ANNUAL NATIONAL ASSESSMENT 2013

2013 DIAGNOSTIC REPORT
AND
2014 FRAMEWORK FOR IMPROVEMENT
TABLE OF CONTENTS

FOREWORD BY THE MINISTER ............................................. 6
1. Introduction ................................................................. 7
2. Purpose and Scope of the Report ...................................... 7
3. Method Used to Compile the Report ................................. 7
4. The Packaging of the Report ........................................... 7

PART A: 2013 ANA DIAGNOSTIC REPORT

5. Summary of the Key Findings: Mathematics ......................... 9
   5.1 Foundation Phase ..................................................... 9
   5.2 Intermediate Phase ................................................. 9
   5.3 Senior Phase (Grade 9) .............................................. 9

6. Suggestions to Enhance the Effective Teaching and Learning of Mathematics ......................... 10
   6.1 Effective teaching and learning .................................... 10
   6.2 Using assessment to inform teaching ............................. 10

7. Analysis of Learner Responses by Grade and Subject: Mathematics ......................... 11
   7.1 Mathematics Grade 1 ................................................ 11
   7.2. Mathematics Grade 2 ............................................... 13
   7.3. Mathematics Grade 3 ............................................... 16
   7.4. Mathematics Grade 4 ............................................... 22
       7.4.1. Numbers, Operations and Relationships .................. 22
       7.4.2. Patterns, Functions and Algebra ............................. 25
       7.4.3. Space and Shape (Geometry) ................................. 26
       7.4.4. Measurement .................................................... 27
       7.4.5. Data Handling ................................................... 28
   7.5. Mathematics Grade 5 ............................................... 28
       7.5.1. Numbers, Operations and Relationships .................. 28
       7.5.2. Patterns, Functions and Algebra ............................. 31
       7.5.3. Space and Shape (Geometry) ................................. 31
       7.5.4. Measurement .................................................... 32
       7.5.5. Data Handling ................................................... 33
   7.6. Mathematics Grade 6 ............................................... 35
       7.6.1. Numbers, Operations and Relationships .................. 35
       7.6.2. Patterns, Functions and Algebra ............................. 37
8. SUMMARY OF THE KEY FINDINGS: LANGUAGES

8.1 Foundation Phase - Home Language
8.2 Intermediate Phase - Home Language
8.3 Senior Phase (Grade 9) - Home Language
8.4 Intermediate Phase - First Additional Language
8.5 Senior Phase (Grade 9) - First Additional Language

9. SUGGESTIONS TO ENHANCE THE EFFECTIVE TEACHING AND LEARNING OF LANGUAGES

9.1 Effective teaching, learning and assessment
9.2 Lessons from the 2011 Progress in International Reading Literacy Study

10. ANALYSIS OF LEARNER RESPONSES BY GRADE AND SUBJECT: LANGUAGES

10.1 Home Language Grade 1
10.2. Home Language Grade 2
10.3. Home Language Grade 3
10.4. Home Language Grade 4
10.4.1. Comprehension
10.4.2. Language and Writing
10.5. Home Language Grade 5
10.5.1. Comprehension
10.5.2. Language and Writing
10.6. Home Language Grade 6
10.6.1. Comprehension
10.6.2. Language and Writing
10.7. Home Language Grade 9
10.7.1. Comprehension
FOREWORD BY THE MINISTER

The purpose of the 2013 ANA Diagnostic Report is to inform all levels of the education system of specific areas of Language and Mathematics knowledge and skills which learners who participated in the Annual National Assessment (ANA) 2013 found to be challenging, and provide suggested interventions to address these areas. These findings emanated from an analysis of a random sample of 2013 Grades 1-6 and 9 learner scripts in Mathematics and Languages drawn from across provinces. The evidence contained in this report and the accompanying 2014 ANA Framework for Improvement of Mathematics and Languages is therefore pertinent to all public schools in South Africa and should be used by schools, districts and provinces to inform teaching programmes and also specific interventions to improve the levels and quality of learner performance in schools.

The report also provides School Management Teams (SMTs) with objective evidence to identify areas in which individual teachers need specific support in terms of both content knowledge and various methods of facilitating learning and can be used together with the analysis of the school’s results to strengthen teaching and learning.

The Framework for Improvement should be used by provinces, districts and schools to inform their customised 2014 Improvement Plans for Mathematics and for Home and First Additional Languages in Grades 1-6 and 9.

I invite all stakeholders and the broader general public to receive this report and view it as an important tool to improve learning and teaching in our schools, as we continue to improve the quality of basic education.

MRS A M MOTSHEKGA, MP

MINISTER OF BASIC EDUCATION

DATE: 13 December 2013
1. **Introduction**

The Department of Basic Education (DBE) administered the Annual National Assessment (ANA) in September 2013. ANA was written by learners in Grades 1–6 and Grade 9 in Language and Mathematics. The purpose of the ANA is to determine learner performance with regard to the skills and knowledge that they have acquired as a result of teaching and learning experiences in school. After the administration of the ANA tests, the DBE compiled this diagnostic report where an analysis is made to provide evidence that will inform and direct appropriate interventions for (a) teaching and learning, (b) management of curriculum implementation by School Management Teams (SMTs), (c) curriculum and management support at district level and (d) resource provision and monitoring at provincial and national levels.

2. **Purpose and Scope of the Report**

The purpose of this report is to highlight and present to teachers and SMTs specific areas of Language and Mathematics knowledge and skills in which learners who participated in ANA 2013 showed low levels of competency. The evidence in this report must be built into normal teaching programmes and also be used to inform specific interventions to improve the levels and quality of learner performance in schools. The report also provides SMTs with objective evidence to identify areas where individual teachers need specific support in terms of both content knowledge and various methods of facilitating learning. The identified areas of required support will also influence the choice of relevant teaching and learning support materials.

The report presents critical aspects of knowledge and skills inadequacies that were identified from random samples of Grades 1-6 and 9 learner scripts in the Language and Mathematics tests of the ANA 2013. The findings in this report will, therefore, be applicable to public schools in South Africa.

3. **Method Used to Compile the Report**

A random sample of learner scripts for each grade and subject was collected from a cross-section of schools from different provinces and used as the basis for the diagnostic (qualitative) analysis. The diagnostic analysis was informed by the findings of the quantitative analysis which provided information on the average learner performance in each item. An analysis of the scripts was undertaken to establish the nature and extent of the most common errors and misconceptions made by learners, when compared to the content knowledge and skills that each question was assessing as reflected in the Curriculum and Assessment Policy Statement (CAPS) for Grades 1-6 and in the National Curriculum Statement for Grade 9.

The findings of the analysis are presented according to the main content areas of each subject. The information has been exemplified with explanations and specimens of typical learner responses together with suggestions and recommendations for possible interventions.

4. **The Packaging of the Report**

The report is packaged in two parts, namely Part A: 2013 ANA Diagnostic Report and Part B: 2014 ANA Framework for Improvement. The 2014 Framework for Improvement was informed by the findings in the Diagnostic Report. The success of these two parts in terms of optimum usage and management hinges on the interdependent roles to be fulfilled by each tier of the system, namely DBE, PDEs, Districts and Schools. Since the Diagnostic Report and the Framework for Improvement are intended to improve classroom practice, they should reach the schools early in the school year. To achieve this and ensure effective use in informing the classroom practice in the 2014 academic year, the following management process should be followed:
<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsibility</th>
<th>Timeframes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery of the Report to provinces</td>
<td>National Assessments</td>
<td>02-10 January 2014</td>
</tr>
<tr>
<td>Development of provincial 2014 Improvement Plans by PDEs;</td>
<td>PDEs</td>
<td>20 January 2014</td>
</tr>
<tr>
<td>Customising the provincial Improvement Plans by districts and schools</td>
<td>Districts and schools</td>
<td>31 January 2014</td>
</tr>
<tr>
<td>Implementation of ANA Improvement Plans</td>
<td>PDEs, Districts and schools</td>
<td>1 February-30 November 2014</td>
</tr>
<tr>
<td>Monitoring and Support</td>
<td>DBE, PDEs and Districts</td>
<td>1 February-30 November 2014</td>
</tr>
<tr>
<td>Submission of Quarterly Progress Report</td>
<td>PDEs</td>
<td>End of each quarter in 2014</td>
</tr>
</tbody>
</table>
PART A: 2013 DIAGNOSTIC REPORT

5. SUMMARY OF THE KEY FINDINGS: MATHEMATICS

5.1 Foundation Phase

- Inability to complete numeric patterns and counting in given intervals.
- Inability to write number names and symbols for 2 and 3 digit numbers and lack of understanding of place values.
- Inability to compare and order whole numbers from biggest to smallest and smallest to biggest.
- Inability to recognise fractions in diagrams and fraction names, and comparing unitary fractions from smallest to biggest.
- Difficulty to identify 2D and 3D shapes.
- Inability to read and interpret the information on pictographs and bar graphs.
- Lack of competency to add, subtract, multiply and divide activities involving word problems.

5.2 Intermediate Phase

- Poor understanding of place value.
- Inability to complete numeric patterns and counting in given intervals.
- Learners use wrong strategies when dealing with fractions. They often apply incorrect mathematical rules to manipulate the denominators and numerators.
- Learners use drawings e.g. sticks, repeated addition and repeated subtraction for multiplication and division respectively even when working with large numbers.
- Learners can respond only to the simple number patterns involving constant difference, but NOT those that involve constant ratio and intervals that are not multiples of a constant difference.
- Inability to identify the number of faces, vertices and edges.
- Demonstrating poor visual perceptive skill when viewing objects from different perspectives.
- Learners are unable to relate metres to centimetres, minutes to hours, and litres to millilitres.
- Learners show lack of understanding of all the concepts that were assessed in data handling, these include: pictograph, bar graph, median, mode.

5.3 Senior Phase (Grade 9)

- Learners could not identify and use the appropriate formulae to calculate simple interest and compound interest.
- Difficulty in applying the knowledge of inverses to solve equations
- Inability to simplify algebraic fractions.
- Lack of understanding of the processes involved in factorisation.
- Inability to complete numeric patterns.
- Difficulty in proving congruency and similarity and/or applying congruency and similarity to solving geometry problems.
- Inability to calculate the surface area and volume of 3D objects.
- Lack of competency to apply the concepts involving entire data handling e.g. collecting, organising, representing, analysing, interpreting and reporting data.
6. **Suggestions to Enhance the Effective Teaching and Learning of Mathematics**

6.1 Effective teaching and learning

- Planning and teaching of Mathematics should be conducted according to the prescripts of CAPS.
- Mathematics lessons should include oral, practical and written activities to reinforce and consolidate mathematical skills and concepts in a systematic way.
- Allow learners to explain (in their own words) their solutions/methods i.e. how they got the answer, whether the procedure and answer are correct or incorrect. This practice enables a teacher to identify and track possible misconceptions at an early stage and introduce corrective measures immediately. The added benefit of allowing learners to explain their solutions is that it empowers them to take responsibility for their learning and builds confidence amongst them.
- Introduce a variety of strategies and methods and encourage learners to use strategies and methods that they best understand and those that are conceptually appropriate and relevant for the grade. For example unit counting and illustrations are not suitable for computations with large numbers beyond 10.
- Encourage the use of correct mathematics language, symbols and signs which are grade-appropriate.
- Use the Language of Learning and Teaching (LoLT) most of the time, more especially in Grades R to 3 (African languages). While code-switching is sometimes necessary, over reliance on it can be detrimental to learner performance as the assessment is conducted strictly through LoLT.
- Number concept development is very critical to enhance competency in Mathematics, therefore more attention should be given to Numbers, Operations and Relationships in Foundation and Intermediate Phases.
- Most topics in Geometry and Data Handling can be taught meaningfully and practically by using readily available resources drawn from the learner’s environment.
- Align teaching to assessment: teach problem-solving skills and strategies to familiarise learners with problem-solving type questions; teach learners through mathematical investigations to enhance their performance in Mathematics investigations during assessment; teach through a Mathematics project so that learners become familiar with a project as a form of assessment.
- The DBE Workbooks should be used optimally and systematically to consolidate Mathematics lessons.

6.2 Using assessment to inform teaching

- Analyse learners’ errors and/or misconceptions to understand their thinking processes. The errors learners make may be as a result of a misunderstanding of what the teacher taught or ineffective teaching methodology used by a teacher. The errors that learners make provide teachers with rich information that they can use to improve their teaching methodologies. Attending to these errors immediately when they occur will prevent them from developing into misconceptions. Effective assessment does not only focus on the correct answer (product), but on Mathematics procedures (processes) too.
- Invest in formative assessment (assessment for learning) because it paves the way for enhanced learner performance when assessed using summative assessment.
- Align assessment to teaching i.e. learners should be assessed on what they have learnt and how they were taught. In other words it will be highly unlikely that learners will perform well when asked to conduct an investigation if they were never taught through an investigative approach.
- Expose learners to various types of questions such as multiple choice questions.
• Expose learners to questions that are pitched at different cognitive levels such as questions that require straight recall (knowledge), routine procedures, complex procedures and problem solving. The main aim is to narrow the gap between formal or informal assessment that is internally set and conducted by teachers in different schools and external assessment such as common examinations that are set at provincial level or the Annual National Assessment set at national level.

7. Analysis of Learner Responses by Grade and Subject: Mathematics

7.1 Mathematics Grade 1

The following topics/concepts were assessed: number patterns, addition in the context of word problems, months of the year, addition using a number line, addition and subtraction in the context of money.

a). Number patterns

Learners demonstrated poor knowledge and understanding of number patterns. Learners could not recognize the counting pattern in 10’s from 2 to 52. The response shows that the learner did not know how to find the missing number and therefore did not attempt this item.

Proposed intervention

Learners should be exposed to number sense activities (count all, count on and build up and break down numbers up to 100 ) such as completing number sequences by recognizing the number pattern whether it is increasing or decreasing and by how many. A robust understanding of number patterns will enable learners to develop skills to complete number sequences ranging from 1 to 50 at Grade 1 level.

b). Addition in the context of word problems

Learners demonstrated poor understanding and knowledge of this word problem. Learners copied and rewrote the word problem. They showed poor knowledge of word problem strategies. The response shows that the learner knew that a bicycle has 2 wheels but did not draw the right number of bicycles, the learner drew 6 instead of 7 and therefore the answer was wrong.
Proposed intervention

Procedures of answering word problems should be taught. These include:

- reading with understanding,
- underlining the key words and information,
- translating certain words into mathematics language,
- identifying the appropriate mathematics operation,
- constructing a mathematics sentence,
- carrying out mathematical calculations to get the answer and respond to the question posed.

c). Months of the year

Learners demonstrated poor knowledge of months of the year and ability to read the names of months of the year. Question was “which is the third month after May?” and the response was generally “March” instead of “August”.

Proposed intervention

A calendar should be displayed in every Grade 1 class so that the learners can see and read the names of the months and observe how they follow one another.

d). Addition using a number line

Learners demonstrated poor knowledge of number lines. Learners did know how to find the answer to 4+2+2 on the number line. The responses show that learners did not know which number to start with on the number line and count on by making the right number of jumps.

Proposed intervention

**Number lines** should be introduced early in Grade 1. Learners should be able to fill missing numbers on the number line. Number lines should be used to do calculations (addition, subtraction, multiplication, grouping and sharing). Learners should be encouraged to use number lines to solve word problems.

e). Addition and subtraction in the context of money.

Learners demonstrated poor understanding of money. They could not read and interpret prices and do money calculations correctly. Both responses demonstrate that learners did not understand the word “each” and did not know how to work out the price of two apples if one apple costs R2. They did not understand the question, and how to calculate change.
Proposed interventions

Routine and non-routine word problems should feature in almost all Mathematics lessons. Learners should be taught the techniques to solve word problems. They should be able to read the problem, underline the numbers in the problem and the question and thereafter work out the solution to the word problem by drawing a diagram, writing the number sentence or using a number line to work out the answer. Problem solving should be an oral, practical and written activity. Learners should be encouraged to discuss their methods and the teacher should record their responses and demonstrate a variety of techniques to solve any one problem. Learners should record their word problem in their class work books.

7.2. Mathematics Grade 2

The following topics/concepts were assessed: number pattern, counting in 4s, place value, doubling and halving, multiplying using a flow diagram, word problems involving sharing.

a). Number pattern

Learners demonstrated poor number concept development. They were unable to complete a number sequence that requires counting forward in 4s from 127.

The error analysis demonstrates that learners do not have an understanding of how to find the missing number, namely, they do not know how to read the number in the sequence and recognize whether the sequence is increasing or decreasing and by how many. Both responses demonstrate that the learners do not know “how many to add or subtract” to get to the next number in the sequence, it is very evident that the learner does not know the order of numbers beyond 50 and 100.

Proposed intervention

Learners should be exposed to activities that develop a strong number sense, namely they should be taught the skill to read, copy and extend number sequences. Learners should be taught the skill to describe whether a number sequence is increasing or decreasing and by how many, and what is the rule, “how many should I add or subtract” to get the missing number. Learners should be exposed to number patterns up to 200 that involves counting forward and backward in 1's, 2's, 3's from a given number and also in multiples of 2's, 3's 4's, 5's 10's from any multiple between 0 and 200.
Place value

Learners demonstrated poor understanding of place value of two digit numbers. The learner was unable to write the value of 5 in 53. The learner’s response demonstrates poor understanding of base 10.

Proposed intervention

Learners should be exposed to place value at Grade 2 level. Learners should be able to decompose two digit numbers into multiples of tens and ones/units up to 99.

b). Doubling and halving

Learners demonstrated poor understanding of the concept of doubling and halving. Both responses demonstrate that the learner was using drawings and unit counting to double and halve large numbers, although unit counting and drawings did not result in the learner getting the right answer.

The learner response on both doubling and halving are good examples to demonstrate that he/she was confused when he/she had to double and halve “34”. It is clear that the learner does not know that to double large numbers, the skill is to add 34 and 34 or multiply 34 by 2 and to halve 34 he/she should have found out what is half of 30 and half of 4 and add both to get the answer 17.

Proposed intervention

Doubling and halving are calculation techniques. At Grade 2 level learners should be exposed to other strategies (multiply by 2 or add the number twice for doubling; divide the number by 2 for halving) besides drawings and unit counting to double and halve large two digit numbers up to 99.

c). Multiplying using a flow diagram

Learners demonstrated poor understanding and knowledge of multiplication tables of 4 and were not familiar with the flow diagram representation of multiplication number sentences. The learner got both answers wrong indicating a poor knowledge of tables.
Proposed intervention

At Grade 2 level learners should be exposed to multiplication as a number operation through repeated equal addition. Learners should be able to use the multiplication symbol and do multiplication calculations with one and two digit numbers (2x, 3x, 4x, 5x, 10x) and word problems up to 50.

d). Word problems involving sharing

Learners demonstrated poor understanding and knowledge of the word problem with sharing and a remainder. The learner’s response demonstrates that he/she knew it was a sharing problem but didn’t know the total number of objects to be shared. The only word problem skills that the learner is demonstrating are drawings and unit counting. These skills (unit counting and drawings) are not strong techniques for larger numbers.

Proposed interventions

- Routine and non-routine word problems should feature in almost every Mathematics lesson. At Grade 2 level learners should be introduced to:
  - addition and subtraction word problems involving “combine”, “change”, “compare”;
  - multiplication (repeated addition) up to 50
  - grouping up to 50 with/without a remainder
  - sharing up to 50 with or without a remainder
- word problems with fractions
- word problems with money

- Learners should be taught various strategies to solve word problems. At Grade 2 level learners should be encouraged to write the number sentence for the word problem, use number lines and apply number concept skills such building up and breaking down techniques and mental mathematics (number bonds, halving, doubling, tables) to perform calculations.

- Learners should be given at least 2 word problems as practice examples in every lesson and these should be recorded in their class work books.

### 7.3. Mathematics Grade 3

The following topics/concepts were assessed: digital and analogue time, fractions, subtraction and addition of whole numbers, converting repeated addition to a multiplication number sentence, number patterns and word problems.

a). Digital and analogue time

Learners demonstrated poor understanding and knowledge of digital time. Learners could not interpret that the time **9:45 am** on a digital clock would be same as quarter to 10 on an analogue clock. The learner response to this item shows that the learner did not understand the meaning of “am”.

**Proposed intervention**

Learners at Grade 3 level should be able to tell 12 hour time, read and demonstrate hours, half hours, and quarter hours on an analogue clock as well as read digital time on digital clocks. Learners should know the meaning of “am” and “pm” and also the equivalence of digital time on an analogue clock name that **9:45 am** is the same as **quarter to 10**.

b). Fractions

Fractions (order unitary fractions)

Learners demonstrated poor understanding and knowledge of fractions. Learners were unable to read fraction words e.g. half, quarter, third, fifth. The learner response demonstrates that the learner was not able to compare and arrange fractions from greatest to smallest.
Proposed interventions

Learners should know the number symbols and number names for unitary and non-unitary fractions namely half, quarter, third, eighth, fifth. Also learners should be able to recognize fractions in diagrammatic form and arrange fractions from smallest to biggest.

c). Subtraction and addition of whole numbers

Subtraction of 3 digit numbers using the “breaking down” method

Learners demonstrated poor understanding and knowledge of the breaking down method. The first learner response demonstrates that the learner had some idea of what he/she was doing but subtracted all the way instead of adding up what was left in the third row in order to get the right answer.

The second learner response demonstrates that the learner had no idea of the breaking down method. This learner attempted the drawing and took away 2 hundred from 7 hundred and got 500 but after that the learner did not know what to do.

d). Addition of 3 digit numbers

Learners demonstrated poor knowledge and understanding of addition of 3 digit numbers. The first learner response shows that the learner used the vertical addition algorithm, but did not write out the 2 sets of numbers correctly in columns. The learner added the units and tens column correctly but could not carry the “10” and add the hundreds column correctly and therefore the answer is wrong.

The second learner response shows that the learner used mental mathematics to add the 100’s and got 600 and added the 10’s and got 110 and for the unit column the learner used drawings and unit counting to add and got 14 instead of 11 and then the learner wrote out the number sentence: 700+10+14 and got the answer 724. This demonstrates that the learner knows the addition concept but did not know the strategy to add 3 digit numbers beyond 500.
e). Using the number line to add

Learners demonstrated poor knowledge of using the number line to calculate 20 + 30. The response shows that the learner was confused. The learner took one big jump from “0 to 30” but did not add the “20” on the number line.

Proposed interventions

Learners should be able to perform addition and subtraction calculations involving addition and subtraction of 2 and 3 digit numbers up 999. Learners should be exposed to the following calculation techniques:

- building up and breaking down numbers
- doubling
- halving
- number lines
- rounding off in 10’s

f). Number patterns

Learners demonstrated poor understanding of number patterns. The learner response confirms that the learner did not recognize counting in 50’s to complete the pattern.
Proposed interventions

Learners should be exposed to activities that develop a strong number sense namely they should be taught the skill to read, copy, extend **number sequences**. Learners should be taught the skill to describe whether a number sequence is increasing or decreasing and by how many and what is the rule to find the missing number. Learners should be exposed to number patterns up to 1000 that involves counting forwards and backwards in multiples of 20’s, 25’s, 50’s, 100’s and 1000’s from any multiple between 0 and 1000 at Grade 3 level.

g). Word problems involving multiplication and division

Learners demonstrated poor understanding of word problems involving multiplication up to 75. Learners did not know the meaning of the term “**each**”. The learner responses show the following:

- Response 1: learner wrote an arbitrary number “67”
- Response 2: learner wrote an arbitrary addition number sentence
- Response 3: learner wrote random numbers, did some drawings and unit counting and then wrote arbitrary numbers.
h). Division word problems

Learners demonstrated poor knowledge and understanding of word problems that are based on division with sharing and remainder. The first response shows that the learner did not attempt the question which shows that the learner may not have been read the problem.

The second response shows that the learner knows the concept of sharing using drawings and unit counting. From the learner’s responses it is clear that the learner knew that each child should get 5 chocolates and used counting in 5’s and 2’s to get 7 but wrote the remainder incorrectly instead of 1 (one whole chocolate), the learner wrote as the remainder.

Proposed interventions

- Routine and non-routine word problems should feature in every Mathematics lesson. Learners should be introduced to:
  - addition and subtraction of word problems involving ‘combine’, ‘change’, ‘compare’ up to 999
  - multiplication (repeated addition and ratio) to 100
  - division with grouping up to 100 with/without a remainder
  - division with sharing up to 100 with or without a remainder
  - word problems with fractions (as a collection)
  - word problems with money
• Learners should be taught various strategies to solve word problems. At Grade 3 level learners should be encouraged to:
  ° read the word problem
  ° find out the right number operation
  ° write the right number sentence for the word problem,
  ° use a variety of problem solving techniques e.g. number lines, apply number concept skills such building up and breaking down techniques and mental mathematics (number bonds, halving, doubling, tables) to perform calculations

• Learners should be given at least three word problems per week (routine and non-routine) to consolidate their knowledge and application of the basic operations in their class work books.

i). Writing the multiplication number sentence

Learners demonstrated poor understanding of the relationship between repeated addition and multiplication. Hence they were unable to complete and write the multiplication number sentence for the repeated addition sum. The response shows that the learner added the “six fours” instead of counting the number of 4’s.

Proposed intervention

The relationship between addition and multiplication should be clearly explained to learners. A grid or array of objects can be used to enhance meaningful understanding. This will enable learners to multiply large numbers without using repeated addition since the number range increases in Grade 3.
7.4. Mathematics Grade 4

7.4.1. Numbers, Operations and Relationships

The following topics/concepts were assessed: Place value, rounding off, ratio, multiples, factors, distributive property, word problems in financial context, number sentences, fractions, operations (addition, subtraction, multiplication, division) with whole numbers.

a). Fractions

Question 15 focused on comparing fractions, adding fractions and sharing (determining a fraction of a whole). Learners performed well in addition of fractions using a fraction wall but performed poorly in the other questions.

- When comparing fractions, the majority of learners responded that \( \frac{1}{2} < \frac{2}{4} \). This is a common error where learners think that a fraction with a large denominator is greater than the fraction with a small denominator.
- While the majority of learners calculated \( \frac{1}{4} + \frac{2}{4} \) correctly, a significant number of learners were not able to colour \( \frac{3}{4} \) on the fraction wall provided. Some learners did not attempt to answer the question.

Proposed interventions

- The fact that majority of learners were able to calculate \( \frac{1}{4} + \frac{2}{4} \) but could not shade three \( \frac{1}{4} \) is the indication that they could not relate the two. Shading \( \frac{3}{4} \) is the same as \( \frac{1}{4} + \frac{1}{4} + \frac{1}{4} \) or \( \frac{1}{4} + \frac{2}{4} \). Learners should be made aware that shading three \( \frac{1}{4} \) on the fraction wall will give them \( \frac{3}{4} \) and this is similar to adding three \( \frac{1}{4} \).
- Teach fraction names according to the CAPS, for instance \( \frac{1}{4} \) should be referred to as quarter instead one over four.

b). Multiples and factors

The questions that focused on multiples and factors were poorly responded to. This is an indication that learners do not do mental mathematics especially multiplication tables which would enhance the understanding of factors.

Proposed interventions

CAPS (p13 and p34) emphasises that learners should do mental mathematics daily for about 10 minutes. Multiples and factors should feature in the mental mathematics daily. Use multiplication tables to enhance the understanding of factors.
c). Multiplication and division of whole numbers

The method of calculation using sticks was used by the majority of learners across the grades when adding or dividing whole numbers. While this method is useful, its limitation is when the number range increases as is the case with 78 x 42.

![Image of multiplication example: 78 x 42]

Proposed interventions

- Use concrete objects or sticks only to enhance number concept development, and understanding of multiplying by repeated addition and dividing by grouping.
- Once learners have grasped a concept of multiplying and dividing, they should immediately be exposed to the breaking down technique.
- However learners who are able to multiply in columns should be allowed to do so without using a breaking down technique.

d). Distributive property

Question 2 was presented as follows:

![Image of distributive property example]

Complete:

\[(2 \times 3) + (2 \times 4) = 2 \times (\_\_ + 4)\]
Learners were not able to determine the omitted number to demonstrate their understanding of distributive property of whole numbers. Learners are mainly used to applying distributive property in, for instance, $2(2+4)$ and not to factorise an expression that is written in expanded form.

**Proposed interventions**

The teaching of distributive property of numbers should not be limited to expanding factors of an expression. Expose learners to simplifying the expanded form by factorisation.

e). **Word problems**

Questions 5, 7 and 15.4 were context rich questions. Question 7 was a simpler version of a word problem because it only required learners to demonstrate the skill of changing a sentence into a number sentence. Very few learners were able to answer these three questions correctly.

Learners were not able to:

- interpret word problems correctly.
- use the given information appropriately.
- translate language into mathematics language and write correct mathematical or number sentences.

**Proposed interventions**

Teach systematic procedures for answering word problems. These include:

- reading with understanding.
- underlining the key words and information.
- translating certain words into mathematics language.
- identifying the appropriate mathematics operation to be used.
- constructing a mathematical or number sentence.
7.4.2. Patterns, Functions and Algebra

The following topics/concepts were assessed: Number patterns, flow diagram (input-output values).

a). Number patterns

Three types of number patterns were assessed, namely a decreasing pattern where a common difference was 50; increasing pattern involving fractions with the same denominator; and an increasing pattern where a common ratio was 2. Learners performed well in the pattern involving common fractions but poorly in the other two.

In relation to a pattern involving a common difference of 50, it is evident that learners are predominantly exposed to the number patterns involving multiples of 50 and not fractions involving intervals of 50 starting with any number.

A number pattern 2; 4; 8; 16; …. (involving a common ratio), was poorly answered. A dominant answer that learners gave was 18. At a glance learners might have thought that this is a number pattern involving consecutive even numbers from 2, resulting in a constant difference and NOT a constant ratio.

Proposed interventions

• Allow learners to investigate and extend a variety of numeric patterns involving constant difference or ratio.
• Numeric patterns involving constant difference should NOT be limited to the multiples of numbers.
• Allow learners to create their own numeric patterns and describe them in their own words.

b). Flow diagram (input-output values).

The question required learners to complete a flow diagram given the input and the rule involving multiple operations.

• Probably learners are not adequately exposed to flow diagrams involving multiple operations.
• Learners could not apply the order of operations in flow diagrams.
• The following response shows that the learner added 5 and 9, which also shows lack of understanding of how to apply the rule.

Proposed interventions

Flow diagrams should not be limited to one operation, but should be extended to multiple operations.

The order of the operation should be followed as it appears in the given rule.
7.4.3. Space and Shape (Geometry)

The following topics/concepts were assessed: Alpha-numeric grid references, reflection, identifying 2D shapes; characteristics of 3D objects.

a). Identifying geometric shapes

Almost 50% of learners could not identify or recognise a pentagon.

Proposed interventions

Since the names given to the 2D shapes are descriptive, make learners aware of the meaning of the name of each shape, i.e. the name describes the number of sides in a shape. For instance, the prefix *penta* in *pentagon* means five and a pentagon is therefore a five-sided polygon.

b). Characteristics of 3D objects

A similar question was asked in Grade 5 (Question 15) although it was a square-based pyramid. Learners in Grades 4 and 5 experience a similar difficulty in identifying the correct names of the shapes of the faces constituting a 3D object.

Proposed interventions

- Use concrete objects and relate them to the drawings of the 3D objects so that learners can observe the faces, edges and vertices.
- The names given to most of the 3D objects are descriptive. Practically show learners the relationship between the names of the 3D objects and the shapes of their faces, e.g. triangular pyramid has a triangular base and a square-based pyramid has a square base. A square-based pyramid is, therefore, made of a square and triangles.
7.4.4. Measurement

The following topics/concepts were assessed: time, conversion, volume.

a). Conversions (contexts of time, length and volume).

Generally learners are unable to relate metres to centimetres, minutes to hours, and litres to millilitres. For instance in the response below, a learner added 12 m and 48 cm to get 60 cm.

![Image of a learner's response](image)

In terms of Question 14 that focused on ‘volume’ the challenge was not only in converting litres to millilitres, it was also evident that learners could not understand, interpret and solve word problems correctly.

![Image of a learner's response for volume question](image)

Proposed interventions

- Carry out practical demonstrations to show the relationship between a litre and millilitres, an hour and minutes, and a metre and centimetres. For instance a relationship between a litre and millilitres can be demonstrated practically by allowing learners to measure the same volume of water using two containers calibrated differently: one container calibrated in millilitres and the other calibrated in litres and then allow them to make conclusions.
- The teaching of word problems must be done systematically as suggested in Numbers, Operations and Relationships.
7.4.5. Data Handling

The following topics/concepts were assessed: Interpreting a bar graph.

Interpreting a bar graph

Question 18.1 required learners to complete a given table using tally marks. They did not understand how to record data using tally marks.

<table>
<thead>
<tr>
<th>KIND OF SPORT</th>
<th>TALLY MARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golf</td>
<td>2</td>
</tr>
<tr>
<td>Baseball</td>
<td>7</td>
</tr>
<tr>
<td>Tennis</td>
<td>4</td>
</tr>
</tbody>
</table>

Question 18.3 required learners to find the difference between learners who prefer soccer to those who prefer cricket. It seems as if the use of the term ‘difference’ in Mathematics was not well understood.

Proposed interventions

- Recording data using tally marks should be emphasised and demonstrated correctly. To show learners how tally marks can be used to record data, a practical exercise can be done in the classroom where individual learners indicate which sporting code they prefer.
- Expose learners to and emphasise the correct use of Mathematics terminology.

7.5. Mathematics Grade 5

7.5.1. Numbers, Operations and Relationships

The following topics/concepts were assessed: Place value; multiples; rounding off; comparing fractions; factors; operations (addition, subtraction, multiplication, division) with whole numbers; addition and subtraction of fractions.

a). Operations with whole numbers

Learners performed better in the questions that required them to add and subtract whole numbers than in those that required them to multiply and divide whole numbers. In certain instances the answer they arrived at when multiplying a 3-digit number by a 2-digit number was a 2-digit number. This may be attributed to two possibilities:

- poor number sense or number concept development; and
- inability to estimate, consequently not being able to detect the plausibility of the answer.

Proposed interventions

- Teach learners and demonstrate practically that multiplication and division are inverse operations, i.e. they can use division to confirm the answer they obtained after multiplying, and vice versa.
- Mental mathematics should be done daily to enhance the mastery of the four basic operations.

b). Rounding off

Most of the responses that learners gave suggest a lack of number sense, which includes lack of knowledge of the relative size of numbers. For instance the majority of learners responded that 99 999 rounded off to the nearest 1 000 is approximately 10 000.
Proposed interventions

Rounding off should initially be taught using practical contexts such as using money before switching to context free exercises.

c). Word problems

Three word problems were analysed and they revealed challenges similar to those experienced by Grade 4 learners.

- Learners were not able to:
  - interpret word problems correctly;
  - use the given information appropriately;
  - translate language into mathematics language and write correct mathematical sentences; and
  - respond to the questions posed after correctly calculating the answer.

- There were instances where learners in Grade 5 are still using repeated addition for multiplication. While this is mathematically correct, it poses a huge problem to learners when the number range increases e.g. 320 x 92

Write an open number sentence for the following sum:
The sum of four numbers is 20 500. Three of the numbers are 2 341, 573 and 10 690. What is the fourth number?

\[
\begin{align*}
2 341 + 573 + 10 690 &= 10 190
\end{align*}
\]

Mnr. Mabuzi het R4 200 vir sy se werk verdien. Hoeveel het hy per uur verdien?

\[
\begin{align*}
4200 &- 200 \\
&= 4000 \\
\end{align*}
\]
Proposed interventions

- The use of repeated addition for multiplication should gradually be discouraged as the number range increases. Repeated addition is not only cumbersome but time consuming too.

- Procedures of answering word problems should be taught. These include:
  - reading with understanding,
  - underlining the key words and information,
  - translating certain words into mathematics language,
  - identifying the appropriate mathematics operation,
  - constructing a mathematics sentence,
  - carrying out mathematical calculations to get the answer and respond to the question posed. In other words if the question required learners to calculate the cost of 4 tickets at R320 each, the answer should be R1 280 and NOT 1280.

- Since word problems can be used in almost every Content Area, they should be practiced almost daily by learners.

### d). Fractions

Addition and subtraction of mixed fractions remains a challenge to learners. One of the methods learners attempted to use was to simplify mixed fractions for easy calculation; however instead of changing them into improper fractions they changed them into whole numbers. Some learners added the denominators.
Proposed interventions

- Emphasise the mathematical rules and procedures for adding and subtracting mixed fractions.
- Expose learners to different methods of dealing with mixed fractions and proper fractions, e.g. converting a mixed fraction into an improper fraction.

7.5.2. Patterns, Functions and Algebra

The following topics/concepts were assessed: Numeric patterns; geometric patterns;

Numeric and geometric patterns

Learners tend to respond better to the number pattern that does not relate the two variables (dependent and independent variables). In other words they respond better to a pattern like 3; 5; 7; …; ….. However they find it difficult to identify a pattern where the values of a dependent variable and independent variable are tabulated.

Proposed interventions

Number patterns that relate the two variables can best be taught using a geometric pattern. Teaching numeric patterns by starting with a table in Example 1 might be more challenging for learners to relate the two variables than starting with a geometric pattern (Example 2) then moving to a table. Starting with a geometric pattern helps learners to develop the understanding of relating the variables; afterwards they can be given a table without a geometric pattern.

Example 1

<table>
<thead>
<tr>
<th>Number of triangles</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of match sticks</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example 2

![Example 2 Diagram]

7.5.3. Space and Shape (Geometry)

The following topics/concepts were assessed: Identifying 2D shapes; characteristics of 3D objects; position and viewing; reflection of a 2D shape;

a). Identifying geometric shapes

The majority of learners could not identify a hexagon from the four given geometric shapes.

Proposed interventions

Since the names given to the 2D shapes are descriptive, learners should be made aware of the meaning of the name of each shape, i.e. the name describes the number of sides in a shape. For instance, the prefix *hexa* in *hexagon* means six and a hexagon is therefore a six-sided polygon.
b). Characteristics of 3D objects

- A similar question was asked in Grade 6 (Question 19) although it is a triangular pyramid. Learners in Grades 5 and 6 are experiencing the same difficulty in determining the number of faces in a shape of a 3D object. Poor visual perceptive skill could be a contributing factor.

- The majority of learners could not give the correct names of the shapes of the faces of a square-based pyramid.

Proposed interventions

Use concrete objects and relate them to the drawings of the 3D objects so that learners can observe the faces, edges and vertices.

c). Reflection of a 2D shape

Learners show a lack of understanding of a concept of reflection along a line.

Proposed interventions

- Transformation geometry can be taught by using practical demonstrations to illustrate a reflection (flipping along a line), rotation (spinning around a point) and translation (sliding).

- Since reflection is a mirror image of an object, a mirror can be used to enable the learners to understand the concept of reflection in the context of geometry.

- It is also important to emphasise the line of reflection when teaching this concept.

7.5.4. Measurement

The following topics/concepts were assessed: Mass; distance; time; conversion; temperature;

a). Conversions

Generally learners are unable to relate metres to centimetres, minutes to hours, and litres to millilitres.
Proposed interventions

Enhance meaningful understanding of the relationship between litres and millilitres by carrying out practical demonstrations. For instance a relationship between a litre and millilitres can be demonstrated practically by allowing learners to measure the same volume of water using two containers calibrated differently: one container calibrated in millilitres and the other calibrated in litres and then allow them to make conclusions.

b). Time

Learners were expected to find the time difference between the athlete who came first and the one who came fourth. It is possible that learners took the first and the fourth times as they are recorded in the table without considering that the times were randomly recorded.

Proposed intervention

- Learners should read the given data carefully. For example, they should arrange the times in ascending/descending order then find the difference.
- Learners should be given a variety of similar exercises.

7.5.5. Data Handling

The following topics/concepts were assessed: Interpreting a pictograph

Interpreting a pictograph

- There was generally poor performance in this question. According to the key provided, one glass represents 10 glasses of juice and learners had to figure out that half-a-glass represents 5 glasses of juice, which they could not. This is an indication that learners understand a fraction of a whole and find it difficult to determine a fraction of a quantity.
- There were instances where learners ignored the key, possibly because they could not interpret it.
Proposed interventions

- Emphasise the meaning and importance of a key used in the pictograph.
- The teaching of fractions should not be limited to a fraction of a whole such as half of an apple or quarter of a loaf of bread. Fraction of quantity such as half of 10 glasses of juice should also be taught.
7.6. Mathematics Grade 6

7.6.1. Numbers, Operations and Relationships

The following topics/concepts were assessed: rounding off to the nearest 100 000, factors, fractions (proper, decimal, mixed), number symbols, place value, whole numbers (addition, subtraction, multiplication, and division), word problems, percentages.

a). Four basic operations

Learners' difficulty to add, subtract and multiply in columns is primarily attributed to the lack of understanding of place value. This was prevalent when learners were:

• Changing arrangement of numbers from rows to columns and carry out addition or subtraction;
• ‘borrowing’ when subtracting; and
• arranging answers according to the place value when multiplying.

Question 6 required learners to use multiple operations to work out a number sentence. The response below shows that learners are probably not aware of the properties of zero and they are unable to follow the order of operations correctly.

Proposed interventions

• Effective teaching of place value is required;
• Use of breaking down technique is an effective way to introduce and enhance the understanding of place value.
• Explore the properties of 0 with learners on a variety of situations.
• Expose learners to the order of operations.

b). Fractions

Fractions, including mixed numbers, proved to be a challenge to all learners across the grades. The following challenges were revealed:

• Using a column method when adding mixed fractions.
• Adding the numerators and denominators.
Proposed interventions

- Teaching of fractions should start from simple proper fractions before introducing mixed numbers.
- Learners should internalise the concept of ‘fraction’ and call them appropriately e.g. ‘one-eighth’ instead of ‘one-over-eight’.
- Emphasise the fact that the column method of addition cannot be applied when adding fractions.

c). Word problems

There were two questions that were analysed: Question 8 and Question 11. Responses to both questions showed that learners are unable to:

- interpret word problems correctly;
- use the given information appropriately;
- translate language into mathematics language and write correct mathematics sentences;
- respond to the question posed after correctly calculating the answer; and
- use direct division when dealing with big numbers; instead of repeated subtraction.
Proposed interventions

- Teach the skills of dealing with word problems, e.g. reading with understanding, underlining the key words and information, translating certain words into mathematics language, identifying the appropriate mathematics operation, constructing a mathematics sentence, carry out mathematical calculations to get the answer and respond to the question posed. Responding to the question posed means that if the answer is 12 remainder 5 and the question required a number of buses, then the answer should be 13 buses because a bus cannot be a fraction.

- While repeated subtraction is a mathematically correct method of dividing, it should be discouraged when dealing with big numbers. Long division should, instead of repeated addition, be encouraged in Grade 6.

7.6.2. Patterns, Functions and Algebra

The following topics/concepts were assessed: numeric patterns, generating rules in a flow diagram, geometric patterns

a). Numeric pattern

The item requires learners to complete a pattern of prime numbers. It emerged that learners confused prime numbers with odd numbers.

Proposed interventions

Expose learners sufficiently to different types of whole numbers. These include:

- Even numbers
- Odd numbers
- Prime numbers

b). Input and output values (tabular representation)

- In Question 14, learners were unable to determine a general rule and use it to calculate the 8th term.
- Some learners wrote 15 in an empty cell which indicates that they could establish a constant difference i.e. 4; however they could not realise that the associated value of $x$ is actually 8 and not 4.

Proposed interventions

Learners should be encouraged to critically look at the input values, in this case the values after identifying a pattern associated with values to avoid confusion or an erroneous answer.

c). Geometric patterns

The answers learners gave show a lack of understanding of an input number (in this case a stack number) and the output value (in this case number of cans) illustrated in diagrammatic form (Question 18).
Proposed interventions

- According to CAPS, p18, learners should be exposed to patterns that are not limited to common difference and ratio. Since square numbers are not done in Grade 6, learners should be taught patterns where the rule is simply ‘multiply an input number by itself to get an output number’ without mentioning a square number.
- When dealing with geometric patterns, clarify the relationship between a position of a figure (input value) and the number of geometric shapes (output value).
- Understanding the relationship between the input and output values as illustrated diagrammatically will enable learners to interpret tabular representation and fill in the missing terms.

7.6.3. Space and Shape (Geometry)

The following topics/concepts were assessed: position and views of objects, naming angles, naming 2D shapes, characteristics of 3D objects, line of symmetry, transformations focusing on reduction. Learners performed poorly on the question focusing on position and views of objects.

a). Position and views of objects

Viewing objects from a different perspective relative to the position of a learner requires very good visual perceptual skills among learners. Learner responses have shown a deficiency in this skill.

Proposed interventions

- Start by using simple everyday concrete objects that learners can view from different directions before using abstract shapes of 3D objects drawn on paper.
- Use single geometric objects before exposing learners to composite geometric objects.

b). Characteristics of 3D objects

Low performance in identifying the features that characterise different 3D objects (Question 19) is attributed to learners’ poor visual perceptive skill. For instance the majority of learners counted the number of vertices in a triangular pyramid by focusing only on the triangular face in the context of a 2D shape.
Proposed interventions

- Use concrete objects to assist learners to count the number of edges, faces and vertices to describe, sort and compare different 3D objects.
- Introduce abstract shapes of 3D objects drawn on paper after learners have grasped the characteristics that include edges, faces and vertices of concrete objects.

7.6.4. Measurement

The following topics/concepts were assessed: Area, perimeter, determining the capacity, conversions, time

a). Perimeter

- The majority of learners thought the squares on the grid were one unit long, in this case 1 metre. This prompted them to arrive at 18 as an answer.
- Learners confused perimeter with area, hence they counted the number of squares in the grid to obtain 18 as the answer.
- Inability of learners to interpret the question appropriately made them ignore important information like 1,5 m long.

Proposed interventions

- Differentiate clearly between area and perimeter when teaching the two concepts especially when using squares in a grid.
- The teaching of perimeter should not only be limited to the rectangular shapes that have well pronounced length and breadth, (e.g. length = 5 and breadth = 3), and learners are simply required to add the length of the four sides.
- When using diagrams to illustrate the question, ensure that learners are able to interpret and understand the question and the diagrammatic illustration. When learners see squares in a grid, they think about an area and find it difficult to associate squares with perimeter especially when the length of each side of a square is not one unit long.

b). Capacity

Majority of learners could not determine the correct intervals on calibrations of a jug. From their responses it is evident that they were mainly exposed to the intervals of 10 and/or 20 and not 25.
Proposed interventions

Use a number line to enable learners to understand and determine intervals other than 10 and 20. The numbers used in a number line should cover numerous contexts such as volume, time, length and capacity.

7.6.5. Data Handling

The following topics/concepts were assessed: Median, mode, interpretation of a bar graph

a). Interpreting a bar graph

Generally learners performed well in the Question 27.1 which compared the time spent by boys and girls in five extramural activities (without doing any calculation). Essentially learners had to look at the height of the two bars (for boys and for girls) and respond by writing down the name of the extramural activity. However their performance was poor in the Question 27.2 which required them to read the graph and do a simple calculation to obtain the answer. The challenge for learners in this question was the language that needed to be translated into the language of mathematics.

Proposed interventions

Since the core of the question was ‘how much more time …’ which is mainly language rich, the effective teaching of word problems should be enhanced. The teaching of word problems should focus on: reading with understanding, underlining the key words and information, translating certain words into mathematics language, identifying the appropriate mathematics operation and constructing a mathematics sentence.
7.7. **Mathematics Grade 9**

7.7.1. **Numbers, Operations and Relationships**

*The following topics/concepts were assessed:* Identifying an irrational number; writing numbers in scientific notation; calculating simple interest and loans; using rate to calculate time.

a). **Using rate to calculate time**

Although Question 6.1 required the understanding of the concept ‘rate’, it is also a typical word problem that is rich in language. The majority of learners did not understand that ‘How long’ meant calculate time, instead they calculated distance even though it was already given.

**Proposed interventions**

Word problems should be taught systematically to enable learners to extract critical information from the given text and use it appropriately to calculate the answer.

b). **Simple and compound interests**

The implausible answers for simple interest and compound interest show that learners do not understand the two concepts. Very few learners used the correct formulae.

**Proposed interventions**

Expose learners to the appropriate formulae to calculate simple interest and compound interest. Ensure that learners understand each variable in the formulae.
7.7.2. Patterns, Functions and Algebra

The following topics/concepts were assessed: Simplifying expressions; factorising expressions; solving equations; extending a number pattern and determining a general rule of a number pattern; determining the coordinates and equation of a line; drawing a linear graph.

a). Simplifying expressions

Learners showed the following misconceptions when simplifying algebraic fractions:

- Simplifying the numerators as if the denominators are the same.
- Grouping terms that are NOT the same.

Proposed interventions

- Pre-knowledge of subtraction of fractions involving numbers is needed before learners can simplify algebraic fractions, therefore subtraction of fractions should be emphasised especially where denominators are NOT the same.
- Learners should be taught the difference between like and unlike terms and how to do calculations involving them.

b). Factorisation

- Lack of understanding of the meaning of ‘factorise fully’
- Lack of understanding of the concepts ‘like’ and/or ‘unlike terms’

Proposed interventions

Factorisation in Grade 9 takes place in three ways only: common factor, trinomial and difference of two squares. It should be emphasised that when factorising, the first step is to take out a common factor if any and then factorise a trinomial if ‘factorisable’, or else check if a remaining expression allows for ‘difference of two squares’.
c). **Solving of equations**

Lack of understanding of additive and multiplicative inverses and how to use them to solve equations.

\[
\begin{align*}
3x - 1 &= 5 \\
3x &= 6 \\
\frac{3}{3}x &= \frac{6}{3} \\
x &= 2
\end{align*}
\]

**Proposed intervention**

Inverse operations should be taught very effectively because the understanding thereof is a requisite foundational skill for solving equations.

d). **Determining a general rule of a numeric sequence**

The method of calculating the 50th term used by some learners is similar to using sticks or grouping. This can be traced back to the lower grades.

**Proposed interventions**

- In Grade 9, learners should first be introduced to determining a ‘general rule’ and be able to describe and justify the general rule in their own words before they can express the rule algebraically.
- It could also be helpful to use contexualised activities to introduce the ‘term numbers’ or ‘position of a term in number sequence’ and ‘terms’ before context-free activities can be used.
- Use a table to enhance the understanding of ‘term number’ and clarify the difference between ‘term number’ and ‘term’ in a number sequence.

**Example 1**

<table>
<thead>
<tr>
<th>Term number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>9</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term</td>
<td>7</td>
<td>11</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
e). Determining the coordinates and equation of a line

Learners were required to determine the coordinates of points on the graph. Learners could not read the coordinates of the points of intersection of the graph with the axes. Essentially learners did not know that:

- when the graph cuts the X-axis the value of y in (x;y), the coordinate of the point of intersection, is zero; and
- when the graph cuts the Y-axis the value of x in (x;y), the coordinate of the point of intersection, is zero.

Proposed interventions

- The knowledge of input and output values in a flow diagram and/or number patterns (involving dependent and independent variables) can be used to enhance the understanding of coordinates.
- Clearly explain to learners what the coordinates of the points of intersection are when the graph cuts the Y-axis and the X-axis.
7.7.3. Space and Shape (Geometry)

The following topics/concepts were assessed: Calculating the size of an angle; determining congruent and similar triangles; reflection and rotation of triangles.

a). Calculating the size of angles and providing reasons

The majority of learners were unable to provide reasons for their statements. In some instances learners confused angle names and angle sizes. They added angle names and presented them as the answer.
Proposed interventions

- Learners should be made aware that the processes applied in solving equations algebraically are also applied in geometry.
- Emphasise the importance of providing reasons for each statement.
- The practice of justifying all the procedures or steps should be a standard practice in a mathematics class, including algebra. Learners should be encouraged to explain their statements/procedures/strategies verbally.

b). Determining congruent triangles

- Almost 98% of learners could not respond correctly to the question that required them to justify a given statement. This is attributed to learners’ inability to critically analyse a given diagram and use deductive reasoning to draw conclusions.
- Learners revealed a lack of knowledge of mathematical symbols. Symbols that are used to denote equal lines are confused with parallel lines.
- There is also a lack of understanding of the characteristics of triangles. A response below suggests that a triangle has parallel lines.
- The concept of congruency is not known or understood.

Proposed interventions

- Emphasise the importance of the critical analysis of a given diagram before attempting to answer the question. This may include advising learners to use a pencil or a coloured pen to mark the diagram(s) that provide critical information that will assist them to work out the answer.
• Different symbols that are used in mathematics should be taught and clearly explained to learners. These symbols characterise the language of mathematics (see CAPS p8, paragraph 2.2)

• Teach congruency using separate triangles before introducing composite or complex triangles. Conditions for congruency should be clearly taught.

c). Determining similar triangles

Question 8.4 focused on similar triangles. The majority of learners did not attempt this question, and those who attempted it could not provide correct reasons for their statements. Again learners’ inability to justify the answers emerged as a challenge.

Proposed interventions

• Similarity and congruency between triangles can be confusing to learners especially in terms of the conditions for similarity and congruency; therefore the differences between these two concepts should be clarified during teaching.

• Providing reasons to justify given statements should be drilled in all geometry lessons until learners master this practice. In some instances a teacher should give learners correct statements and ask learners to justify them. The question ‘why?’ should dominate all mathematics lessons.

d). Reflection and rotation of triangles.

Learners lacked the following skills to tackle the question successfully:

• Drawing the reflected image.

• Writing the coordinates of the reflected image.

• Drawing the rotated image

• Determining the length of a line joining two points when their coordinates are known.

The extract below is a typical example of a learner response to this item.
Proposed intervention:

Emphasise the following skills:

- Determining the coordinates of a point by reading from the grid.
- Reflecting a point in the $x$– axis.
- Accurately joining the reflected points to make the reflected image.
- Rotating a point through 180.
- Determining the length of a line given the coordinates of two points.
7.7.4. Measurement

The following topics/concepts were assessed: Determining the area of a shaded ring; calculating the area of a triangle; calculating the volume and the surface area of a prism.

Surface area and volume of prisms

The majority of learners did not respond to the question based on a triangular prism. The concepts that were assessed include area of a triangle, surface area and volume of a prism.

Although these are concepts that learners might have been familiar with, the context of a triangular prism seems to have been a challenge. This is an indication that learners were not exposed to the concept of a triangular-based prism.

Proposed interventions

- The teaching of the area of an ordinary 2D shape should immediately be followed by the teaching of the surface area of triangular prisms (3D objects).
- Emphasise the use of nets when calculating the surface area of a triangular prism.
- Use appropriate formulae to calculate area, surface area and volume.
- The teaching of area should not be limited to ordinary 2D triangular and rectangular shapes. Learners should be assisted to identify a triangular surface from a 3D object such as a triangular-based prism and use the same formula used in ordinary triangular 2D shapes to calculate the area.
### 7.7.5. Data Handling

*The following topics/concepts were assessed:* Completing a frequency table; determining measures of central tendency; summarising data using a stem-and-leaf; determining probability.

Data handling generally addresses topics and concepts that are known to be easy to the majority of learners because of the real life contexts that characterise it; however the average performance in this Content Area was 10%. Learners could not summarise the data using a stem-and-leaf plot and calculate the mean, mode and median.

The concept of probability is not well understood.

**Proposed interventions**

There is an abundance of real life data drawn from and representing different situations in the country. The teaching of data handling should, therefore, be made as enjoyable as possible for learners by drawing from the contexts they can relate to. In Grade 9, learners should be taught to choose and justify the appropriate method of data collection as well as criteria for summarising data.
8. **Summary of the Key Findings: Languages**

8.1 **Foundation Phase - Home Language**
- Low reading levels and poor reading skills.
- Poor comprehension skills.
- Inability to write sentences on visual text.
- Inability to construct and punctuate sentences and use tenses correctly.
- Illegible and poor handwriting.

8.2 **Intermediate Phase - Home Language**
- A lack of understanding of the events in the story (e.g. cause and effect, sequencing the events of a story).
- An inability to summarise a story.
- A lack of understanding of different figures of speech.
- Poor understanding and use of different parts of speech.
- Inability to rewrite sentences in a different tense.
- Lack of editing skills i.e. inability to correct the punctuation, spelling and grammar in a sentence.
- Inability to convert a sentence from reported speech into direct speech.
- Weak writing skills.

8.3 **Senior Phase (Grade 9) - Home Language**
- An inability to interpret the meaning or give an opinion of different texts (e.g. cause and effect, symbolism and humour in visual texts).
- A lack of understanding of idioms and expressions.
- An inability to explain concepts in an information text.
- A lack of familiarity with different figures of speech and insufficient vocabulary to comprehend their meaning.
- An inability to identify the topic sentence of a paragraph, distinguishing main points from supporting detail.
- Poor understanding and use of different parts of speech.
- Inability to rewrite sentences in a different tense or use different forms of a verb.
- Inability to convert a sentence in the active voice into the passive voice or direct speech into reported speech.
- Lack of editing skills i.e. inability to correct the punctuation, spelling and grammar in a paragraph.
- Poor writing skills.

8.4 **Intermediate Phase - First Additional Language**
- A lack of understanding of the events in the story (e.g. main idea of a story, cause and effect).
- Inability to interpret characters in a story, make inferences and give an opinion.
- Insufficient vocabulary.
• Poor understanding and use of different parts of speech.
• Inability to rewrite sentences in a different tense.
• Inability to punctuate a sentence, add capitalization or use spelling rules.
• Poor writing skills.

8.5 Senior Phase (Grade 9) - First Additional Language

• Inability to extract the meaning from different text types (a story, poem or information text).
• Inability to interpret the behaviour of characters in a story.
• Lack of understanding of different figures of speech (e.g. alliteration, assonance, simile).
• Insufficient vocabulary to understand either the question or the text.
• Lack of understanding of topic and supporting sentences.
• A lack of understanding of meta-language.
• Inability to rewrite sentences in a different tense or use different forms of a verb e.g. should, would, ought.
• Inability to change direct speech into reported speech.
• Inability to punctuate a paragraph and add capitalization.
• Poor writing skills.
9. Suggestions to Enhance the Effective Teaching and Learning of Languages

9.1 Effective teaching, learning and assessment

- Planning and teaching of Languages should be conducted according to the prescripts of CAPS.
- The Language curriculum is packaged around the following skills:
  - Listening and Speaking;
  - Reading and Viewing;
  - Writing and Presenting; and
  - Language Structures and Conventions.

All these skills need to be taught and assessed on an on-going basis.

- Although the Annual National Assessment focuses on skills that can be tested through a pen-and-paper test, this must not be seen to indicate that only these skills are important and need to be developed. **Listening and Speaking** lay the foundation for vocabulary development, reading and writing and are central to learning in all subjects but it is not possible to assess them through the ANA. Time needs to be spent on a daily basis developing and assessing these skills. This is particularly important in the First Additional Language.

- Learner attainment is inextricably linked to proficiency in the language of learning and teaching, and, in particular, proficiency in **reading**. To become proficient readers, learners need to read a variety of texts on a frequent basis and be taught and practise the use of a range of reading strategies, e.g. skimming, scanning, prediction, comparing, contrasting, inferring and summarizing.

- It is a myth that **comprehension** automatically happens when you read a text – learners need to be taught how to comprehend texts, locate and retrieve information, make inferences and interpretations and integrate ideas and information across texts to provide reasons and explanations.

- The understanding and use of parts of speech, reported and direct speech, the active and passive voice and writing in different tenses posed challenges for many learners. **Language structures** must be taught in context and learners must be given opportunities to practise these different skills.

- An analysis of the ANA scripts reflects that many learners experience difficulty in **writing** different texts. Their language use, spelling and punctuation are often weak, vocabulary is limited and sentences do not flow coherently. Learners need frequent, practice, week by week, term by term, year by year, writing different texts to gain competence in this skill. Focused lessons on sentence construction and paragraph writing and the use of conjunctions to form cohesive sentences will help to improve learners’ writing skills.

- Careful **marking** of learners’ writing will reveal common errors made by learners. These errors can be used to inform focused lessons. Although it is not necessary to mark every spelling, punctuation and language structure and convention error, it is not advisable to totally ignore such errors as learners will become careless. The use of the **process approach** where learners plan, draft and edit their work will ensure that learners produce writing that is accurate, coherent, rich in language and original in ideas.

- The ANA analysis also reflected that many learners were unfamiliar with **meta-language** i.e. language used to talk about language. It is important to make learners aware of grade-appropriate terminology such as figures of speech, different tenses, parts of speech, synonyms and antonyms.

- Make effective use of formative assessment (assessment for learning) to enhance learner performance.

- Expose learners to various types of questions including multiple choice questions. Give learners
practice in answering questions that address different cognitive levels, (literal, reorganisation, inference, evaluation and appreciation.)

- In the ANA, learners experienced difficulty in **understanding** what was required in a **question** and how to respond correctly e.g. **answering in a full sentence...**, **rewriting the sentence...**, **underlining the answer...** etc. Give learners practise in these skills so the format of the ANA questions is familiar to them.

- Expose learners to a variety of reading resources (fiction and non-fiction) that cater for various reading levels (emergent, fluent, independent) and interests in the classroom.

### 9.2 Lessons from the 2011 Progress in International Reading Literacy Study

South Africa participated in the **2011 Progress in International Reading Literacy Study**, one of a series of studies focusing on progress in reading literacy in (1) reading for literary experience and (2) reading to acquire and use information. 2011 PIRLS reports achievement at the following four points along the scale as international benchmarks:

- **Advanced International Benchmark**: the ability to integrate ideas and information across texts to provide reasons and explanations;
- **High International Benchmark**: the ability to make inferences and interpretations with text-based support;
- **Intermediate International Benchmark**: the ability to make straightforward inferences;
- **Low International Benchmark**: the ability to locate and retrieve information from different parts of the text.

Questions in the 2013 Annual National Assessment in Languages for Grades 1-6 and 9 reflect the same benchmarks. The ANA Language papers included different reading texts pertinent to the grade with questions that reflect different levels of achievement. Writing tasks were similarly graded.

Expose learners to the **activities and questions** that are pitched at these **different levels**, but provide support, especially in lower grades. The ANA analysis revealed that learners performed fairly well when they only needed to locate and retrieve information from a text (the PIRLS Lowest International Benchmark). However, making inferences and interpretations and integrating ideas and information from different texts is proving a challenge for many learners.
10. **Analysis of Learner Responses by Grade and Subject: Languages**

10.1 **Home Language Grade 1**

Reading and comprehension skills, sentence construction, language usage and writing

Question 3.3: Sequencing of events in the story

Learners demonstrated poor reading and comprehension skills. The learner responses show that the:

- learners did not understand the question
- learners did not know the correct order of the events in the story

Question 8: Rewriting the sentence using a capital letter and full stop.

Learners demonstrated poor understanding and knowledge of sentence construction. The response shows that the learner does not know that the name of the person (Max) should be written in a capital letter and that the sentence should end with a full stop.
Question 10.1: Sentence construction (write the words in the correct order to make a sentence)

Learners demonstrated poor understanding and knowledge of sentence construction skills. The responses show that the learner could not read and re-arrange the words to make a correct sentence.

Question 10.2: Write two sentences about the picture

Learners were unable to interpret visual texts. The response shows that learners were not able to formulate a sentence. Learners just wrote random words.
Proposed interventions

a). Reading and comprehension skills

At grade 1 level, learners should be exposed to structured reading lessons on a daily basis which should take the form of Whole Class Shared Reading, Group Guided Reading and Independent Reading sessions. Learners should be expected to read at least one book per week.

The following comprehension skills should be taught namely:

- Visual comprehension skills (predict the story using the pictures in the text)
- Literal comprehension skills:
  - discuss the main characters and ideas in the story
  - discuss the title of the book
  - sequence the events in the story

b). Sentence construction, language usage and writing

At Grade 1 level learners should be taught emergent writing skills using “pictures” and real objects. Emergent writing skills should include copying and writing letters, words, captions, sentences and the use of writing frames.

Learners should be exposed to listening and speaking that relate to storytelling and reading, discussions related to personal experiences and theme related discussions. These activities should build-up to story writing starting with pictures and progressing to words and a few (3 to 5) sentences.

At grade 1 level learners should be taught basic punctuation skills (use of capital letters and full stops) and grammar (pronouns, nouns, tenses, word order, plurals).

10.2. Home Language Grade 2

Reading and comprehension skills, Language structure and use and Writing

Question 5: Sequencing events in the story:

The general observation is that learners are still struggling with giving the correct sequence of events after listening to a short story being read to them.
**Proposed interventions**

The teacher must read simple texts to learners and ask them to narrate the story orally in the order of events to equip them with comprehension skills.

Questions 8.1 and 8.2: Comprehension (Inferential skills): Learners demonstrated poor responses to inferential type questions. The response reflects poor reading and comprehension skills; the learner was unable to give a reason to open ended question that required a response to “why?” and “what?” type questions.

Question 10: Learner responses demonstrate poor knowledge of the opposite of “day”

Question 12: Interpretation of graphical information

The learner responses reflect poor knowledge and understanding of informational texts. The responses show that learners were unable to read and respond to the questions on the calendar.
Question 14: Tenses

The learner responses demonstrate poor knowledge and understanding of the use of tenses (past and future). The responses show that learners are unable to:

- rewrite a sentence correctly in the past tense using “yesterday”.
- rewrite a sentence correctly in the future tense using “tomorrow”.
Question 15: Punctuation

Learner responses reflect poor understanding of punctuation. The responses show that learners were unable to rewrite the sentence correctly i.e. not able to identify the question and write the question mark.
Question 16: Pronouns

Learner responses reflect poor understanding of the term “pronoun”. They were unable to write the correct pronoun. Learner responses reflect confusion and misunderstanding of what a “pronoun” is.
Question 17: Write 5-8 sentences on a picture

Learner responses reflect poor writing skills and sentence formulation. The responses show that the learners are unable to write 5 to 8 sentences on a picture.
Proposed interventions

a). Reading and comprehension skills

At grade 2 level learners should be exposed to structured reading lessons on a daily basis which should take the form of Whole Class Shared Reading, Group Guided Reading and Independent Reading sessions. Learners should be expected to read at least one or two books (fiction and non-fiction texts) per week. Learners should be exposed to comprehension skills namely:

- Literal comprehension skills
- Inferential comprehension skills that relate to cause and effect and expressing an opinion etc.

b). Language structure and conventions

In grade 2, learners should be exposed to the following:

- Punctuation (capital letters, full stops, commas, question mark, exclamation mark)
- Tenses: present, past and future tense
- Plurals
- Parts of speech
- Opposites
- Pronouns

c). Writing

The writing requirements for Grade 2 are at least six to eight sentences using correct punctuation (capital letters and full stops). The written texts should include the writing of:

- Personal news/experiences
- Weather news
- Topical events
- Rewrite a story that is told or read
- Own stories (reading texts, theme topics etc)
- Messages
- recipes
- lists
- dialogues
- friendly letters
- invitations and cards

Learners should be given at least two writing activities per week.
10.3. Home Language Grade 3

Reading and comprehension skills, Language structure and conventions and Writing

Question 4: Sequencing events in the story

Learners demonstrated poor reading and comprehension skills. The response shows that learners did not know how to sequence the events in the story in the correct order. The learner wrote numbers randomly without thinking about the order of the events in the story.

Question 8: Tenses (present and past tense)

Learners demonstrated poor understanding and knowledge of past and present tenses. The responses show that the learners do not know how to rewrite a sentence in the past or present tenses which require changing the verb tense.
Question 9: Parts of speech (nouns, pronouns,) and conjunctions

Learners demonstrated poor understanding and knowledge of nouns and pronouns. The response shows that the learner was confused and mistook nouns for pronouns.

The response shows that the learners do not know what a conjunction is and therefore circled option ‘a’ and in some instances did not attempt the question.

The learner circled random words, which shows confusion with nouns and pronouns.
Question 11: Punctuation

The response shows that the learner has a poor understanding of punctuation marks. The learner could not rewrite the sentence correctly using an apostrophe and full stop. The learner only knew that the sentence starts with a “Capital letter” but didn’t know the use of the apostrophe and full stop.

The learner was unable to recognize the question and did not know the use of the comma.

The response shows that the learner has a poor understanding of direct speech. The learner was not able to recognize direct speech and was unable to write the inverted commas and exclamation mark.
Question 12: Verbs

The learners demonstrated insufficient knowledge of how to use verbs to agree with the subject correctly.

Question 13: Analysis and interpretation of informational texts (duty list)

The response shows that the learner was not able to read and make sense of information that is represented in a table format. The learner wrote random responses.

<table>
<thead>
<tr>
<th>Name</th>
<th>Monday and Wednesday</th>
<th>Tuesday and Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mpho</td>
<td>Feed the pigs</td>
<td>Clean the pigsty</td>
</tr>
<tr>
<td>Sibongile</td>
<td>Clean the barns</td>
<td>Brush the horses</td>
</tr>
<tr>
<td>Peter</td>
<td>Feed the horses and chickens</td>
<td>Take the eggs out of the nests</td>
</tr>
<tr>
<td>Pat</td>
<td>Weed the vegetable garden</td>
<td>Water the vegetable garden</td>
</tr>
<tr>
<td>Sane</td>
<td>Pick fresh vegetables</td>
<td>Feed the pigs and chickens</td>
</tr>
</tbody>
</table>

13.1 Mpho feeds the pigs on a Monday. Who else feeds the pigs?

13.2 Pat and Sam both work in the vegetable garden. What does Pat do on a Wednesday?

13.3 Sibongile brushes the horses on a Tuesday and a Thursday. On which days does he clean the barn?


13.2 UVulungu, usandle bhekabe basebenza egedla. Muvuma, umzolo ngaphako, kuthathathu?

13.3 USibongile ubushanga amahasha ngaphile, wakululeki nangakwesini. Zethu imbali.Isipho amba amathandazelo?

13.1 Mpho voer die varke op 'n Maandag. Wie voer ook die varke?

13.2 Pat en Sam werk albei in die groentetuin. Wat doen Pat op 'n Woensdag?

13.3 Sibongile borsei die perde op 'n Donderdag en 'n Donderdag. Op watter dae maak hy die stel skoon?
Question 15: Write 10 sentences on the topic: “A visit to the farm”

The response shows that the learner was unable to write ten (10) sentences related to the topic “A visit to the farm.” The learner was unable to compose ten simple short sentences using correct punctuation, grammar and spelling.

Proposed interventions

a). Reading and comprehension skills

At Grade 3 level, learners should be exposed to structured reading lessons on a daily basis which should take the form of Whole Class Shared Reading, Group Guided Reading and Independent Reading sessions as well as library reading activities.

Learners should be expected to read at least two to three books per week. Grade 3 learners should be exposed to a large variety of fiction and non-fiction texts including short stories, plays and novels. Learners should also be exposed to informational texts such as reading and interpreting graphs (pictograms, bar graphs, block graphs, pie charts etc.); charts, duty rosters, timetables, menu cards, recipes, experiments, instructions, advertisements, comics, emails etc.
Learners should be exposed to a variety of comprehension skills namely:

- Literal comprehension skills.
- Inferential comprehension skills that relate to cause and effect and expressing an opinion and responses to “what, why, how” type questions.
- Re-organizational skills which involve comparing, listing, summarising and classifying information.
- Evaluation skills that relate to responses to “Do you agree”; “Would you have done…”
- Appreciation skills: “Do you know anyone like…”, “Why did you like/dislike…”

b). Language structure and conventions

In grade 3 learners should be exposed to the following:

- Punctuation (capital letters, full stops, commas, apostrophe, question mark, inverted commas, exclamation mark)
- Different sentence types: questions, commands, statements
- Subject and predicate
- Plurals
- Tenses: present, past and future tense
- Parts of speech (nouns, verbs, adjectives, adverbs, pronouns, prepositions)
- Conjunctions: using “and” “but”
- Dictionary skills

c). Writing

- The writing requirements for Grade 3 are at least two paragraphs (10) sentences using correct punctuation, grammar and spelling. The written texts should include the writing of:
  - Personal news/experiences
  - Topical events
  - Own stories (reading texts, theme, topics etc.)
  - Messages
  - Recipes
  - Instructions (how to make a zigzag book)
  - Lists (shopping list)
  - Dialogues
  - Friendly letters
  - Invitations and cards
  - Experiments

- Learners should be given at least two to three writing activities per week.

10.4. Home Language Grade 4

In this section identified ‘gaps’ in specific skills, knowledge and competencies that were displayed by Grade 4 Home Language learners have been presented. The examples are taken from the English scripts. However, similar ‘gaps’ were identified in Afrikaans.
10.4.1. Comprehension

Learners were tested on their comprehension of a story, an information text and a menu.

An analysis of the scripts reflected:

- **a lack of understanding of the text** (e.g. main idea and details of the text, characters, cause and effect; sequencing of events). In question 5 learners were expected to explain the cause of Vuyo running away (He was shy). The learner in the following example gave a totally different reason that is not supported by the text).

  ![Example of a learner's response](image)

  "What caused Vuyo to run away from Mrs Rametse’s house when he took her some eggs?"

  "He was shy because he was afraid of Mrs Rametse."

  

- **an inability to analyze a text and identify the lesson of a text.** This learner was unable to analyze the information text for question 7 and identify the lesson to be learned. Instead he simply wrote "many things".

  ![Example of a learner's response](image)

  "What lesson have you learned from this story?"

  "Many things X"

- **difficulty in expressing feelings or giving an opinion about a text.** In question 4 learners had to express how they felt about the story. This learner could only repeat the question.

  ![Example of a learner's response](image)

  "How did you feel when reading this story? Give a reason for your answer."

  "I don’t feel anything because I don’t understand the story."
Proposed interventions

- Provide more opportunities for learners to read and engage with a range of texts.
- Ensure schools with Grades 4 learners order approved Core Readers and sets of Graded Readers from the National Catalogue.
- Teach and provide practice using different figures of speech.
- Teach comprehension skills so learners know how to analyze both fiction and information texts, explain cause and effect, sequence events or actions, extract specific details from a text, make inferences, express feeling on a text and explain an opinion.

10.4.2. Language and Writing

Learners were tested on parts of speech, spelling and punctuation, subject verb concord, tenses, and synonyms and antonyms. For writing, learners were expected to write a two-paragraph story using a picture.

An analysis of the scripts reflected:

- **poor understanding and use of different parts of speech** e.g. conjunctions, adjectives, adverbs, prepositions and degrees of comparison.

  In question 22 learners had to change an adjective into an adverb. The learner in the example rewrote the entire sentence without a change apart from changing the order of the adjective.

- **inability to rewrite sentences in a different tense**;

  In question 18.2 learners had to rewrite a sentence from the past tense into the future tense. The learner in the example, like many others, does not know how to form the verb in the future tense.

  In question 18.3 learners had to rewrite a sentence using the past continuous tense. The learner in the example did not know either the correct form of the auxiliary verb (*be*) or the past participle of *play*.
• **a lack of editing skills** i.e. an inability to correct the punctuation in a sentence;

In question 17, learners were expected to rewrite a sentence, using correct punctuation. In this response the learner copied only part of the sentence and included no punctuation.

• **a lack of understanding of meta-language** e.g. past continuous tense, synonym, antonym, punctuation, parts of speech;

• **weak writing of a story:**
  • Poor grammar (especially the correct form of the verb, preposition and pronoun), punctuation and spelling (of even frequently used words);
  • Failure to write a story in a logical and sequential way;
  • Failure to divide the writing into two paragraphs that link together.

In this response the learner was only able to write two sentences using very limited vocabulary.

---

**Proposed interventions**

• Teach focused lessons and give more practice in:
  • using different parts of speech;
  • rewriting sentences from one tense to another using different tenses and verb forms;
  • editing and rewriting sentences using correct spelling, grammar and punctuation.

• Ensure learners are familiar with meta-language e.g. parts of speech, degrees of comparison, synonym, antonym, punctuation;

• Increase the number of grammar and vocabulary exercises;

• Build a rich vocabulary and provide opportunities to repeat its use on a daily basis;

• Organize spelling competitions;

• Ensure that correct punctuation is used when learners write their own texts;

• Ensure learners write texts for different purposes on a weekly basis e.g. story, poem or song, instructional text, descriptive paragraph, news report on a personal experience, dialogue. The process approach to writing should be used to help learners plan and refine their writing;

• Use the grammar, punctuation and spelling errors from learners’ writing to inform focused language lessons.
10.5. Home Language Grade 5

In this section identified ‘gaps’ in specific skills, knowledge and competencies that were displayed by Grade 5 Home Language learners have been presented. The examples are taken from the English scripts. However similar ‘gaps’ were identified in Afrikaans.

10.5.1. Comprehension

Learners were tested on their comprehension of a story, an information text and a poem.

An analysis of the scripts reflected:

- a lack of understanding of the text (e.g. main idea of the story, characters, cause and effect; sequencing the events of a story);

  In question 6 learners were expected to explain the rooster’s anger (The dragon had taken the rooster’s horns and didn’t bring them back). The learner in the following example gave the reason for the dragon taking the rooster’s horn –not the reason for the rooster’s behaviour).

- an inability to analyze a text and identify the lesson of a text;

  This learner was unable to analyze the information text for question 12, instead identified a statement that is contrary to the main idea of the text.

- a lack of understanding of different expressions and figures of speech;

  In question 9 learners were expected to identify the simile “happy as a lark” in the text. This learner was not familiar with this expression so could not complete the simile.
**Proposed interventions**

- Provide more opportunities for learners to read and engage with a wide range of texts and genres;
- Ensure schools with Grades 5 learners order approved Core Readers and sets of Graded Readers from the National Catalogue;
- Teach and provide practice using different figures of speech;
- Teach comprehension skills so learners know how to analyze a range of different text types, sequence events in a story, explain cause and effect, extract specific details from a text, make inferences and interpretations and give a reasoned opinion.

**10.5.2. Language and Writing**

Learners were tested on parts of speech, spelling and punctuation, subject verb concord, tenses, direct and indirect speech and synonyms. For writing, learners were expected to write a diary entry of 8-10 sentences about how he/she was bullied at school.

An analysis of the scripts reflected:

- **poor understanding and use of different parts of speech** e.g. conjunctions, adjectives and degrees of comparison;

  In question 22 learners had to fill in the missing degree of comparison (*better* from the given word *good*). The learner in the example provided a different adjective (*happy*) but this was also not the correct degree of comparison.

<table>
<thead>
<tr>
<th>Fill in the missing degree of comparison.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natalie felt <em>(good)</em> when she won the silver medal, but felt even <em>happy</em> when she won gold.</td>
</tr>
</tbody>
</table>

- **inability to rewrite sentences in a different tense**;

  In question 17.1 learners had to rewrite a sentence from the present tense into the future tense. The learner in the example does not know the future form of the verb *works*.

<table>
<thead>
<tr>
<th>Rewrite the following sentence from the present tense to the future tense.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natalie works hard to be successful.</td>
</tr>
<tr>
<td><em>Natalie will be</em> works hard to be <em>successful</em></td>
</tr>
</tbody>
</table>

- **inability to use correct subject verb concord**;

  In question 24 learners had to identify the correct form of the verb so that it agrees with the subject (subject verb concord). The learner in the example does not know the singular verb form of *win*.

<table>
<thead>
<tr>
<th>Rewrite the following sentence from the present tense to the future tense.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natalie works hard to be successful.</td>
</tr>
<tr>
<td><em>Natalie will be</em> works hard to be <em>successful</em></td>
</tr>
</tbody>
</table>

• a lack of understanding of meta-language;

• inability to convert a sentence in direct speech into indirect speech;

• weak writing of a recount:
  º poor grammar (especially the correct form of the verb, preposition and pronoun), punctuation and spelling (of even frequently used words);
  º failure to write a recount in a logical and sequential way;
  º failure to divide the writing into three paragraphs that link together.

The learner was only able to write one paragraph with many basic punctuation, grammar and spelling errors.

In question 11 learners were expected to choose rhyming words from a poem but most of them were unable to do so. This might be caused by the lack of knowledge of the term ‘rhyme’ from the poem.
Proposed interventions

- Teach focused lessons and give more practice in:
  - identifying and using different parts of speech;
  - rewriting sentences from one tense to another using different tenses and verb forms;
  - editing and rewriting sentences and paragraphs using correct spelling, grammar and punctuation.
- Ensure learners are familiar with meta-language e.g. direct and reported speech, parts of speech, degrees of comparison, “rhymes with”.
- Increase the number of grammar and vocabulary exercises.
- Build a rich vocabulary and provide opportunities to repeat its use on a daily basis.
- Organize spelling competitions.
- Ensure that correct punctuation and spelling is used when learners write their own texts.
- Ensure learners write text types for different purposes on a weekly basis so they are familiar with different formats and requirements e.g. story, report, book review, newspaper article, information text. The process approach to writing must be used to ensure learners plan and refine their writing.
- Use the grammar, punctuation and spelling errors from learners’ writing to inform focused language lessons.

10.6. Home Language Grade 6

In this section identified ‘gaps’ in specific skills, knowledge and competencies that were displayed by Grade 6 Home Language learners have been presented. The examples are taken from the English scripts. However similar ‘gaps’ were identified in Afrikaans.

10.6.1. Comprehension

Learners were tested on their comprehension of a story, an information text and an advertisement.

An analysis of the scripts reflected:

- a lack of understanding of the events in the story (e.g. cause and effect; sequencing the events of a story);

In question 9, learners were expected to identify the effect of an action (the water leaking from the pot resulted in pumpkins growing). The learner in the following example could not see the link between the leaking pot and the pumpkins being watered.

- an inability to summarise a story;
- an inability to analyze a text and identify the lesson of a story;
In question 10, the learner was unable to analyze the story and identify the lesson to be learnt.

- **a lack of understanding of different figures of speech**

In question 6 learners were expected to identify an example of a simile and alliteration in the text. This learner had no idea that “as important as a human being” is a simile and “perfect proud pot” is an example of alliteration.

### Proposed interventions

- Provide more opportunities for learners to read and engage with a wide range of texts and genres.
- Ensure schools with Grades 6 learners order approved Core Readers and sets of Graded Readers from the National Catalogue.
- Teach and provide practice using different figures of speech.
- Teach comprehension skills so learners know how to analyze a wide range of different text types, sequence events in a story, extract specific details from a text, make inferences and interpretations and give a reasoned opinion.

### 10.6.2. Language and Writing

Learners were tested on parts of speech, spelling and punctuation, subject verb concord, tenses, antonyms and synonyms, the formation of words using prefixes and suffixes, direct and indirect speech and different sentence types. For writing, learners were expected to write a diary entry of 8-10 sentences about how he/she was bullied at school.

An analysis of the scripts reflected:

- **poor understanding and use of different parts of speech e.g. conjunctions, pronouns, prepositions, adjectives and nouns.**

In question 15 learners were expected to identify three adjectives from the advertisement. The learner in the example only provided three irrelevant sentences that contained adjectives.
an inability to rewrite sentences in a different tense;

a lack of understanding of meta-language;

a lack of editing skills i.e. inability to correct the punctuation, spelling and grammar in a sentence;

In question 17, learners were expected to edit a sentence. In this response the learner not only failed to correct the errors but also rewrote some correct words incorrectly and changed the sentence into the negative form.

 Rewite the following sentence, correcting the spelling and punctuation mistakes.

the South African flag should be respected as follows: it should never touch
the floor be displayed over any objects or used to cover statues.

Rewrite the following sentence into direct speech.

Sipho said that he loved his tuckies.

Sipho said, "I love his tuckies."

Rewrite the following sentence into two simple sentences.

Following the rules is important because it is a sign of respect.

Sentence 1: __________________________ X

Sentence 2: __________________________ X

an inability to convert a sentence in reported speech into direct speech;

This learner’s response to question 16 reveals a lack of understanding of the changes that need to be made when writing and using direct speech.

 an inability to convert a complex sentence into two simple sentences;

Question 25 required learners to divide a complex sentence into two simple sentences. Most learners were not able to answer the question correctly.

 Weak writing of a diary entry:

- Poor grammar (especially the correct form of the verb, preposition and pronoun), punctuation and spelling (of even frequently used words);
- Failure to write a diary entry in a logical and sequential way;
Failure to use rich and varied vocabulary.

In the following response the learner lacked the written vocabulary to express himself coherently but also made many basic grammar and spelling errors.

I was build by a big Monster a highe

god he asked if i cud give he my

money and i said no. he said am asking

you for the se cant time give me

your money. before i break you in to

piece i said he cam kille me entil

i die. he saw am asking for the

last time. i said do what you

have to do. he ran away the

next day he cam what friends

and i ran away. i told my mom

that some one was going to bully me.

Mom told bad. bad told that boy to

stop bullying me. after way you were going
to pay me what you did to me

Proposed interventions

• Teach focused lessons and give more practice in:
  • identifying and using different parts of speech;
  • rewriting sentences from one tense to another using different tenses and verb forms;
  • rewriting sentences from complex to simple;
  • editing and rewriting sentences and paragraphs using correct spelling, grammar and punctuation.

• Ensure learners are familiar with meta-language e.g. direct and reported speech, parts of speech, prefixes and suffixes.

• Increase the number of grammar and vocabulary exercises.

• Build a rich vocabulary and provide opportunities to repeat its use on a daily basis.

• Organize spelling competitions.

• Ensure that correct punctuation and spelling is used when learners write their own texts.

• Ensure learners write text types for different purposes on a weekly basis so they are familiar with different formats and requirements e.g. essay, letter, book review, magazine article. The process approach to writing must be used to ensure learners plan and refine their writing.

• Use the grammar, punctuation and spelling errors from learners’ writing to inform focused language lessons.
10.7. Home Language Grade 9

In this section identified ‘gaps’ in specific skills, knowledge and competencies that were displayed by Grade 9 Home Language learners have been presented. The examples are taken from the English scripts. However similar ‘gaps’ were identified in Afrikaans.

10.7.1. Comprehension

Learners were tested on their comprehension of an information text, a graph, a poem and a cartoon strip.

An analysis of the scripts reflected:

- **an inability to interpret the meaning or give an opinion of different texts** (e.g. cause and effect, symbolism and humour in visual texts);

  In question 3.3 learners were expected to explain the humour in the last frame of a cartoon. This learner failed to understand the power play in the cartoon and the way the mother’s behaviour succeeds in changing the boy’s decision.

- **a lack of understanding of idioms and expressions** e.g. human trafficking, “slip through the cracks”;

  In question 1.6 learners needed to explain the expression “slip through the cracks”. The learner could not explain this expression.

- **an inability to explain concepts in an information text** e.g. giving an opinion on the reliability of statistics;

  In question 1.8 learners were expected to give a reasoned opinion on the reliability of statistics in an article. The learner gave an opinion but could not substantiate it using information from the text.
• a lack of familiarity with different figures of speech and insufficient vocabulary to comprehend their meaning;

In question 2.4 learners had to identify "I want to hear the voices soaring..." as an example of a metaphor, personification or alliteration and then explain its meaning. The learner could not identify the figure of speech or explain it.

• an inability to identify the topic sentence of a paragraph, distinguishing main points from supporting detail;

Proposed interventions

• Provide more opportunities for learners to read and analyze a wide range of texts and genres of increasing complexity.

• Ensure schools with Grades 9 learners order approved Core Readers and novels from the National Catalogue.

• Expose learners to a rich and varied vocabulary e.g. When introducing a new text build the vocabulary first as part of the pre-reading activity, teach strategies to decode unknown words, teach 3-5 new words daily and provide opportunities for learners to use this new vocabulary orally and in their writing.

• Teach and provide practice using different figures of speech.

• Teach comprehension skills so learners know how to analyze a wide range of different text types, make inferences and interpretations, give a reasoned opinion and integrate ideas and information across texts to provide reasons and explanations.

10.7.2. Language and Writing

Learners were tested on parts of speech, tenses, modals, punctuation, the formation of words using prefixes, direct and indirect speech and the passive voice. For writing, learners were expected to plan and write an essay of 120-150 words using a visual stimulus and a diary entry of 80-100 words.
An analysis of the scripts reflected:

- **Poor understanding and use of different parts of speech** e.g. connectives and adjectives;
  In question 4.8 learners were expected to use the connective ‘if’ to join two sentences. This was a more complex activity than simply adding the conjunction between the two sentences. It required the learners to either re-order the sentences or place the connective at the beginning of the first sentence. The learner in the example understood the question but was not able to do this.

![Image of a complex sentence]

- **A lack of understanding of meta-language** e.g. direct and reported speech, passive voice, main clause, conjunction;

- **Lack of editing skills** i.e. inability to correct the punctuation, spelling and grammar in a paragraph;
  In question 4.10, learners were expected to edit a paragraph. In this response the learner not only failed to correct the errors but also rewrote some correct words incorrectly and failed to underline the errors.

![Image of a paragraph with errors]
• inability to convert a sentence in the active voice into the passive voice or direct speech into reported speech;

The learner’s response to question 4.2 showed a lack of understanding of how to write using the passive voice.

![Example of a learner's planning](image)

• a lack of familiarity with main and subordinate clauses;

In question 4.4 learners were expected to write the main clause of a sentence. The learner’s response revealed a lack of understanding of main and subordinate clauses.

![Example of a learner's planning](image)

• Weak writing of an essay and a diary entry:
  - Failure to plan the writing process using the mind map provided;
  - Poor grammar and spelling;
  - Inability to construct meaningful sentences;
  - Failure to understand or write on the given topic;
  - Failure to write a story or diary entry in a logical and sequential way;
  - Failure to use rich and varied vocabulary.

Below is an example of a learner’s planning. The resulting essay on ‘Silence’ is given.
The following two responses, the first on ‘Silence’ and the second on the ‘Family’, reflect that the two learners have different levels of language competence and vocabulary extent. The first visual stimulus in particular suggests a reflective essay, giving the writer the opportunity to contemplate an abstract issue and present his/her personal thoughts and feelings.

<table>
<thead>
<tr>
<th>Response 1 ‘Silence’</th>
<th>Response 2 ‘Family’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silence can speak a thousand words and do a thousand actions. It can display an emotion that though out many people and even bring greater outward thoughts the way we relate to a situation then what the greatest speech could have. Silence is not all to glory. It destroys relationships, breaks high spirits, and can become a harmful statement. Some people have the power to choose how we use the silence in the world. Will we use it to express the truths of the world to motivate the people around us to help and help keep our South Africa the best it can be or will we choose to use the power we are given to gain more power over people allowing others to feel discriminated by our harsh words, even if we start cry a single word to please people for himself over both past or hard to read. Ignoring our responsibility to note for people we still forced to see a blind eye and walk on whilst a helpless individual desperate for silence for our help.</td>
<td></td>
</tr>
<tr>
<td>The essay is a deeply one people must be responsible in their children and be special to the children they must take care of their children but to be safe and secure your child because they are the best thing that have happened to you but if it is not you child but give them the love that you want because you give your people would step again in their family and be Citizen to the society life and be return to the school work and be show k your time color of what.</td>
<td></td>
</tr>
</tbody>
</table>

Proposed interventions

- Teach focused lessons and give more practice in:
  - identifying and using different parts of speech;
  - editing and rewriting paragraphs using correct spelling, grammar and punctuation.
- Ensure learners are familiar with meta-language e.g. direct and reported speech, passive and active voice, main and subordinate clauses.
- Increase the number of grammar and vocabulary exercises.
- Build an extensive and rich vocabulary and provide opportunities to repeat its use on a daily basis.
- Ensure that correct punctuation and spelling is used when learners write their own texts.
- Ensure learners write text types for different purposes on a weekly basis so they are familiar with different formats and requirements e.g. essay, formal and informal letter, report, interview. The process approach to writing must be used to ensure learners plan and refine their writing.
- Use the grammar, punctuation and spelling errors from learners’ writing to inform focused language lessons.
10.8. First Additional Language Grade 4

In this section identified ‘gaps’ in specific skills, knowledge and competencies that were displayed by Grade 4 First Additional Language learners have been presented. The examples are taken from the English scripts. However similar ‘gaps’ were identified in Afrikaans.

10.8.1. Comprehension

Learners were tested on their comprehension of a story, a poem and an advertisement.

An analysis of the scripts reflected:

- **a lack of understanding of the events in the story** (e.g. main idea of a story, plot, setting, cause and effect);

  In question 6 learners were expected to identify the cause of an effect (the lion woke up). Many learners could only repeat a sentence from the story that reflected another, unrelated action:

  ![Image of a student's response to a question about a story](image1)

- **an inability to understand characters in a story**, to interpret an action or identify the lesson of a story;

  In question 5.2 learners were expected to give a reason for the lion needing help from the mouse. This learner understood the question but lacked the language competence to explain the reason:

  ![Image of a student's response to a question about a story](image2)

- **an inability to interpret the information given in an advertisement.**

Proposed interventions

- Provide more opportunities for learners to read stories and information texts.
- Ensure schools with Grades 4-6 learners order approved Core Readers and sets of Graded Readers from the National Catalogue.
- Teach reading strategies, including phonics and word attack skills in the FAL.
- Include daily reading time so learners read every day from Workbooks, textbooks or library books.
- Expose learners to more vocabulary e.g. When introducing a new text build the vocabulary first as part of the pre-reading activity, teach strategies to decode unknown words, teach 3-5 new words daily and provide opportunities for learners to use this new vocabulary.
- Teach comprehension skills so learners know how to understand both stories and information texts, find specific details from a text, make straightforward inferences and give an opinion.
10.8.2. **Language and Writing**

Learners were tested on parts of speech, subject verb concord, tenses, punctuation, synonyms, the formation of words using a prefix, spelling e.g. plural forms of words and the gender forms of nouns. For writing, learners were expected to write a story of 8-10 sentences about their best friend.

An analysis of the scripts reflected:

- **poor understanding and use of different parts of speech** e.g. connecting words (*and* and *because*), pronouns, adjectives and prepositions;

  In question 27 learners had to identify an adjective from a given sentence. Most of them displayed a limitation in understanding basic language structure.

- **inability to rewrite sentences in a different tense**;

  In the following example the learner did not know the past tense for *runs*.

- **a lack of understanding of meta-language** e.g. the meaning of words such as punctuation, prefix, preposition, pronoun, gender, abbreviation, "rhymes with";

- **inability to punctuate a sentence and add capitalization**;

- **poor knowledge of spelling rules** e.g. plurals;

- **insufficient vocabulary to understand either the question or the text**;
In the following example the learner did not understand what was expected in the question but simply copied the instruction.

```
Punctuate the following sentence using a capital letter and a comma. Rewrite your answer in the space provided.

Lions are found in Limpopo Gauteng and mpumalanga.
```

In the following example the learner did not understand she had to respond by underlining the correct form of the verb. Instead the learner wrote the correct answer (but was not awarded a mark).

```
Underline the correct answer within brackets.

There were (many, much) lions in the jungle.
```

- **Weak story writing:**
  - Very poor grammar and spelling;
  - Minimal vocabulary so an inability to write complete sentences;
  - Inability to construct meaningful sentences to form a logical story.

In the following example the learner possessed so little vocabulary that she was unable to write more than three basic sentences.

```
Write a story of 8–10 sentences about your best friend.

A best friend is a person with whom you spend lots of time. You may want to describe your friend, his/her favourite food, colour, pets, hobbies, school subjects and things you do together.
Remember to use correct spelling, grammar and punctuation.

My best friend

Name: My best friend like to play soccer.
My best friend like to go with her dad.
He like to buy Chips.
```
The learner also lacked vocabulary but relied heavily on the words from the instructions that were given.

Proposed interventions

- Teach focused lessons and give more practice in:
  - using different parts of speech e.g. joining sentences using the correct connecting word (e.g. but, because, so that); adding the correct pronoun (e.g. I, it, you, us, them) or preposition (e.g. on, under, above, towards, on, during, with).
  - rewriting sentences from one tense to another;
  - using the correct subject verb concord.
- Ensure learners are familiar with meta-language such as punctuation, different parts of speech, synonyms and antonyms, tenses, plurals.
- Provide practice in rewriting sentences using correct punctuation and capitalization.
- Encourage the use of correct punctuation when learners write their own stories.
- Increase the number of grammar and vocabulary exercises.
- Organize spelling competitions.
- Ensure learners write different text types on a weekly basis using a frame e.g. a story, dialogue, descriptive paragraph or visual text.
- Use the grammar and spelling errors from learners’ writing to inform focused Language lessons.
10.9. First Additional Language Grade 5

In this section identified ‘gaps’ in specific skills, knowledge and competencies that were displayed by Grade 5 First Additional Language learners have been presented. The examples are taken from the English scripts. However; similar ‘gaps’ were identified in Afrikaans.

10.9.1. Comprehension

Learners were tested on their comprehension of a story, a poem and an information text.

An analysis of the scripts reflected:

- a lack of understanding of the events in the story/information text/poem (e.g. main idea, cause and effect, setting, plot);

In question 9.5 learners were expected to give the main idea of a poem, using a full sentence. Many learners copied the title (and the poet) but were unable to write the answer in a full sentence:

9.5 What is this poem about? Write your answer in a full sentence

My Family is my place

- an inability to interpret characters in a story or identify the lesson of a story;

- an inability to write a summary;

In question 10 learners needed to summarise the steps for preparing a vegetable garden in the correct sequence. Many learners were unable to identify the steps or put them in the correct sequence.

Read the paragraph below and then complete the summary that follows.

Preparing the Vegetable Garden

The first thing you need to do when starting your vegetable garden is to consider where it will be. Once you have chosen the area, dig the soil over to the depth of a garden fork. After digging, add manure so that the soil will be rich. Finally add a good fertiliser. By following the steps above, you will be able to grow your own vegetables.

Write a summary about preparing a vegetable garden by completing the steps below.

Step 1: First, find a place where the vegetable garden will be.

Step 2: Next, Find a place most have vegetables.

Step 3: Then, The food most have vegetables in your place.

Step 4: Finally, I most eating vegetables in you place.

Step 5: Now you will be ready to plant your vegetables.
Proposed interventions

- Provide more opportunities for learners to read a range of stories, poems and information texts.
- Ensure schools with Grades 5 learners order approved Core Readers and sets of Graded Readers from the National Catalogue.
- Teach reading strategies, including phonics and word attack skills in the FAL.
- Include daily reading time so learners read every day from Workbooks, textbooks or library books.
- Expose learners to more vocabulary e.g. When introducing a new text build the vocabulary first as part of the pre-reading activity, teach strategies to decode unknown words, teach 3-5 new words daily and provide opportunities for learners to use this new vocabulary.
- Teach comprehension skills so learners know how to understand both stories and information texts, find specific details from a text, summarize a passage, make straightforward inferences and give an opinion.

10.9.2. Language and Writing

Learners were tested on parts of speech, comparative and superlatives, subject verb concord, tenses, punctuation, synonyms, prefixes, spelling, using the negative form, rhyming words and the gender forms of nouns. For writing, learners were expected to write a recount in two paragraphs.

An analysis of the scripts reflected:

- **poor understanding and use of different parts of speech** e.g. connecting words, pronouns and prepositions;

  In question 11 learners were required to fill in the correct preposition. Although they were given words to choose from, most of them found it difficult to choose the correct word.

- **inability to rewrite sentences in a different tense;**

- **a lack of understanding of meta-language** e.g. the meaning of words such as summary, preposition, punctuation, prefix, negative form, rhyming words;
In these examples the learner did not understand what was meant by the negative form.

Learners were required to write a synonym of a word within brackets. Most of them did not get it correct which indicates their inability to use language correctly when it comes to identifying synonyms or lack of understanding of synonyms.

- **inability to punctuate a sentence and add capitalization;**

  In this example the learner knew to add commas to divide a list but failed to use capital letters for proper nouns or add a full stop at the end of the sentence.

- **Weak letter writing:**
  - Poor grammar and spelling;
  - Inability to construct meaningful sentences to form a logical paragraph;
  - Failure to write on the given topic;
  - Failure to write a recount in a logical and sequential way.

  In this example the learner wrote a number of badly constructed sentences that were not on the given topic:
Proposed interventions

- Teach focused lessons and give more practice in:
  - using different parts of speech e.g. connecting words, pronouns and prepositions;
  - rewriting sentences from one tense to another;
  - rewriting sentences into the negative form;
  - using the correct subject verb concord.

- Ensure learners are familiar with meta-language such as punctuation, different parts of speech, tenses, negative form.

- Provide practice in rewriting sentences using correct punctuation and capitalization.

- Ensure that correct punctuation is used when learners write their own stories.

- Increase the number of grammar and vocabulary exercises.

- Organize spelling competitions.

- Ensure learners write different text types on a weekly basis with structured support so they are familiar with different formats e.g. a story, descriptive paragraph, dialogue.

- Use the grammar and spelling errors from learners’ writing to inform focused language lessons.

- Learners need to be exposed to dictionary work to increase their vocabulary.
10.10. First Additional Language Grade 6

In this section identified ‘gaps’ in specific skills, knowledge and competencies that were displayed by Grade 6 First Additional Language learners have been presented. The examples are taken from the English scripts. However similar ‘gaps’ were identified in Afrikaans.

10.10.1. Comprehension

Learners were tested on their comprehension of a story, a graph and an information text.

An analysis of the scripts reflected:

- a lack of understanding of the events in the story (e.g. main idea of a story, cause and effect);

  In question 7 learners were expected to give a reason for the jackal wanting the crow to sing. This learner not only had no understanding of the story but also lacked the ability to express what he wanted to say:

  7. Explain why the jackal wanted the crow to sing.

     Jackal him cool the sweet the
     cheery here the horrible on the
     jackals.

- an inability to interpret characters in a story, make inferences and give an opinion;

  In question 8 learners were expected to give an opinion on whether it was fair for the jackal to get the cheese. The learner understood the question but was unable to motivate the answer.

  8. Was it fair that the jackal got the cheese? Give a reason for your answer.

     Yes

     Because it was the Jackal.

- a lack of familiarity with different figures of speech and insufficient vocabulary to comprehend their meaning;

- insufficient vocabulary to understand the question or the text.

  In question 6 learners were asked to identify two sentences showing how the jackal ‘flattered’ or ‘sweet talked’ the crow. An analysis of the scripts revealed that many learners were not familiar with the word ‘flattered’ or the idiom ‘sweet talked’, as the following example shows.

  6. Give two examples of sentences the jackal said to flatter or ‘sweet talk’ the crow.

     The (crow) was so pleased the crow.
     She should never have tricked the jackal.

- an inability to write a summary;

  In question 37 learners needed to extract six key points from an information text. Many learners were unable to analyze the story in order to identify the key points.
Proposed interventions

- Provide more opportunities for learners to read a variety of texts.
- Ensure schools with Grade 6 learners order approved Core Readers and sets of Graded Readers from the National Catalogue.
- Teach reading strategies, including phonics and word attack skills in the FAL.
- Include daily reading time so learners read a minimum of one book per week throughout the year.
- Expose learners to more vocabulary e.g. When introducing a new text, build the vocabulary first as part of the pre-reading activity, teach strategies to decode unknown words, teach 3-5 new words daily and provide opportunities for learners to use this new vocabulary orally and in their writing.
- Teach comprehension skills so learners know how to analyze different text types, extract specific details from a text, make inferences and give an opinion.

10.10.2. Language and Writing

Learners were tested on parts of speech, comparative and superlatives, subject verb concord, tenses, punctuation, synonyms and antonyms, the formation of words using prefixes, spelling e.g. plural forms of words and the gender forms of nouns. For writing, learners were expected to write a letter of four paragraphs to a friend about a day he/she landed in trouble at school.
An analysis of the scripts reflected:

- **poor understanding and use of different parts of speech** e.g. connecting words, pronouns and prepositions;
- **inability to rewrite sentences in a different tense**;
- **a lack of understanding of meta-language** e.g. the meaning of words such as punctuation, prefix, suffix and root or base word;

In the following examples the learner did not understand what was expected in the questions.

- **inability to punctuate a sentence and add capitalization**;

In the following example the use of the apostrophe was not known.

- **poor knowledge of spelling rules e.g. plurals**;
- **weak letter writing**:
  - Failure to understand how to use a letter format;
  - Poor grammar and spelling;
  - Inability to construct meaningful sentences to form a logical paragraph;
  - Failure to write on the given topic;
  - Failure to write a recount in a logical and sequential way.

In the example the learner was unable to write his/her own sentences but copied sentences from the reading text.
In the following example the learner lacked the written vocabulary to express himself coherently.

Proposed interventions

- Teach focused lessons and give more practice in:
  - using different parts of speech e.g. joining sentences using the correct connecting word to show addition (e.g. and), sequence (e.g. then, next), contrast (e.g. but) and reason (e.g. because);
  - rewriting sentences from one tense to another;
  - rewriting sentences and paragraphs using correct punctuation;
  - using the correct subject verb concord.

- Ensure learners are familiar with meta-language such as punctuation, different parts of speech, synonyms and antonyms, tenses, plurals.

- Increase the number of grammar and vocabulary exercises.

- Organize spelling competitions.

- Ensure that correct punctuation is used when learners write their own stories.

- Ensure learners write different text types on a weekly basis so they are familiar with different formats and requirements e.g. a story, descriptive paragraph, a letter. The process approach to writing should be used.

- Use the grammar, punctuation and spelling errors from learners’ writing to inform focused language lessons.

10.11. First Additional Language Grade 9

In this section identified ‘gaps’ in specific skills, knowledge and competencies that were displayed by Grade 9 First Additional Language learners have been presented. The examples are taken from the English scripts. However similar ‘gaps’ were identified in Afrikaans.
10.11.1. Comprehension

Learners were tested on their comprehension of a story, a poem, a graph and an information text.

An analysis of the scripts reflected:

- **a lack of understanding of the events in the story** (e.g. plot, cause and effect);

  In question 5 learners were expected to give the cause of the main characters leaving the village. This learner was only able to confirm the effect:

  ![Question 5 Example](image)

- **an inability to recognize either the author’s purpose or the narrator of the story**;

  In question 1 learners needed to identify why the author wrote the story. This learner’s response indicates that she did not understand the story or realize that it was a fable:

  ![Question 1 Example](image)

In question 4 learners needed to identify the narrator of the story. The learner’s response indicates a lack of understanding of the concept of ‘the narrator of a story’.

![Question 4 Example](image)
• an inability to interpret characters in a story, make inferences and give an opinion providing reasons and explanations;

In question 2.1 learners needed to identify the main characters in the story. The learner did not understand the plot sufficiently to recognize the main characters in the story.

![2.1 Who are the main characters in the story?](image)

- Thunder and Lightning
- Thunder and Lightning and the king
- The king and his advisors
- The king and the villagers

• a lack of familiarity with different figures of speech and insufficient vocabulary to comprehend their meaning;

In question 7.1 learners were asked to interpret imagery in a poem. An analysis of the scripts revealed that many learners could not interpret how the character felt because ‘He licks the pattern off his plate’, as the following example shows.

![7.1 “He licks the pattern off his plate” (line 11). Look at the above quote. How does Timothy feel?](image)

- Angry
- Rude
- Hungry
- Irritated

• an inability to identify the topic sentence of a paragraph, distinguishing main points from supporting detail;

• an inability to identify the source of an information text;

In question 11 learners had to identify the source of the information text. Although [Adapted from You Magazine, September 2012] was provided as a footnote, many learners did not understand the significance of this information:

![11. The article called “Busting the Bullies” was published in a](image)
Proposed interventions

- Provide more opportunities for learners to read and analyze a wide range of texts and genres of increasing complexity.
- Ensure schools with Grade 9 learners order approved Core Readers and novels from the National Catalogue.
- Expose learners to more vocabulary e.g. When introducing a new text, build the vocabulary first as part of the pre-reading activity, teach strategies to decode unknown words, teach 3-5 new words daily and provide opportunities for learners to use this new vocabulary orally and in their writing.
- Teach and provide practice using different figures of speech.
- Teach comprehension skills so learners know how to analyze a wide range of different text types, extract specific details from a text, make inferences and interpretations and give a reasoned opinion.

10.11.2. Language and Writing

Learners were tested on parts of speech, tenses, modals, punctuation, the formation of words using prefixes, direct and indirect speech and the passive voice. For writing, learners were expected to write a short story of 80-100 words about a bad experience he/she had had and a diary entry of 60-80 words.

An analysis of the scripts reflected:

- **poor understanding and use of different parts of speech** e.g. connecting words, adjectives and nouns;

  In question 27 learners were expected to identify ‘small’ as an adjective. The learner in the example understood the question but was not able to name the correct part of speech, even though adjectives are taught in earlier grades.

  ![Example Question](image)

- **inability to rewrite sentences in a different tense**;

  In question 20 learners were expected to complete a sentence using the past perfect progressive tense. The learner in the example offered two responses, both of them incorrect.

  ![Example Question](image)

- **a lack of understanding of meta-language** e.g. direct and reported speech, past perfect progressive tense, prefix, adjectives as a part of speech;
• **lack of editing skills** i.e. inability to correct punctuation, spelling and grammar in a paragraph;

In question 18, learners were expected to edit a short paragraph. In this response the learner not only failed to correct the errors but also rewrote some correct words incorrectly.

```
The following extract contains SIX errors. Rewrite the passage correctly. Underline the corrections you have made.

If you’re being bullied keep notes of incidents. Right down the names of the bully and keep a record of times and dates when hurtful things were said to you. A bully do not have to have power over you!
```

```
If you’re been bullied keep notes of incidents. Right down the names of the bully and keep a record of times and dates when hurtful things were said to you. A bully do not have to have power over you!
```

• **inability to convert a sentence in the active voice into the passive voice or direct speech into reported speech, and vice versa;**

This learner’s response to question 19 revealed a lack of understanding of what is meant by direct and reported speech.

```
19.1 Change the following into reported speech. Begin the sentence as indicated.

“I planned everything carefully to avoid chaos,” said the king.

The king said, “I planned everything carefully to avoid chaos,” said the king.
```

```
19.2 Change the following into direct speech. Begin the sentence as indicated.

Thunder and Lightning said that they were displeased with the king.

Thunder and Lightning said, “We were displeased with the king.”
```

• **a lack of familiarity with modals;**

In question 21 learners were expected to identify the correct modal. This learner’s response revealed a lack of understanding of the difference between *ought, might* and *should.*
• **Weak writing of a story and diary entry:**
  - Failure to plan the writing process using the mind map provided;
  - Poor grammar and spelling;
  - Inability to construct meaningful sentences;
  - Failure to understand or write on the given topic;
  - Failure to write a story or diary entry in a logical and sequential way;
  - Failure to use rich and varied vocabulary.

In this response the learner lacked the written vocabulary to express himself coherently but also misunderstood the topic and wrote on “work experience” rather than a story of a bad experience the learner had had.
In this diary entry the learner was unable to write in the past tense; spelling is very weak and only limited vocabulary is used.

Proposed interventions

• Teach focused lessons and give more practice in:
  ◦ identifying and using different parts of speech;
  ◦ rewriting sentences from one tense to another using different tenses and verb forms e.g. modals;
  ◦ editing and rewriting sentences and paragraphs using correct spelling, grammar and punctuation.

• Ensure learners are familiar with meta-language e.g. direct and reported speech, past perfect progressive tense, prefixes and suffixes.

• Increase the number of grammar and vocabulary exercises.

• Build a rich vocabulary and provide opportunities to repeat its use on a daily basis.

• Organize spelling competitions.

• Ensure that correct punctuation and spelling is used when learners write their own texts.

• Ensure learners write text types for different purposes on a weekly basis so they are familiar with different formats and requirements e.g. a story, descriptive paragraphs, poem, play script, letter. The process approach to writing must be used to ensure learners plan and refine their writing.

• Use the grammar, punctuation and spelling errors from learners' writing to inform focused Language lessons.
PART B: 2014 ANA FRAMEWORK FOR IMPROVEMENT

11. INTRODUCTION

The Annual National Assessment (ANA) 2013 was written in September 2013. Foundation Phase and Intermediate Phase ANA addressed the content and skills in the Curriculum and Assessment Policy Statement (CAPS). Grade 9 ANA was set according to the National Curriculum Statement (NCS) which will be phased out in 2014. The analysis of ANA was conducted in two ways, viz. quantitatively and qualitatively. The qualitative analysis or diagnostic analysis, as it is commonly known, is credited for its efficacy to improve classroom practice. It was conducted by analysing the actual learner responses from a sample of scripts. The sample of scripts for analysis was drawn from all provinces and covered the different levels of performance (low, medium, high). In Grades 1 to 3, the scripts that were sampled were representative of all Home Languages.

The information gleaned from the diagnostic analysis was primarily informed by two factors: the wrong answers that learners presented and the processes of arriving at the answers.

12. RATIONALE

The Department of Basic Education (DBE) has set out clear goals that require the support and collaborative effort by the DBE, Provincial Departments of Education (PDE), Districts and Schools for their full realisation. As presented in the 2014 Framework for Improvement of Mathematics and Languages, henceforth referred to as Framework, each of the four tiers of the education system has critical, distinct and interrelated responsibilities to fulfil. These goals are categorised into two groups: those that focus on improving the average performance and those that focus on increasing minimum competencies.

Average performance

- Improve the average performance of Grade 3 learners in Mathematics and Languages.
- Improve the average performance of Grade 6 learners in Mathematics and Languages.
- Improve the average performance of Grade 9 learners in Mathematics and Languages.

A contribution towards the improvement of the learners’ average performance in Languages and Mathematics starts from the Foundation Phase and should be strengthened in the Intermediate and Senior Phases.

Therefore an emphasis on Grade 3, 6 and 9 should not create an impression that other grades are less important. The ANA diagnostic analysis was aimed at identifying learners’ weaknesses in Mathematics and Languages and addressing them with appropriate interventions from the DBE to school level.

Minimum competencies

- Increase the number of learners in Grade 3 who, by the end of the year, have mastered the minimum Languages and Numeracy competencies for Grade 3.
- Increase the number of learners in Grade 6 who, by the end of the year, have mastered the minimum Languages and Mathematics competencies for Grade 6.
- Increase the number of learners in Grade 9 who, by the end of the year, have mastered the minimum Languages and Mathematics competencies for Grade 9.

Unlike the previous goals that aim to improve the average performance and are quantity-oriented, the goals that aim to enhance minimum competencies are quality-oriented. Achievement and mastery of competencies in Languages and Mathematics can effectively be identified by analysing learner responses as was the case with the diagnostic analysis that has informed this framework.
13. The Packaging of the Framework

The diagnostic analysis of learner responses was done per grade and it emerged that most of the findings i.e. errors and misconceptions, are similar across the grades within the phase. The 2014 ANA Framework for the Improvement of Mathematics and Languages is, therefore, packaged per phase. However, schools are expected to customise the Framework into grade and subject specific Improvement Plans. This will enable schools to address weaknesses in each grade. This Framework should be read in conjunction with the ANA 2013 Diagnostic Report (Part A of this document) which contains comprehensive findings from the analysis of learner responses.

The Framework covers three main areas: firstly, the identified weaknesses that emerged from the diagnostic analysis – these are characterized by the common errors or misconceptions that were revealed when the actual learner responses were examined; secondly, remedial measures to improve classroom practice – these remedial measures are intended to provide suggestions on how best the identified weaknesses can be addressed; however they are not conclusive and allow for additional more effective measures to be identified and implemented; thirdly responsibilities to be carried out by the DBE, PDEs, Districts and schools.

Mathematics

The findings of the diagnostic analysis were classified into five categories, viz. Numbers, Operations and Relationships; Patterns, Functions and Algebra; Space & Shape; Measurement and Data handling. These five broad categories have also informed the structure of this Framework from Grade 1 to 9 to present identified Mathematics weaknesses among learners and proposed/recommended remedial measures to improve classroom practice. Since the challenges learners experience within a phase are fairly common, the weaknesses are packaged per phase and presented per category as mentioned earlier.

Languages

The diagnostic analysis of the Languages ANA for Grades 1 to 3 demonstrates that learners experienced similar challenges across all languages (English, Afrikaans and African Languages) that were assessed and these include poor reading and comprehension skills (response to high order questions) and writing skills where the learner had to compose a written response (at least 3 to 5 sentences) for a visual illustration and responding to a topic in five to ten sentences using correct punctuation, grammar and spelling. In terms of language usage items learners struggled with punctuation (capital letters, full stops, commas, apostrophe) and tenses. The Framework highlights structured Reading and Writing lessons as per CAPS requirements and the need for learners in Grades 1 to 3 to read at least one to two books per week.

The diagnostic analysis of the Languages ANA for Grades 4-6 and 9 reflects similar challenges in both Home and First Additional Languages. The findings are given per grade (Grades 4-6 and 9) for both Home and First Additional Languages. They have been classified into two broad categories – (1) Comprehension, and (2) Language Structure and Use and Writing. These categories are reflected in the structure used in this Framework so that recommended remedial measures can focus on phase-specific challenges in these two broad areas.

14. How to Use the 2014 ANA Framework for Improvement

The 2014 ANA Framework for Improvement is the outcome of the diagnostic analysis and it is therefore strongly recommended that it should be read in conjunction with the ANA 2013 Diagnostic Report. Essentially the Framework provides the synopsis of the weaknesses revealed by the ANA 2013 Diagnostic Report and assigns responsibilities to all the levels in the system to implement the appropriate remedial measures to improve classroom practice. Given this scenario, the Framework should be perceived as one which PDEs, Districts and Schools should use to customise the interventions to improve learner performance in Mathematics and Languages across the system more especially in schools that underperformed. The ANA 2013 Diagnostic Report provides a critical and comprehensive account of learner weaknesses in terms of their responses.
PDEs, Districts and Schools may use the core weaknesses presented in the Framework to develop interventions or remedial measures that are contextualised for their learners. It is against this backdrop that the DBE acknowledges the prevalence of peculiar challenges each school or district may experience.

The effective implementation of this Framework hinges on intensive monitoring, evaluation and support. Even at school level, School Management Teams (SMTs), particularly Heads of Department (HODs) responsible for Mathematics or Languages, should strengthen monitoring and support for teachers in a constructive and developmental manner. The fundamental goal is to ensure that the areas of weakness that learners have revealed are corrected through effective teaching and assessment practices.
### Foundation Phase (Grades 1-3): Mathematics

#### Numbers, Operations and Relationships and Patterns

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counting forwards and backwards in:</td>
<td>Strengthening the teaching of Mathematics concepts and skills using CAPS and the Workbooks</td>
<td>DBE</td>
</tr>
<tr>
<td>• Grade 1:</td>
<td>* Plan and teach Mathematics lessons daily for 7 hours per week.</td>
<td>Province</td>
</tr>
<tr>
<td>1’s, 2’s, 5’s, 10’s up to 100</td>
<td>* A typical Mathematics lesson should include the following components:</td>
<td>District</td>
</tr>
<tr>
<td>• Grade 2:</td>
<td>◦ Mental Mathematics</td>
<td>School</td>
</tr>
<tr>
<td>1’s, 2’s, 3’s, 4’s, 5’s, 10’s, 20’s, 25’s up to 200</td>
<td>◦ Counting and Concept development</td>
<td></td>
</tr>
<tr>
<td>• Grade 3:</td>
<td>◦ Problem solving</td>
<td></td>
</tr>
<tr>
<td>1’s, 2’s, 3’s, 4’s, 5’s, 10’s, 20’s, 25’s, 50’s up to 100</td>
<td>◦ Written activities</td>
<td></td>
</tr>
<tr>
<td>Focus Areas Grades 1 to 3:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Counting activities (oral and written) focusing on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>counting backwards and forwards from a given number in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2’s, 3’s, 4’s, 5’s, 10’s, 20’s, 25’s, 50’s, 100’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Read and recognize 2 and 3 digit numbers, number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>symbols and names up to 999</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Read numbers on a number line and complete the missing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>numbers on the number line up to 999</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Foundation Phase (Grades 1-3): Mathematics

### Numbers, Operations and Relationships and Patterns

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Writing number names and symbols for 2 and 3 digit numbers:                          | • Place value activities: build up and break down 2 and 3 digit numbers using an abacus frame, interlocking blocks and flard cards  
• Computational **skills and number operations**: teach all 4 basic operations and learners must be able to read mathematical signs e.g. $x$, $+$, $-$, $=$, $+$, $-$  
• Calculation techniques as per CAPS for:  
  ◦ addition  
  ◦ subtraction  
  ◦ multiplication and division  
• Do Workbook activities and ANA exemplars  
• Word Problems (routine and non-routine) on basic operations | • Distribution of ANA exemplars  
• Distribution of the 2013 ANA Diagnostic Report and the Framework for Improvement.  
• Develop School Based Assessment exemplars  
• Develop School Based Assessment (SBA) Mathematics Handbook  
• MST Intervention programme for Grades R to 3  
• Monitor the use of ANA exemplars  
• Set provincial quarterly ANA practice tests  
• Conduct Provincial Workshops on ANA findings and remedial plan  
• Conduct workshops on the use of ANA exemplars  
• Administer provincial quarterly tests in schools  
• Analyse ANA tests and plan appropriate interventions  
• Monitor the implementation of the 2014 ANA Improvement Plan.  
• Computational skills and number operations: teach all 4 basic operations  
• Word Problems: teach at least 2 word problems per week.  
• Use Workbook activities  
• Use ANA exemplar activities |
## Foundation Phase (Grades 1-3): Mathematics

### Numbers, Operations and Relationships and Patterns

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparing and ordering of whole numbers from biggest to smallest and smallest to biggest</strong></td>
<td>• Do Workbook activities and ANA exemplars</td>
<td><strong>DBE</strong></td>
</tr>
<tr>
<td></td>
<td>• Distribution of ANA exemplars</td>
<td>• Monitor the use of ANA exemplars</td>
</tr>
<tr>
<td></td>
<td>• Distribution of the 2013 ANA Diagnostic Report and the Framework for Improvement.</td>
<td>• Set provincial quarterly ANA practice tests</td>
</tr>
<tr>
<td></td>
<td>• Develop School Based Assessment exemplars</td>
<td>• Conduct Interventions for Grades R to 3</td>
</tr>
<tr>
<td></td>
<td>• Develop School Based Assessment exemplars (SBA) Mathematics Handbook</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop MST Intervention programme for Grades R to 3</td>
<td></td>
</tr>
<tr>
<td>Place value: building up and breaking up of 2 and 3 digit numbers:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Grade 1: up to 20</td>
<td>• Distribution of ANA exemplars</td>
</tr>
<tr>
<td></td>
<td>• Grade 2: up to 99</td>
<td>• Distribution of the 2013 ANA Diagnostic Report and the Framework for Improvement.</td>
</tr>
<tr>
<td></td>
<td>• Grade 3: up to 1000</td>
<td>• Develop School Based Assessment exemplars</td>
</tr>
<tr>
<td>Fractions: recognition of fraction in diagrams and fraction names, comparing unitary fractions from smallest to biggest</td>
<td>• Fractions:</td>
<td>• Distribution of ANA exemplars</td>
</tr>
<tr>
<td></td>
<td>• parts of a whole e.g. halves, quarters, eighths, thirds, sixths, fifths using real objects</td>
<td>• Distribution of the 2013 ANA Diagnostic Report and the Framework for Improvement.</td>
</tr>
<tr>
<td></td>
<td>• teach fraction names e.g. halves, quarters, eighths, thirds as per CAPS</td>
<td>• Develop School Based Assessment exemplars</td>
</tr>
<tr>
<td></td>
<td>• Do Workbook activities and ANA exemplars</td>
<td>• Develop School Based Assessment exemplars (SBA) Mathematics Handbook</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Develop MST Intervention programme for Grades R to 3</td>
</tr>
</tbody>
</table>
### Foundation Phase (Grades 1-3): Mathematics

#### Numbers, Operations and Relationships and Patterns

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Computational skills and number operations (Grades 1 to 3)</td>
<td>• Do Workbook activities and ANA exemplars</td>
<td>• Distribution of ANA exemplars</td>
</tr>
<tr>
<td>• Number lines</td>
<td></td>
<td>• Distribution of the 2013 ANA Diagnostic Report and the Framework for Improvement.</td>
</tr>
<tr>
<td>• Doubling and halving</td>
<td></td>
<td>• Develop school based assessment exemplars</td>
</tr>
<tr>
<td>• Addition of 1, 2 and 3-digit numbers</td>
<td></td>
<td>• Develop School Based Assessment (SBA) Mathematics Handbook</td>
</tr>
<tr>
<td>• Subtraction of 2-digit numbers</td>
<td></td>
<td>• MST Intervention programme for Grades R to 3</td>
</tr>
<tr>
<td>• Multiplication of 2-digit numbers by 1-digit numbers</td>
<td></td>
<td>• Monitor the use of ANA exemplars</td>
</tr>
<tr>
<td>• Division of 2-digit numbers by 1-digit numbers</td>
<td></td>
<td>• Set provincial quarterly ANA practice tests</td>
</tr>
<tr>
<td>• Money: Grades 1-3</td>
<td></td>
<td>• Conduct Provincial Workshops on ANA findings and remedial plan</td>
</tr>
<tr>
<td>• Reading prices and solve money word problems</td>
<td></td>
<td>• Monitor the implementation of the 2014 ANA Improvement Plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Conduct workshops on the use of ANA exemplars</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Administer provincial quarterly tests in schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Analyse ANA tests and plan appropriate interventions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Monitor the implementation of the 2014 ANA Improvement Plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fractions: parts of a whole (unitary fractions) and names</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Computational skills and number operations: teach all 4 basic operations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Word Problems at least 2 word problems per week.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use Workbook activities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use ANA exemplar activities</td>
</tr>
</tbody>
</table>

#### Word Problems Grades 1 to 3:

Unable to read and understand the word problem and unable to identify number concepts and operations in the word problem

- Money:
  - practical engagement with South African currency namely coins and bank notes.
  - convert cents to rand.
  - read prices in rands and cents.
  - solve money problems and calculate change.

- Procedures of answering word problems should be taught. These include:
  - reading with understanding,
  - underlining the key words and information,
  - translating certain words into mathematics language,
  - identifying the appropriate mathematics operation,
  - constructing a mathematics sentence,
**FOUNDATION PHASE (GRADES 1-3): MATHEMATICS**

### Space & Shape

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Symmetry</td>
<td>• Identification of 2D and 3D shapes</td>
<td>DBE</td>
</tr>
<tr>
<td>• Position and directions</td>
<td>• Geometric patterns</td>
<td>Province</td>
</tr>
<tr>
<td>• Geometric patterns</td>
<td>• Symmetry: Recognize and draw line of symmetry in 2D geometrical and non-geometrical shapes</td>
<td>District</td>
</tr>
<tr>
<td>• Identification of 2D and 3D shapes</td>
<td>• Do Workbook activities and ANA exemplars</td>
<td>School</td>
</tr>
<tr>
<td></td>
<td>• Distribution of ANA exemplars</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Distribution of the Framework and 2013 ANA diagnostic Report</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop School Based Assessment exemplars</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop School Based Assessment (SBA) Mathematics Handbook</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Develop MST Intervention programme for Grades R to 3</td>
<td></td>
</tr>
</tbody>
</table>

- Monitor the use of ANA exemplars
- Set provincial quarterly ANA practice tests
- Conduct Provincial Workshops on ANA findings and remedial plan
- Conduct workshops on the use of ANA exemplars
- Administer provincial quarterly tests in schools
- Analyse ANA tests and plan appropriate interventions
- Teach at least 2 Lessons per week based on Space and Shape
- Conduct practical and written activities
- Use Workbook activities
- Use ANA exemplar activities
## Foundation Phase (Grades 1-3): Mathematics

### Measurement

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
<td></td>
<td>DBE</td>
</tr>
<tr>
<td>Grade 1: Calendar</td>
<td>Distribution of ANA exemplars</td>
<td></td>
</tr>
<tr>
<td>Grade 2 and 3: Analogue and digital time</td>
<td>Distribution of the Framework and 2013 ANA diagnostic Report</td>
<td></td>
</tr>
<tr>
<td><strong>Length, Mass, Capacity</strong></td>
<td>Develop School Based Assessment exemplars</td>
<td></td>
</tr>
<tr>
<td>Grade 2: read volume</td>
<td>Develop MST Intervention programme for Grades R to 3</td>
<td></td>
</tr>
<tr>
<td>Grade 3: measuring using ruler (width/length), read mass/capacity of items</td>
<td>Monitor the use of ANA exemplars</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conduct workshops on the use of ANA exemplars</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conduct provincial quarterly ANA practice tests</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Analyse ANA tests and plan appropriate interventions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitor the implementation of the 2014 ANA Improvement Plan.</td>
<td></td>
</tr>
</tbody>
</table>

Teach at least 2 lessons per week based on Measurement:
- Practical and written activities
- Use Workbook activities
- Use ANA exemplar activities
<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| **Learners are unable to read and interpret the information on a pictograph and bar graph.** | **Data Handling**  
  • Collect data, organize data according to specific variables e.g. colour, shape, size  
  • Read and Interpret data from a bar graph, pictograph  
  • Represent data on a pictograph or bar graph  
  • Do Workbook activities and ANA exemplars |   
  • Place on agenda for subject committee to develop exemplars.  
  • Ensure that CAPS and Workbooks are provided to all schools.  
  • Monitor and support.  
  • Mediate CAPS and Workbooks to address Data handling adequately.  
  • Monitor and support.  
  • Conduct workshops for teachers.  
  • Conduct on-site support for teachers.  
  • Monitor the implementation of the 2014 ANA Improvement Plan.  
  • Use real data to teach Data handling.  
  • Expose learners to more practical activities that focus on pictographs and bar graphs.  
  • Use Workbook activities.  
  • Use ANA exemplar activities. |
### Intermediate Phase (Grades 4-6): Mathematics

#### Numbers, Operations and Relationships

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Word problems</strong></td>
<td></td>
<td>DBE</td>
</tr>
<tr>
<td>• Learners were not able to:</td>
<td>Procedures of answering word problems should be taught. These include:</td>
<td>Province</td>
</tr>
<tr>
<td>◦ interpret word problems correctly;</td>
<td>• reading with understanding,</td>
<td>District</td>
</tr>
<tr>
<td>◦ use the given information appropriately;</td>
<td>• underlining the key words and information,</td>
<td>School</td>
</tr>
<tr>
<td>◦ translate language into mathematics language and write correct mathematical sentences;</td>
<td>• translating certain words into mathematics language,</td>
<td></td>
</tr>
<tr>
<td>◦ respond to the question posed after correctly calculating the answer.</td>
<td>• identifying the appropriate mathematics operation,</td>
<td></td>
</tr>
<tr>
<td>• There were instances where Grade 5 and 6 learners are still using repeated addition for multiplication. While this is mathematically correct, it poses a huge problem to learners when the number range increases e.g. 320 x 92</td>
<td>• constructing a mathematics sentence,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• carrying out mathematical calculations to get the answer and respond to the question posed. In other words if the question requires learners to calculate the cost of 4 tickets at R320 each, the answer should be R1 280 and NOT 1280.</td>
<td>• Provide teaching materials developed by the DBE-JICA project to support the teaching of word problems.</td>
</tr>
</tbody>
</table>

- Mediate the teaching materials to support the teaching of word problems.
- Strengthen co-operative work with language subject co-ordinators to acquire the skills such as reading, writing, interpretation, comprehension.
- Conduct a workshop on how to use the teaching materials to support the teaching of word problems.
- Encourage teachers to develop their own word problems.
- Use the DBE workbooks to give learners more practice work on word problems.
- Work closely with language subject advisors to acquire more skills such as reading and viewing, writing, interpretation, comprehension.
- Encourage learners to develop their own word problems.
## Intermediate Phase (Grades 4-6): Mathematics

### Numbers, Operations and Relationships

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| **Fractions**         | • The teaching of fractions should start from using concrete objects to enhance conceptual development before moving to abstract manipulations of fractions.  
                         • Equivalent forms of fractions should be taught, e.g. percentages, decimal fractions, common fractions, improper fractions.  
                         • Correct strategies of addition, subtraction, multiplication and division should be used during teaching.  
                         • Ensure that all schools have copies of CAPS because it provides critical information on the scope and strategies for the teaching of fractions.  
                         • Mediate the appropriate sections of CAPS to assist teachers with the scope of fractions to be covered per grade.  
                         • Support teachers on the innovative methods of teaching fractions. Emphasise the mathematical rules and procedures of dealing with mixed fractions.  
                         • Mediate the appropriate sections of CAPS to assist teachers with the scope of fractions to be covered per grade.  
                         • Encourage teachers to use the workbooks and textbooks.  
                         • Monitor the implementation of the 2014 ANA Improvement Plan.  
                         • Use correct names of fractions as presented in the CAPS.  
                         • Enhance the understanding of fractions by using concrete objects.  
                         • The teaching of fractions should not be limited to fractions of a whole but should include fractions of quantity of objects too.  
                         • Expose learners to appropriate methods of dealing with mixed fractions.  
                         • Emphasise the mathematical rules and procedures of dealing with mixed fractions.  
                         • Teach equivalent forms of common fractions (CAPS p16)  
                         • Use exercises from the workbooks and the guidance from the CAPS. |  |
|                       | Ensure that all schools have copies of CAPS because it provides critical information on the scope and strategies for the teaching of fractions.  
                         | Mediate the appropriate sections of CAPS to assist teachers with the scope of fractions to be covered per grade. |  |
### Intermediate Phase (Grades 4-6): Mathematics

#### Numbers, Operations and Relationships

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| **Multiplication and division of whole numbers**          | Using sticks, repeated addition and repeated subtraction assist with conceptual understanding of multiplication and addition; however learners should be assisted to progress from these elementary long methods of multiplying and dividing to shorter abstract methods. | • Support teachers in the use of abstract methods of multiplication and division especially during the subject committee/cluster workshops.  
• Monitor the implementation of the 2014 ANA Improvement Plan.  
• Introduce the breaking down technique or the column method.  
• Demonstrate to learners that multiplication and division are inverse operations, and they can be used as such to confirm the correctness of the answer.  
• Mental mathematics should be done daily to enhance the understanding of multiplication and division.  
• Use exercises from the workbooks and the guidance from the CAPS. |
|                                                            | Ensure that all schools have copies of CAPS because it provides critical information on the scope and strategies for the teaching of operations with whole numbers. | • Ensure that the meetings with subject advisors address subject specific issues including strategies for multiplication and division. |

Ensure that the meetings with subject advisors address subject specific issues including strategies for multiplication and division.
## Intermediate Phase (Grades 4-6): Mathematics

### Patterns, Functions and Algebra

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Numeric and geometric patterns | • Teach all the different types of patterns as presented in the CAPS.  
• Use geometric patterns to generate a number pattern and present the pattern in a tabular form.  
• Ensure that all schools have copies of CAPS because it provides critical information on the scope and strategies for the teaching of numeric and geometric patterns.  
• Conduct monitoring to ensure effective curriculum implementation and coverage. | • Support subject advisors by conducting focused workshops.  
• Conduct monitoring to ensure curriculum coverage.  
• Monitor the implementation of the 2014 ANA Improvement Plan.  
• Teach all types of patterns presented in the CAPS.  
• Use geometric patterns to generate and teach number patterns. Allow the learners to practically construct geometric patterns using concrete objects and observing the pattern.  
• Allow learners to generate their own patterns and describe them using own words.  
• Teach the flow diagrams (input and output values) as another way to enhance the understanding of number patterns. |
### Intermediate Phase (Grades 4-6): Mathematics

#### Space and Shape (Geometry)

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Characteristics of 3D objects:</strong> Inability to identify the number of faces, vertices and edges.</td>
<td>• Use concrete objects and relate them to the drawings of the 3D objects so that learners can observe the faces, edges and vertices. • Conduct monitoring and support.</td>
<td>• Ensure that all schools have CAPS and workbooks. • Support subject advisors by conducting focused workshops. • Conduct monitoring to ensure effective curriculum implementation and coverage. • Provide support for teachers through workshops and on-site visits. • Monitor the implementation of the 2014 ANA Improvement Plan.</td>
</tr>
<tr>
<td><strong>Identifying 2D shapes:</strong> Inability to name a given 2D shape.</td>
<td>• The descriptive names of polygons should be used to enhance meaningful understanding of the polygons. • Start by using simple everyday concrete objects that learners can view from different directions before using abstract shapes of 3D objects drawn on paper.</td>
<td>• Provide support for teachers through workshops and on-site visits. • Ensure that CAPS and workbooks are being used in schools. • Monitor the implementation of the 2014 ANA Improvement Plan.</td>
</tr>
<tr>
<td><strong>Position and viewing of objects from different dimensions:</strong> poor visual perceptive skill.</td>
<td>• Practically show learners the relationship between the names of the 3D objects and the shapes of their faces, e.g. triangular pyramid has a triangular base and a square-based pyramid has a square base. A square-based pyramid is, therefore, made of a square and triangular faces. • Use simple everyday concrete objects that learners can view from different directions before using abstract shapes of 3D objects drawn on paper. • Use single geometric objects before exposing learners to composite geometric objects.</td>
<td>• Use concrete objects so that learners can:  ◦ Visualise by observing and then naming the objects.  ◦ Analyse by counting the number of faces, vertices and edges.  ◦ Sketch or draw the 3D objects.  ◦ Make models of the 3D objects.</td>
</tr>
<tr>
<td>Identified weaknesses</td>
<td>Remedial measures to improve classroom practice</td>
<td>Responsibility</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Conversions (volume, time, length, mass)</td>
<td>Practically demonstrate to learners how a litre and a millilitre, kg and a gram, minute and an hour, and kilometre and a metre relate.</td>
<td><strong>DBE</strong></td>
</tr>
</tbody>
</table>
| Learners are unable to relate metres to centimetres, minutes to hours, and litres to millilitres. | • Strengthen monitoring and support.  
• Monitor the use of workbooks. | • Support teachers with innovative strategies to teach conversions.  
• Provide on-site classroom support to teachers. | Carry out practical demonstrations to show the relationship between a litre and millilitres, an hour and minutes, and a metre and centimetres.  
• Allow learners to measure the same volume of water using two containers calibrated differently: one container calibrated in millilitres and the other calibrated in litres and then allow them to draw conclusions. |
## Intermediate Phase (Grades 4-6): Mathematics

### Data Handling

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Learners showed a lack of understanding of all the concepts that were assessed in data handling, these include: pictograph, bar graph, median, mode. | - Ensure that this section is strengthened in the workbooks during the annual review.  
- Subject committees to develop exemplars. | - Mediate the workbooks and use additional materials developed together with provincial co-ordinators to support teachers with the teaching of data handling.  
- Establish the competencies of teachers in data handling and develop appropriate interventions. |
| Data handling should be taught using real life data or data generated in the classroom or drawn from different organisations such as StatsSA. | - Participate in the workbook review to strengthen data handling.  
- Work with subject advisors to develop more activities focusing on data handling to support subject advisors.  
- Establish the competencies of subject advisors in data handling and develop appropriate interventions. | - Use the activities that are in the workbooks.  
- Use the materials developed by subject advisors.  
- Allow learners to collect, summarise, analyse, represent and present data to enhance their understanding of different concepts in data handling in different contexts. |
## Senior Phase (Grade 9): Mathematics

### Numbers, Operations and Relationships

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simple interest and compound interest</strong></td>
<td>Since financial mathematics is dealt with in the context of word problems, the teaching of word problems should be done systematically to enhance learners’ ability to interpret, understand, select critical information and use that information to calculate the answer.</td>
<td>DBE</td>
</tr>
</tbody>
</table>
| Learners could not identify and use the appropriate formulae | • Strengthen the DBE workbooks during the annual review.  
• Integrate with EMS exemplars from Financial Literacy. | • Strengthen the DBE workbooks during the annual review.  
• Mediate the workbooks to teachers to adequately address financial mathematics.  
• Monitor curriculum implementation and coverage. | • Conduct workshops on financial mathematics.  
• Monitor curriculum coverage and implementation of the Improvement Plan. | • Teach word problems systematically to enhance learners’ ability to interpret, understand, select critical information and use that information to calculate the answer.  
• Differentiate between compound interest and simple interest and show learners how to use relevant formulae appropriately. |
### Senior Phase (Grade 9): Mathematics

#### Patterns, Functions & Algebra

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| **Equations**         | Thorough training should be conducted to assist teachers and learners as suggested below:  
  - The teaching of equations should be preceded by the teaching of integers.  
  - Addition and subtraction of integers should be taught simultaneously to demonstrate the concept of additive inverse.  
  - Multiplication and division of integers should be taught simultaneously to demonstrate the concept of a multiplicative inverse.  
  - Conduct a workshop to provide knowledge and skills regarding the teaching of integers and equations to all subject advisors in the province.  
  - This can be conducted during the scheduled curriculum meetings between provincial coordinators and subject advisors in each province.  
  - Conduct focused workshops for teachers to address the effective teaching and learning of integers and equations.  
  - Emphasise the multiplicative identity property of numbers and additive identity property of numbers.  
  - Use DBE workbooks to enable teachers to use them to teach integers and solving equations.  
  - Link equations to word problems.  
  - Use DBE workbooks to enable learners to do more practice exercises on integers and solving equations.  
  - Monitor curriculum coverage and implementation of the Improvement Plan.  
  - Teach integers before teaching equations for learners to acquire the requisite knowledge and skills of solution of equations.  
| Strengthen the content focusing on **integers** and **equations** during the workbook review. | DBE | Province | District | School |

- Conduct a workshop to provide knowledge and skills regarding the teaching of integers and equations to all subject advisors in the province.
- This can be conducted during the scheduled curriculum meetings between provincial coordinators and subject advisors in each province.
- Conduct focused workshops for teachers to address the effective teaching and learning of integers and equations.
- Emphasise the multiplicative identity property of numbers and additive identity property of numbers.
- Use DBE workbooks to enable teachers to use them to teach integers and solving equations.
- Link equations to word problems.
- Use DBE workbooks to enable learners to do more practice exercises on integers and solving equations.
### Senior Phase (Grade 9): Mathematics

#### Patterns, Functions and Algebra

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expressions</strong></td>
<td>• Start with common fractions before introducing algebraic fractions because competency in common fractions is a prerequisite for competency in algebraic fractions.</td>
<td>• Support teachers during workshops and on-site classroom visits.</td>
</tr>
<tr>
<td></td>
<td>• Ensure that this content is well addressed in the workbooks.</td>
<td>• Monitor curriculum implementation and coverage.</td>
</tr>
<tr>
<td></td>
<td>• Ensure that all schools have the latest version of the workbooks for each learner.</td>
<td>• Use DBE workbooks to support teachers.</td>
</tr>
<tr>
<td></td>
<td>• Ensure that all teachers have a copy of CAPS for reference and guidance.</td>
<td>• Monitor the availability of CAPS to each teacher in the province.</td>
</tr>
<tr>
<td></td>
<td>• Support subject advisors during provincial meetings.</td>
<td>• Monitor the availability and utilisation of workbooks.</td>
</tr>
<tr>
<td></td>
<td>• Monitor curriculum implementation.</td>
<td>• Monitor the availability and utilisation of workbooks.</td>
</tr>
<tr>
<td></td>
<td>• Monitor the availability of CAPS to each teacher in the province.</td>
<td>• Teach ‘like’ and ‘unlike terms’</td>
</tr>
<tr>
<td></td>
<td>• Support subject advisors during provincial meetings.</td>
<td>• Teach common fractions before learners are exposed to algebraic fractions.</td>
</tr>
<tr>
<td></td>
<td>• Monitor curriculum implementation and coverage.</td>
<td>• Emphasise the rules of simplifying fractions especially when the denominators are different.</td>
</tr>
<tr>
<td></td>
<td>• Use DBE workbooks to support teachers.</td>
<td>• Use DBE workbooks to support learners.</td>
</tr>
<tr>
<td></td>
<td>• Monitor the availability of CAPS to each teacher in the province.</td>
<td>• Use CAPS to seek more clarity on the scope and methods of teaching of expressions.</td>
</tr>
<tr>
<td></td>
<td>• Monitor the availability and utilisation of workbooks.</td>
<td>• Start from products of whole numbers to introduce the concept of factors and factorisation.</td>
</tr>
<tr>
<td></td>
<td>• Support teachers during workshops and on-site classroom visits.</td>
<td>• Systematically teach the steps used in factorisation:</td>
</tr>
<tr>
<td></td>
<td>• Monitor curriculum implementation and coverage.</td>
<td>° start by checking for a common factor; and/or</td>
</tr>
<tr>
<td></td>
<td>• Use DBE workbooks to support teachers.</td>
<td>° if the expression has two terms check if difference of two squares can be used;</td>
</tr>
<tr>
<td></td>
<td>• Monitor the availability of CAPS to each teacher in the province.</td>
<td>° if the expression has 3 terms factorise a trinomial</td>
</tr>
<tr>
<td></td>
<td>• Monitor the availability and utilisation of workbooks.</td>
<td>° if the expression has 4 terms use grouping of terms and factor out common factors.</td>
</tr>
<tr>
<td><strong>Factorisation</strong></td>
<td>• Systematically teach the steps used in factorisation.</td>
<td>• Systematically teach the steps used in factorisation:</td>
</tr>
<tr>
<td></td>
<td>• Start from products of whole numbers to introduce the concept of factors and factorisation.</td>
<td>° start by checking for a common factor; and/or</td>
</tr>
<tr>
<td></td>
<td>• Systematically teach the steps used in factorisation:</td>
<td>° if the expression has two terms check if difference of two squares can be used;</td>
</tr>
<tr>
<td></td>
<td>° start by checking for a common factor; and/or</td>
<td>° if the expression has 3 terms factorise a trinomial</td>
</tr>
<tr>
<td></td>
<td>° if the expression has 4 terms use grouping of terms and factor out common factors.</td>
<td>° if the expression has 4 terms use grouping of terms and factor out common factors.</td>
</tr>
<tr>
<td>Identified weaknesses</td>
<td>Remedial measures to improve classroom practice</td>
<td>Responsibility</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Numeric and geometric patterns</td>
<td>• Teach all the different types of patterns as presented in the CAPS.</td>
<td>• Strengthen numeric and geometric patterns in the workbooks during the annual review.</td>
</tr>
<tr>
<td></td>
<td>• Use geometric patterns to generate a number pattern and present the pattern in a tabular form.</td>
<td>• Ensure that all schools have copies of CAPS because it provides critical information on the scope and strategies for the teaching of numeric and geometric patterns.</td>
</tr>
<tr>
<td></td>
<td>• Ensure that all schools have workbooks.</td>
<td>• Conduct monitoring to ensure effective curriculum implementation and coverage.</td>
</tr>
<tr>
<td></td>
<td>• Conduct monitoring to ensure effective curriculum implementation and coverage.</td>
<td>• Provide exemplars to teachers.</td>
</tr>
<tr>
<td></td>
<td>• Subject committees to develop exemplars</td>
<td>• Emphasise the use of correct algebraic language.</td>
</tr>
</tbody>
</table>

**Senior Phase (Grade 9): Mathematics**

Patterns, Functions and Algebra.

**Identified weaknesses**

**Remedial measures to improve classroom practice**

**Responsibility**

- Teach all the different types of patterns as presented in the CAPS.
- Use geometric patterns to generate a number pattern and present the pattern in a tabular form.
- Strengthen numeric and geometric patterns in the workbooks during the annual review.
- Ensure that all schools have copies of CAPS because it provides critical information on the scope and strategies for the teaching of numeric and geometric patterns.
- Conduct monitoring to ensure effective curriculum implementation and coverage.
- Subject committees to develop exemplars.
- Support subject advisors by conducting focused workshops in this regard.
- Conduct monitoring to ensure effective curriculum implementation and coverage.
- Support teachers by conducting focused workshops in this regard.
- Provide exemplars to teachers.
- Emphasise the use of correct algebraic language.
**Senior Phase (Grade 9): Mathematics**

**Space and Shape (Geometry)**

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Straight line geometry | Competency in straight line geometry is a determining factor for competency in congruency and similarity especially when required to justify certain statements. | • Strengthen content during the workbook annual review.  
• Strengthen monitoring and support for districts and schools.  
• Subject committees to develop exemplars | Monitoring and support to ensure curriculum coverage.  
Advise teachers to teach straight line geometry thoroughly in Grades 7 and 8 to maximise learner performance in Grade 9. | • Ensure mastery of relationships between pairs of angles.  
• Emphasise parallel lines and equal lines and the different symbols used to denote them.  
• Emphasise the skills acquired in the solution of equations in Algebra to solve geometry problems. |
| Triangles: congruency and similarity | Enhance conceptual understanding of congruency and similarity. | • Strengthen content during the workbook annual review.  
• Strengthen monitoring and support for districts and schools. | Ensure that all schools have textbooks, workbooks and CAPS.  
• Conduct workshops to address geometry in its entirety.  
• Support teachers during school visits on how to structure assessment to cater for different cognitive levels, including questions that require learners to justify their answers.  
• Strengthen monitoring and support. | • Clearly differentiate between similarity and congruency to mitigate confusion between the two concepts.  
• Teach the conditions of congruency and similarity.  
• Start with simple triangles and later introduce composite or complex triangles.  
• Expose learners to different levels of questions, especially those that require problem solving and complex procedures. |
# Senior Phase (Grade 9): Mathematics

## Measurement

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface area and volume of prisms</td>
<td>• Teach the area of 2D shapes before surface area of 3D objects to enhance understanding among learners.</td>
<td>DBE(^{1}) Province(^{2}) District(^{3}) School(^{4})</td>
</tr>
<tr>
<td></td>
<td>• Clarify the differences between area and surface area, and between volume and capacity.</td>
<td>• Conduct focused workshops to address surface area and volume of 3D objects.</td>
</tr>
<tr>
<td></td>
<td>• Ensure the availability of CAPS in all schools.</td>
<td>• Subject committees to develop exemplars</td>
</tr>
<tr>
<td></td>
<td>• Subject committees to develop exemplars</td>
<td>• Support teachers through school visits.</td>
</tr>
<tr>
<td></td>
<td>• The teaching of area of an ordinary 2D shape should immediately be followed by the teaching of the surface area of triangular prisms (3D objects).</td>
<td>• Ensure that subject advisors are familiar with the content that addresses volume and surface area in CAPS.</td>
</tr>
<tr>
<td></td>
<td>• Emphasise the use of nets when calculating the surface area of a triangular prism.</td>
<td>• Use appropriate formulae to calculate area, surface area and volume.</td>
</tr>
<tr>
<td></td>
<td>• Use appropriate formulae to calculate surface area and volume.</td>
<td>• Monitor the implementation of class improvement plan</td>
</tr>
<tr>
<td></td>
<td>• Monitor the implementation of class improvement plan</td>
<td></td>
</tr>
</tbody>
</table>
## Senior Phase (Grade 9): Mathematics

### Data handling

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The entire data handling</strong> e.g. collecting, organising, representing analysing, interpreting and reporting data.</td>
<td>Teach the entire data cycle and use real life data collected by learners or drawn from StatsSA or other research organisations.</td>
<td>Develop an exemplar of a Project that focuses on a data cycle and share it with teachers as means to guide them to develop theirs.</td>
</tr>
<tr>
<td></td>
<td>Liaise with StatsSA to provide resources to support teachers with data handling.</td>
<td>• The topics in data handling are presented sequentially in CAPS and should be followed.</td>
</tr>
<tr>
<td></td>
<td>Conduct focused workshops to address all the concepts that need to be covered in data handling and Probability.</td>
<td>• Use real life data to teach all the steps in a data cycle.</td>
</tr>
<tr>
<td></td>
<td>• The topics in data handling are presented sequentially in CAPS and should be followed.</td>
<td>• Ensure that Grade 9 learners are able to choose and justify relevant method of data collection and analysis.</td>
</tr>
</tbody>
</table>
## FOUNDATION PHASE (Grades 1-3): Home Languages

### Reading, Comprehension and Writing Skills

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low reading levels and poor reading skills</td>
<td>Plan structured reading lessons focusing on <strong>Whole class Shared Reading</strong> and small group guided reading lessons as per CAPS</td>
<td>DBE</td>
</tr>
<tr>
<td></td>
<td>Provide Reading Plan, and monitor and report on the implementation thereof.</td>
<td>Provisioning of Big Books, Graded Readers and Phonics programmes, Library Books, Reading Posters</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of Reading norms and National Reading Assessment Baseline</td>
<td>Implement Provincial Reading norms and National Reading Assessment for Grades 1 to 3</td>
<td>Monitor Reading benchmarks for Grades 1 to 3 and National Reading Assessment in targeted schools</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution of:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>DVD:</strong> Getting Literacy Teaching Right in the Foundation Phase</td>
<td>Monitor and support Reading at classroom level Empower and capacitate curriculum specialists on Reading methodologies and strategies</td>
</tr>
<tr>
<td></td>
<td>• <strong>Book:</strong> Reading in the Early Grades: A teacher’s Handbook</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Foundation Phase (Grade 1-3): Home Languages

### Reading, Comprehension and Writing Skills

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Instructional <strong>Reading lessons</strong> should be at least 1 hour long with:</td>
<td>DBE</td>
</tr>
<tr>
<td></td>
<td>• Whole class Shared Reading : 15 minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Group Guided Reading : 30 minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Phonics, Word and Sentence level work: 15 minutes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distribution and provisioning of CAPS documents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Develop curriculum coverage tool for CAPS implementation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitor and support curriculum coverage as per CAPS requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plan, teach and assess reading lessons as per CAPS requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set up a reading corner in the classroom with fiction and non-fiction books that are grade-specific.</td>
<td></td>
</tr>
</tbody>
</table>

- National reading Campaigns and festivals
- Provincial Reading festivals
- District Reading campaigns and festivals

- Observe Reading events and celebration
- Establish Reading and Writing Clubs
- Implement Reading Programmes
### Foundation Phase (Grades 1-3): Home Languages

**Reading, Comprehension and Writing Skills**

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Poor Comprehension skills | Plan oral and written comprehension activities for all reading types of texts.  
- Teach a variety of comprehension skills recall, reorganization, inferential and evaluative thinking and reasoning skills  
- Comprehension activities:  
  - multiple choice type,  
  - sequencing of events.  
  - High order questions e.g. “why, what, where”, etc.  
- Use DBE Workbook comprehension activities  
- Use ANA exemplars | DBE  
Provide Workbooks for Grades 1 to 3  
Develop ANA exemplars.  
Use subject committees to develop comprehension exemplars.  
Monitor distribution and utilization of Workbooks | Province  
Monitor utilization of Workbooks  
Distribute ANA exemplars, 2013 ANA Diagnostic Report and the 2014 Framework for Improvement | District  
Conduct Workshops on ANA exemplars | School  
Monitor the utilization of ANA exemplars in Grades 1 to 3 and the ANA Improvement plan.  
Monitor utilization of Workbooks:  
- Must do the prescribed number of worksheets per week  
- Teachers must mark Workbook activities and give learners feedback. |
## Foundation Phase (Grades 1-3): Home Languages

### Reading, Comprehension and Writing Skills

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language usage</strong></td>
<td></td>
<td>DBE</td>
</tr>
<tr>
<td>• Punctuation</td>
<td>Monitor the utilization of workbooks, textbooks and CAPS.</td>
<td>Develop and administer Provincial Quarterly assessments that include language usage items.</td>
</tr>
<tr>
<td>• Sentence construction</td>
<td>• Tenses: Past, Present, Future</td>
<td>• Monitor quality of school based assessments</td>
</tr>
<tr>
<td>• Tenses</td>
<td>• Parts of speech and conjunctions</td>
<td>• Use DBE Workbooks to consolidate comprehension and language activities as well as spelling and dictation activities</td>
</tr>
<tr>
<td>• Parts of speech and conjunctions</td>
<td>Focus on: • Sentence construction activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Writing frames</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Punctuation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Tenses: Past, Present, Future</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Parts of Speech</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Conjunctions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Dictionary skills</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Writing</strong></th>
<th>Dedicated Writing sessions for at least 20 minutes per day, 3 times a week as per CAPS requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Unable to write two sentences on visual text in Grade 1</td>
<td>Use reading texts (Big Book, poem, theme poster) to generate ideas for writing activities</td>
</tr>
<tr>
<td>• Unable to write five sentences on visual text in Grade 2</td>
<td>Writing activities: • Personal news and events</td>
</tr>
<tr>
<td>• Unable to write 10 Sentences on a topic</td>
<td>• Writing frames</td>
</tr>
<tr>
<td></td>
<td>• Stories on reading texts and themes</td>
</tr>
<tr>
<td></td>
<td>• Poems, lists, recipes, advertisements, invitations/cards, e-mails etc.</td>
</tr>
<tr>
<td></td>
<td>• Make and write own story books</td>
</tr>
<tr>
<td></td>
<td>• Use the activities from the DBE work book</td>
</tr>
<tr>
<td></td>
<td>• Display children’s writing and story books in the classroom</td>
</tr>
</tbody>
</table>

- Develop writing benchmarks for Grades 1 to 3 |
- Conduct professional development writing workshops |
- Monitor and evaluate writing benchmarks for Grades 1 to 3 |
- Conduct Reading and writing workshops |

- Implement writing benchmarks for Grades 1 to 3 |
- Conduct professional development writing workshops |
- Monitor writing activities: **Grade 1**: 2 writing activities per week |
- **Grade 2**: 2 -3 writing activities per week |
- **Grade 3**: 3-4 writing activities per week
<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| Illegible and poor handwriting   | Teach handwriting lessons for at least 20 minutes per day, 3 times a week as per CAPS requirements                  | • Provincial Workshops on handwriting  
• Monitor and support.  
• Conduct handwriting workshops.  
• Provide on-site support.  
• Develop school handwriting policy  
• Teach correct letter formation of upper and lower case letters.  
• Use Workbook handwriting practice activities. |
| • incorrect letter formations    |                                                                                                                 |                                                                                  |
| • Poor spacing of words and letters |                                                                                                                 |                                                                                  |
19. **Intermediate Phase (Grades 4-6): Home Language**

### Intermediate Phase (Grades 4-6): Home Language

#### Comprehension

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
</table>
| • Lack of understanding of different texts (e.g. cause and effect, plot, lesson of a story, visuals); • Inability to interpret characters or events in a story, make inferences and give an opinion; • Lack of familiarity with different figures of speech; • Inability to write a summary of a story | **Plan and teach structured reading lessons as per CAPS requirements**  
- Plan structured language lessons focusing on the teaching of comprehension  
- Teach comprehension skills so learners know how to analyze a wide range of different text types, sequence events in a story, extract specific details from a text, make inferences and interpretations and give a reasoned opinion.  
- Teach and provide practice using different figures of speech  
- Provide more opportunities for learners to read a variety of texts  
- Ensure schools with Grades 4-6 learners order approved Core Readers and sets of Graded Readers from the National Catalogue  
- Provide opportunities for learners to engage with a wide range of texts and genres  
- Include daily reading time so learners read a minimum of one book per week throughout the year | **DBE**  
- Use the Departmental structures e.g. Language subject committee, HEDCOM sub-committee to ensure provinces support districts and schools to plan and teach structured reading lessons as per CAPS requirements  
- Monitor curriculum coverage, procurement of readers and the teaching of structured reading comprehension lessons  
- Workshop teachers on teaching reading comprehension using a wide range of different text types and genres  
- Support schools to order readers, use the ANA analysis to plan and teach structured reading comprehension lessons as per CAPS and form School Literacy Teams  
- Monitor and report on curriculum coverage, the teaching of structured reading comprehension lessons  
- SMTs to form a School literacy team in the school | **Province**  
- Support districts and schools to plan and teach structured reading comprehension lessons as per CAPS requirements  
- SMTs to ensure schools order and use core readers and graded readers to improve teaching of reading and reading comprehension | **District**  
- Support schools to orders readers, use the ANA analysis to plan and teach structured reading comprehension lessons as per CAPS and form School Literacy Teams  
- Monitor and report on curriculum coverage, the teaching of structured reading comprehension lessons  
- SMTs to form a School literacy team in the school | **School**  
- Support schools to orders readers, use the ANA analysis to plan and teach structured reading comprehension lessons as per CAPS and form School Literacy Teams  
- SMTs to ensure schools order and use core readers and graded readers to improve teaching of reading and reading comprehension  
- Monitor and report on curriculum coverage, the teaching of structured reading comprehension lessons  
- SMTs to form a School literacy team in the school  
- Teachers to use the ANA analysis to plan and teach structured reading comprehension lessons: to analyze a wide range of different text types and genres, extract specific details from a text, make inferences and interpretations, give a reasoned opinion and provide practice using different figures of speech |
**Intermediate Phase (Grades 4-6): Home Language**

## Language and Writing

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
<th>DBE</th>
<th>Province</th>
<th>District</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor understanding and use of different parts of speech</td>
<td><strong>Plan and teach structured language lessons as per CAPS requirements</strong></td>
<td>• Use the Departmental structures e.g. Language subject committee, HEDCOM sub-committee to ensure provinces support districts and schools to plan and teach structured language lessons as per CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inability to rewrite sentences in a different tense</td>
<td>• Plan structured lessons focusing on the teaching of Language and Writing</td>
<td>• Monitor and report on curriculum coverage, the teaching of structured language lessons</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of understanding of meta-language</td>
<td>• Teach focused lessons and give more practice in:</td>
<td>• Ensure learners write different text types on a weekly basis using the process approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of editing skills</td>
<td>- using different parts of speech</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inability to convert a sentence in reported speech into direct speech</td>
<td>- rewriting sentences from one tense to another;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weak writing skills: failure to understand how to use a diary format, poor grammar and spelling, inability to construct meaningful sentences to form a logical diary entry on the given topic and use a rich and varied vocabulary</td>
<td>- editing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- converting a sentence in reported speech into direct speech and vice versa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Build a rich vocabulary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Familiarize learners with meta-language</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure learners write different text types on a weekly basis so they are familiar with different formats and requirements as per CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the process approach to writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the grammar, punctuation and spelling errors from learners’ writing to inform focused Language lessons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the ANA analysis to plan and teach structured language lessons as per CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Monitor and report on curriculum coverage, the teaching of structured language lessons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure learners write different text types on a weekly basis using the process approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Support districts and schools to plan and teach structured language lessons as per CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Support schools to orders reader, use the ANA analysis to plan and teach structured Language lessons as per CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Support districts and schools to plan and teach structured Language lessons as per CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Support schools to orders reader, use the ANA analysis to plan and teach structured Language lessons as per CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the process approach to writing so that learners plan and edit their writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Teachers to use the ANA analysis to plan and teach structured Language lessons on tenses, direct/reported speech, different parts of speech, use of correct punctuation and spelling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Teachers to provide learners with opportunities to write different text types on a weekly basis so they are familiar with different formats and requirements as per CAPS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Teachers to use the process approach to writing so that learners plan and edit their writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- SMTs to form a School literacy team in the school.
- Teachers to use the ANA analysis to plan and teach structured language lessons on tenses, direct/reported speech, different parts of speech, use of correct punctuation and spelling.
- Teachers to provide learners with opportunities to write different text types on a weekly basis so they are familiar with different formats and requirements as per CAPS.
- Teachers to use the process approach to writing so that learners plan and edit their writing.
## Senior Phase (Grade 9): Home Language

### Comprehension

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Inability to interpret a text, make inferences and give a reasoned opinion or explanation (e.g. plot of a story, cause and effect, symbolism and humour in visual texts)</td>
<td><strong>Plan and teach structured reading lessons as per CAPS requirements</strong></td>
<td>DBE</td>
</tr>
<tr>
<td>• Lack of understanding of idioms and expressions</td>
<td>• Plan structured language lessons focusing on the teaching of comprehension</td>
<td></td>
</tr>
<tr>
<td>• Inability to explain concepts in an information text</td>
<td>• Teach comprehension skills so learners know how to analyze a wide range of different text types, make inferences and interpretations, give a reasoned opinion and integrate ideas and information across texts to provide reasons and explanations.</td>
<td></td>
</tr>
<tr>
<td>• Lack of familiarity with different figures of speech and insufficient vocabulary to comprehend their meaning;</td>
<td>• Teach and provide practice using figures of speech</td>
<td></td>
</tr>
<tr>
<td>• Inability to differentiate main points from supporting detail</td>
<td>• Teach 3-5 words daily and provide opportunities for learners to use the vocabulary orally and in writing</td>
<td></td>
</tr>
</tbody>
</table>

**Provide more opportunities for learners to read a wide variety of texts**

• Ensure schools with Grades 7-9 learners order approved Core Readers and novels from the National Catalogue

• Provide opportunities for learners to read and analyze a wide range of texts and genres of increasing complexity

• Use the Departmental structures e.g. Language subject committee, HEDCOM sub-committee to ensure provinces support districts and schools to plan and teach structured reading lessons as per CAPS requirements

• Monitor and report on curriculum coverage, procurement of readers and the teaching of structured reading comprehension lessons

• Support districts and schools to plan and teach structured reading comprehension lessons as per CAPS requirements

• Support schools to order core readers and novels, use the ANA analysis to plan and teach structured reading comprehension lessons as per CAPS and form School Literacy Teams

• Monitor and report on curriculum coverage, the teaching of structured reading comprehension lessons

• SMTs to ensure schools order and use core readers and novels to improve teaching of reading and reading comprehension

• SMTs to form a School literacy team in the school

• Teachers to use the ANA analysis to plan and teach structured reading comprehension lessons: to analyze a wide range of different text types, make inferences and interpretations, integrate ideas and information across texts give a reasoned opinion and provide practice using different figures of speech

• Teachers to teach 3-5 words daily and get learners to use the vocabulary orally and in writing
## Senior Phase (Grade 9): Home Language

### Language and Writing

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Poor understanding and use of different parts of speech</td>
<td><strong>Plan and teach structured language lessons as per CAPS requirements</strong></td>
<td>DEB</td>
</tr>
<tr>
<td>• Inability to convert a sentence in the active voice into the passive voice or direct speech into reported speech and vice versa</td>
<td>• Plan structured lessons focusing on the teaching of Language and Writing</td>
<td>• Support districts and schools to plan and teach structured language lessons as per CAPS</td>
</tr>
<tr>
<td>• Lack of understanding of meta-language</td>
<td>• Teach focused lessons and give more practice in:</td>
<td>• Monitor and report on curriculum coverage, the teaching of structured language lessons as per CAPS</td>
</tr>
<tr>
<td>• Lack of editing skills</td>
<td>° using different parts of speech</td>
<td>• Ensure learners write different text types on a weekly basis using the process approach</td>
</tr>
<tr>
<td>• inability to differentiate main and subordinate clauses</td>
<td>° rewriting sentences and paragraphs using correct grammar and punctuation;</td>
<td></td>
</tr>
<tr>
<td>• Weak essay writing skills: failure to plan the writing process, weak spelling and grammar, inability to construct meaningful sentences to form logical paragraphs on the given topic; lack of a rich and varied vocabulary</td>
<td>° identifying main and subordinate clauses</td>
<td></td>
</tr>
<tr>
<td></td>
<td>° converting a sentence in the active voice into the passive voice or direct speech into reported speech and vice versa;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>° Familiarize learners with meta-language</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure learners write a range of different text types on a weekly basis so they are familiar with different formats.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the process approach to writing so learners plan and edit their writing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the grammar, punctuation and spelling errors from learners’ writing to inform focused Language lessons</td>
<td></td>
</tr>
</tbody>
</table>
## Intermediate Phase (Grades 4-6): First Additional Language

### Comprehension

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lack of understanding of a text (e.g. main idea and details in a text, cause and effect, sequence of events, lesson of the story/text)</td>
<td><strong>Plan and teach structured reading lessons as per CAPS requirements</strong>&lt;br&gt;  - Plan structured language lessons focusing on the teaching of comprehension&lt;br&gt;  - Teach comprehension skills so learners know how to analyze different text types, sequence events in a story, extract specific details from a text, make inferences and interpretations and give a reasoned opinion.&lt;br&gt;  - Teach and provide practice using different figures of speech&lt;br&gt;  - Provide more opportunities for learners to read a variety of texts&lt;br&gt;  - Ensure schools with Grades 4-6 learners order approved Core Readers and sets of Graded Readers from the National Catalogue&lt;br&gt;  - Teach reading strategies, including phonics and word attack skills in the FAL&lt;br&gt;  - Include daily reading time so learners read a minimum of one book per week throughout the year</td>
<td>DBE&lt;br&gt;  - Use the Departmental structures e.g. Language subject committee, HEDCOM sub-committee to ensure provinces support districts and schools to plan and teach structured reading lessons as per CAPS requirements&lt;br&gt;  - Monitor curriculum coverage, procurement of readers, the teaching of structured reading comprehension lessons</td>
</tr>
</tbody>
</table>
**Intermediate Phase (Grades 4-6): First Additional Language**

**Language and Writing**

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Poor understanding and use of different parts of speech</td>
<td><strong>Plan and teach structured language lessons as per CAPS requirements</strong></td>
<td><strong>DBE</strong></td>
</tr>
<tr>
<td>• Inability to rewrite sentences in a different tense</td>
<td>• Plan structured lessons focusing on the teaching of Language and Writing</td>
<td>• Support districts and schools to plan and teach structured language lessons as per CAPS</td>
</tr>
<tr>
<td>• Lack of understanding of meta-language</td>
<td>• Teach focused lessons and give more practice in:</td>
<td>• Monitor and report on curriculum coverage, the teaching of structured language lessons</td>
</tr>
<tr>
<td>• Inability to punctuate a sentence or paragraph and add capitalization</td>
<td>◦ using different parts of speech</td>
<td>• Workshop teachers on teaching language and using process writing to produce different text types using writing frameworks</td>
</tr>
<tr>
<td>• Poor knowledge of spelling rules</td>
<td>◦ rewriting sentences from one tense to another;</td>
<td>• Organize spelling competitions</td>
</tr>
<tr>
<td>• Weak letter writing: failure to understand how to use a letter format, poor grammar and spelling, inability to construct meaningful sentences to form a logical paragraph on the given topic</td>
<td>◦ rewriting sentences and paragraphs using correct punctuation;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>◦ using the correct subject verb concord.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Familiarise learners with meta-language.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure learners write different text types on a weekly basis so they are familiar with different formats and requirements as per CAPS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the process approach to writing and support learners by providing writing frameworks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use the grammar, punctuation and spelling errors from learners’ writing to inform focused Language lessons.</td>
<td></td>
</tr>
<tr>
<td>Identified weaknesses</td>
<td>Responsibility</td>
<td>Remedial measures to improve classroom practice</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Lack of understanding of a text (e.g. plot of a story, cause and effect, author's purpose)</td>
<td>Departmental structures e.g. Language subject committee, HEDCOM sub-committee</td>
<td>Plan structured language lessons focusing on the teaching of comprehension and reading strategies as per CAPS requirements.</td>
</tr>
<tr>
<td>Inability to interpret characters or events in a story, make inferences and give a reasoned opinion or explanation; lack of familiarity with different figures of speech and insufficient vocabulary to comprehend their meaning.</td>
<td>Support districts and schools to plan and teach structured reading lessons as per CAPS requirements.</td>
<td></td>
</tr>
<tr>
<td>Inability to identify main points from supporting detail.</td>
<td>Monitor curriculum coverage, the teaching of structured reading comprehension lessons.</td>
<td></td>
</tr>
<tr>
<td>Inability to identify the source of a text.</td>
<td>Workshop with teachers on teaching reading comprehension using a range of different text types.</td>
<td></td>
</tr>
</tbody>
</table>

**Provide more opportunities for learners to read a wide variety of texts**

- Ensure schools with Grades 7-9 learners order approved Core Readers and novels from the National Catalogue.
- Teachers to teach 3-5 words daily and give learners to use the vocabulary orally and in writing.
- Teachers to teach reading strategies and word attack skills in the FAL.

**Plan and teach structured reading lessons as per CAPS requirements**

- Plan structured language lessons focusing on the teaching of comprehension and reading strategies as per CAPS requirements. |
- Teachers to teach and provide practice using different figures of speech.
- Teachers to teach 3-5 words daily and provide learners to use the vocabulary orally and in writing.

**Provide opportunities for learners to read a wide range of different text types**

- Teachers to teach reading strategies and word attack skills in the FAL.
- Provide opportunities for learners to read and analyze a wide range of texts and genres of increasing complexity.
### Senior Phase (Grade 9): First Additional Language

#### Language and Writing

<table>
<thead>
<tr>
<th>Identified weaknesses</th>
<th>Remedial measures to improve classroom practice</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Poor understanding and use of different parts of speech</td>
<td><strong>Plan and teach structured language lessons as per CAPS requirements</strong></td>
<td><strong>DBE</strong></td>
</tr>
<tr>
<td>• Inability to rewrite sentences in a different tense</td>
<td>• Plan structured lessons focusing on the teaching of Language and Writing</td>
<td>• Support districts and schools to plan and teach structured language lessons as per CAPS</td>
</tr>
<tr>
<td>• Inability to convert a sentence in the active voice into the passive voice or direct speech into reported speech and vice versa</td>
<td>• Teach focused lessons and give more practice in:</td>
<td>• Monitor and report on curriculum coverage, the teaching of structured language lessons as per CAPS</td>
</tr>
<tr>
<td>• A lack of familiarity with modals</td>
<td>- using different parts of speech</td>
<td>• Ensure learners write different text types on a weekly basis using the process approach</td>
</tr>
<tr>
<td>• Lack of understanding of metacognitive language</td>
<td>- rewriting sentences from one tense to another;</td>
<td>• Workshop teachers on teaching language and using process writing to produce different text types</td>
</tr>
<tr>
<td>• Inability to punctuate a paragraph</td>
<td>- rewriting sentences and paragraphs using correct grammar and punctuation;</td>
<td>• SMTs to form a School literacy team in the school</td>
</tr>
<tr>
<td>• Poor knowledge and use of spelling rules</td>
<td>- converting a sentence in the active voice into the passive voice or direct speech into reported speech and vice versa</td>
<td>• Teachers to use the ANA analysis to plan and teach structured language lessons on passive/active voice, tenses, direct/reported speech, different parts of speech, modals, use of correct punctuation and spelling</td>
</tr>
<tr>
<td>• Weak writing skills: failure to plan the writing process, weak grammar, inability to construct meaningful sentences to form logical paragraphs on the given topic; limited vocabulary</td>
<td>• Familiarize learners with metacognitive language</td>
<td>• Provide learners with opportunities to write different text types on a weekly basis so they are familiar with different formats and requirements as per CAPS</td>
</tr>
<tr>
<td></td>
<td>• Ensure learners write different text types on a weekly basis so they are familiar with different formats.</td>
<td>• Use the process approach to writing so that learners plan and edit their writing</td>
</tr>
<tr>
<td></td>
<td>• Use the process approach to writing so learners plan and edit their writing</td>
<td>• Use the Departmental structures e.g. Language subject committee, HEDCOM sub-committee to ensure provinces support districts and schools to plan and teach structured language lessons as per CAPS</td>
</tr>
<tr>
<td></td>
<td>• Use the grammar, punctuation and spelling errors from learners’ writing to inform focused Language lessons</td>
<td>• Support schools to order readers, use the ANA analysis to plan and teach structured Language lessons as per CAPS</td>
</tr>
<tr>
<td></td>
<td><strong>Use the DBE</strong></td>
<td>• Support districts and schools to plan and teach structured language lessons as per CAPS</td>
</tr>
<tr>
<td></td>
<td><strong>Province</strong></td>
<td>• Monitor and report on curriculum coverage, the teaching of structured language lessons as per CAPS</td>
</tr>
<tr>
<td></td>
<td><strong>District</strong></td>
<td>• Ensure learners write different text types on a weekly basis using the process approach</td>
</tr>
<tr>
<td></td>
<td><strong>School</strong></td>
<td>• Workshop teachers on teaching language and using process writing to produce different text types</td>
</tr>
</tbody>
</table>

*Note: ANA = Annual National Assessment, CAPS = Curriculum and Assessment Policy Statement, SMT = School Management Team.*
23. **Conclusion**

The key findings and proposed interventions contained in this report are solely aimed at the teacher and the day-to-day management of the curriculum in the classroom. The scripts were selected strategically in order to give insight into how learners in Grades 1 to 6 and 9 performed in Language and Mathematics and also provide possible ways in which learners could be assisted to learn more effectively.

The qualitative analysis suggests that most learners have not mastered knowledge and skills that are appropriate to the grade in which they are placed. Therefore, there is need for teachers to develop remedial programmes that address the shortcomings in learners' skills and knowledge.

The recommended interventions in this report should be incorporated into teaching plans and augmented with relevant strategies in each context. The recommendations are not exhaustive but they provide the minimum that could be done to address the challenges and help learners improve performance at school and in national assessments.

One important feature of this report is that it provides specific evidence to illustrate the nature and extent of the identified learning shortcomings among learners in each grade and suggested remedial measures to improve classroom practice. Teachers are expected to develop targeted programmes to address specific weaknesses relevant to their own learners. Principals must provide necessary support and materials. Districts should also find the report useful to guide their monitoring and support to schools. The DBE, together with the PEDs, will monitor the implementation of remedial programmes and provide support and appropriate resources where necessary.