

# Natural Sciences and Technology CAPS

## (Grades 4 – 6)

### SECTION 3: CONTENT

All content relating to Technology should be removed and the subject name be changed accordingly to “Natural Sciences”. Thus, the following topics to be removed, and their time allocation be distributed to other topics.

#### GRADE 4: Term 1

- Structures for animal shelters

#### GRADE 4: Term 2

- Strengthening materials
- Strong frame structures

#### GRADE 4: Term 3

- Movement and Energy in a system

#### GRADE 4: Term 4

- Rocket systems

#### GRADE 5: Term 1

- Skeletons as Structures

#### GRADE 5: Term 3

- Systems for moving things

#### GRADE 5: Term 4

- Sedimentary rocks

#### GRADE 6: Term 1

- Food Processing

#### GRADE 6: Term 4

- Systems to explore the Moon and Mars

## SECTION 4: ASSESSMENT

### 4.3 FORMAL ASSESSMENT

Cognitive levels for the assessment in Grades 4, 5 and 6

Low order questions 50%		Middle order questions 35%		High order questions 15%	
Level 1 Remembering	Level 2 Understanding	Level 3 Applying	Level 4 Analysing	Level 5 Evaluating	Level 6 Creating
Exhibit memory of previously learned material by recalling facts, terms, basic concepts, and answers.	Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating main ideas.	Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.	Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.	Present and defend opinions by making judgments about information, validity of ideas, or quality of work based on a set of criteria.	Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.
acquire categorise choose copy define describe find identify label list locate match memorise name omit point out quote recall	classify compare conclude contrast define demonstrate describe differentiate discuss distinguish draw estimate exemplify explain express extend identify illustrate	apply build calculate carry out change choose compute construct demonstrate develop dramatise employ execute exhibit experiment with identify illustrate implement	analyse assume attribute break down calculate categorise classify compare conclude contrast correlate criticise deconstruct deduce detect devise differentiate discover	appraise argue arrange assess choose compose conclude construct criticise critique decide deduct defend derive design detect determine develop	adapt appraise argue assess build change choose combine compare compile compose conclude consider construct create criticise decide deduce

recite recognise record relate repeat respond retrieve select show state tabulate tell trace	infer interpret locate match outline paraphrase recognise relate rephrase report represent restate review show summarise translate	interpret interview make use of model modify operate organise plan practice predict relate restructure select sketch solve	discriminate dissect distinguish divide examine experiment find infer inspect integrate investigate motivate organise outline probe scrutinise separate simplify structure survey test for	disprove document estimate evaluate experiment explain formulate generalise hypothesise interpret judge justify measure modify order organise predict prioritise produce propose prove rank rate recommend relate select test	design develop devise elaborate estimate evaluate formulate generalise hypothesise imagine improve infer integrate invent judge measure modify plan predict produce propose rate rearrange solve suppose test validate
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*(Adapted from: Anderson, L. W., & Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing, Abridged Edition. Boston, MA: Allyn and Bacon.)*

#### 4.4 PROGRAMME OF FORMAL ASSESSMENT FOR NATURAL SCIENCES AND TECHNOLOGY

##### Grades 4, 5 and 6

The number of assessment tasks for the year is constituted as follows:

- Six (6) formal SBA tasks from term 1 to term 3 and one (1) \* Examination at the end of the year. Reference to be made to the programme of assessment table for clear outline.
- The weighting of practical tasks or investigations will cover any content within that specific term and makes up 40% towards the term mark.
- The weighting of content within a test is based on the time allocated to the content as per the annual teaching plan and constitutes 60% towards the term mark. Special reference is made to term 2, where the practical or investigation will constitute 40% and the June exam will constitute 60% towards the term mark.
- The weighting for \* Examinations for June will constitute 40% of the content from term 1 and 60% of the content from term 2.
- The weighting for \* Examinations for November will constitute 40% of the content from term 3 and 60% of the content from term 4.

The class tests and \* Examinations **must** include questions on all content covered as per indication from the programme of assessment.

##### Grade 4

	Term 1		Term 2		Term 3		Term 4
<i>Form of Assessment</i>	Practical Task/ Investigation (40%)	Test (60%)	Practical Task/ Investigation (40%)	* Examination (60%)	Practical Task/ Investigation (40%)	Test (60%)	* Examination
<i>Tools of Assessment</i>	Memo & rubric	Memo	Memo & rubric	Memo	Memo & rubric	Memo	Memo
<i>Minimum Marks</i>	20	25	20	40	20	25	40
<i>Time Allocation</i>	40 minutes	60 minutes	60 minutes	60 minutes	40 minutes	60 minutes	60 minutes
<i>Knowledge and skills focus</i>	Term 1	Term 1	Term 2	Term 1 (40%) Term 2 (60%)	Term 3	Term 3	Term 3 (40%) Term 4 (60%)
<i>No. of Tasks</i>	2		2		2		1

## Grade 5

	Term 1		Term 2		Term 3		Term 4
<i>Form of Assessment</i>	Practical Task/ Investigation (40%)	Test (60%)	Practical Task/ Investigation (40%)	* Examination (60%)	Practical Task/ Investigation (40%)	Test (60%)	* Examination
<i>Tools of Assessment</i>	Memo & rubric	Memo	Memo & rubric	Memo	Memo & rubric	Memo	Memo
<i>Minimum Marks</i>	20	30	20	50	20	30	50
<i>Time Allocation</i>	60 minutes	30 minutes	60 minutes	60 minutes	60 minutes	45 minutes	60 minutes
<i>Knowledge and skills focus</i>	Term 1	Term 1	Term 2	Term 1 (40%) Term 2 (60%)	Term 3	Term 3	Term 3 (40%) Term 4 (60%)
<i>No. of Tasks</i>	2		2		2		1

## Grade 6

	Term 1		Term 2		Term 3		Term 4
<i>Forms of assessment</i>	Practical Task/ Investigation (40%)	Test (60%)	Practical Task/ Investigation (40%)	* Examination (60%)	Practical Task/ Investigation (40%)	Test (60%)	* Examination
<i>Tools of assessment</i>	Memo & rubric	Memo	Memo & rubric	Memo	Memo & rubric	Memo	Memo
<i>Minimum Marks</i>	20	50	20	60	20	50	60
<i>Time allocation</i>	60 minutes	60 minutes	60 minutes	90 minutes	60 minutes	60 minutes	90 minutes
<i>Knowledge and skills focus</i>	Term 1	Term 1	Term 2	Term 1 (40%) Term 2 (60%)	Term 3	Term 3	Term 3 (40%) Term 4 (60%)
<i>No. of Tasks</i>	2		2		2		1

**Notes:** \* Content, concepts and skills across all the topics, including knowledge of investigations and some skills associated with practical work must be assessed in the written exams.