

2023

Annual Teaching Plans
**NATURAL SCIENCES
& TECHNOLOGY**

Intermediate Phase



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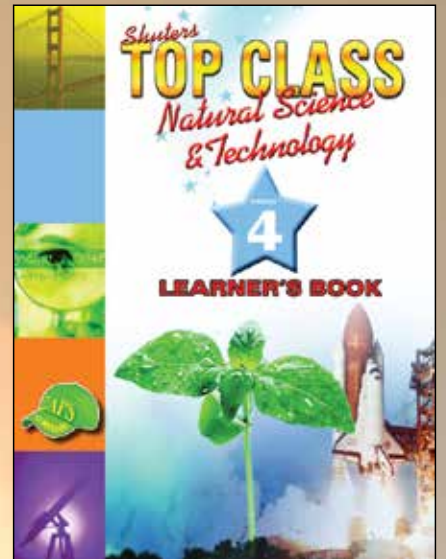
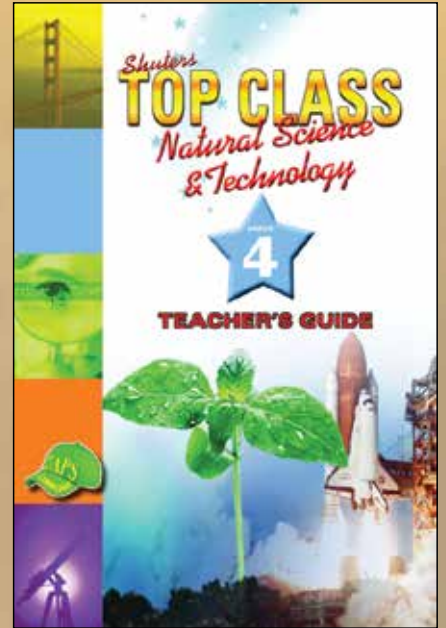
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- Helps save planning and preparation time
- Follows the CAPS precisely, making teaching easier
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NATURAL SCIENCES AND TECHNOLOGY Term 1

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 4		
			Unit	LB	TG
Life and Living					
Living and non-living things	<ul style="list-style-type: none"> Living things Non-living things <p>Informal assessment:</p> <ul style="list-style-type: none"> Use pictures and read case studies to distinguishing between living and non-living things with reasons. Use everyday life experiences and examples to describe the seven life processes. Identifying the different parts of a flowering plant 	Week 1–2	Unit 1: Living and non-living things	1–10	1–6
Structure of plants and animals	<ul style="list-style-type: none"> Structure of plants and animals Structure of animals <p>Informal assessment:</p> <ul style="list-style-type: none"> Compare the different parts of a plant (roots, stems and leaves) in terms of their size, colour and shape. Use various drawings and or pictures to label basic structure flowering plants and animals. Use pictures of various animals to compare their differences and similarities Conditions for growth 	Week 3–4	Unit 2: Structure of plants and animals	11–19	7–15
What plants need to grow	<p>Informal assessment:</p> <ul style="list-style-type: none"> Do a scientific investigation to find out what seeds need to germinate and grow into new plants. Keep a diary during the investigation to record observations and the results. Predict the result of your investigation. 	Week 5	Unit 3: What plants need to grow	20–23	16–18
Habitats of animals	<ul style="list-style-type: none"> Different habitats Need for a habitat <p>Informal assessment:</p> <ul style="list-style-type: none"> Identify, draw and describe the habitat in your school. Your drawing should have ONLY the plants and little animals that you can see in your habitat. Identify the habitats of indigenous South African plants and animals. 	Week 6–7	Unit 4: Habitats of animals	24–30	19–22

NATURAL SCIENCES AND TECHNOLOGY Term 1

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 4		
			Unit	LB	TG
Life and Living					
Structures for animal shelters	<ul style="list-style-type: none"> Animal shelters <p>Informal assessment:</p> <ul style="list-style-type: none"> Compare natural and man-made animal shelters. Design and draw an animal shelter, taking into account its: purpose, shape, size and materials. Evaluate the suitability of the design. 	Week 8–9	Unit 5: Structures for animal shelters	31–40	23–28
Remediation, revision, and consolidation		Week 10–11			

NATURAL SCIENCES AND TECHNOLOGY Term 2

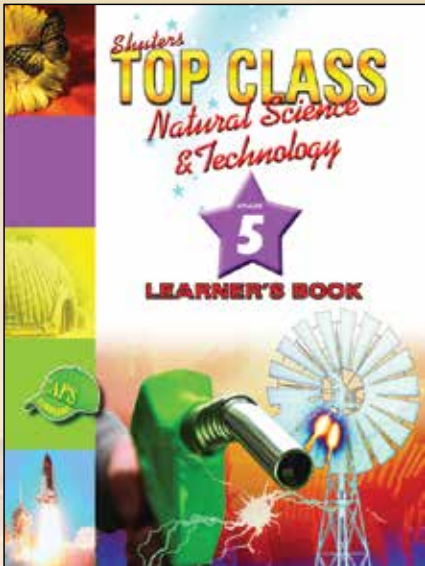
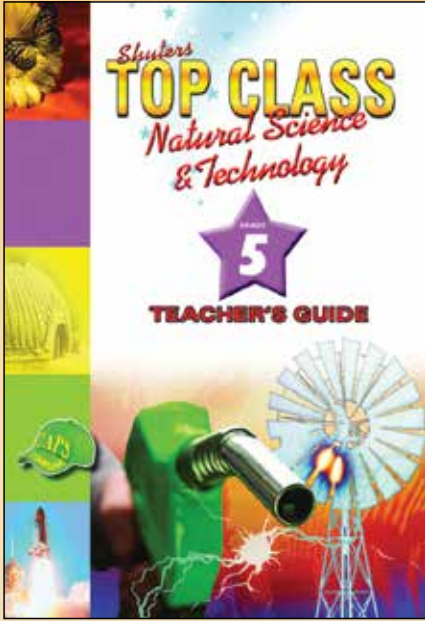
Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 4		
			Unit	LB	TG
Matter and materials					
Materials around us	<ul style="list-style-type: none"> Solids, liquids and gases Change of state The water cycle <p>Informal assessment:</p> <ul style="list-style-type: none"> Investigate and write down the properties of solids, liquids and gases. Compare the properties of solids, liquids and gases Describe and draw the stages of the water cycle. Make a model of a water cycle 	Weeks 1–4	Unit 6: Materials around us	41–49	29–36
Solid materials	<ul style="list-style-type: none"> Raw and manufactured materials Properties of materials <p>Informal assessment:</p> <ul style="list-style-type: none"> Explain the difference between raw and manufactured materials. Investigating materials that objects are made from. Describing the properties of raw and manufactured materials. Classifying materials into raw or manufactured. Investigate the properties of raw and manufactured materials such as; hard or soft; tough or fragile; stiff or flexible; strong in tension; etc. Investigate how tough different materials are. Investigate material that is the most flexible for a ruler Investigating the flexibility of a ruler. Record the results in the table and use them to plot a graph on graph paper. Identifying different materials that are strong in tension Link different materials with the purpose of the object 	Weeks 5–6	Unit 7: Solid materials	50–59	37–43
Strengthening materials	<ul style="list-style-type: none"> Ways to strengthen materials <p>Informal assessment:</p> <ul style="list-style-type: none"> Explore different ways to strengthen paper, e.g. tubing and folding. Investigate the strongest pillar and draw a table and a bar graph of the results. Discuss the results and draw conclusions. 	Week 7–8	Unit 8: Strengthening materials	60–66	44–46

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 4		
			Unit	LB	TG
Matter and materials					
Strong frame structures	<ul style="list-style-type: none"> • Struts and frame structures • Indigenous structures <p>Informal assessment:</p> <ul style="list-style-type: none"> • Explore ways to make a strong structure • Design and make a bridge. It must span a minimum length of 1 m. It must be able to support a load (bags of coins and books) • Identify materials used in traditional homes, e.g.: Zulu hut, Xhosa rentable, etc. • Compare modern and traditional structures and materials 	Week 9	Unit 9: Strong frame structures	67–76	47–53
Remediation, revision, and consolidation		Week 10–11			

NATURAL SCIENCES AND TECHNOLOGY Term 3

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 4		
			Unit	LB	TG
Energy and change					
Energy and energy transfer	<ul style="list-style-type: none"> Energy for life Energy from the sun <p>Informal assessment:</p> <ul style="list-style-type: none"> Describe the transfer of energy from the Sun. Identify activities that people, and animals do that require energy. Draw and explain how animals get energy for life processes from the Sun. 	Week 1–3	Unit 10: Energy and energy transfer	77–83	54–60
Energy around us	<ul style="list-style-type: none"> Energy Input and output energy <p>Informal assessment:</p> <ul style="list-style-type: none"> Investigate the input and output energy of appliances, e.g. a kettle, stove, torch, radio, iron, fan/hair dryer, car/bicycle, drum, etc. 	Week 3–5	Unit 11: Energy around us	84–92	61–67
Movement and energy in a system	<ul style="list-style-type: none"> Movement and musical instruments <p>Informal assessment:</p> <ul style="list-style-type: none"> Research about the various indigenous musical instruments and how they work. Investigate how musical instruments make music. Design and make your own musical instrument. 	Week 5–7	Unit 12: Movement and energy in a system	93–100	68–72
Energy and sound	<ul style="list-style-type: none"> Vibrations and sound Making sounds Noise pollution <p>Informal assessment:</p> <ul style="list-style-type: none"> Investigate how different types of movement causes vibration that cause different sound using elastic band. Investigate how to make sounds louder and travel further. Identify and describe sources of noise pollution. Research about the health risk of exposure to loud music and explain to your peers how best to protect their hearing. 	Week 8–9	Unit 13: Energy and sound	101–111	73–78
Remediation, revision, and consolidation		Week 10–11			

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 4		
			Unit	LB	TG
Planet Earth and beyond					
Planet Earth	<ul style="list-style-type: none"> • Features of the Earth • Earth and space <p>Informal assessment:</p> <ul style="list-style-type: none"> • Describe and identify the main features of the Earth • Draw or make models of the Earth 	Weeks 1–2	Unit 14: Planet Earth	112–118	79–83
The sun	<ul style="list-style-type: none"> • Our closest star • Input and output energy <p>Informal assessment:</p> <ul style="list-style-type: none"> • Identify and describe main features of the Sun • Draw or make models of the Sun 	Week 3	Unit 15: The sun	119–120	84–85
The Earth and sun	<ul style="list-style-type: none"> • Moving around the sun • The sun and life <p>Informal assessment:</p> <ul style="list-style-type: none"> • Explain how the Earth moves around the Sun • Interpreting models and pictures of Solar System 	Week 4			
The moon	<ul style="list-style-type: none"> • Features of the moon • Phases of the moon • Moon stories <p>Informal assessment:</p> <ul style="list-style-type: none"> • Investigate how the changing shape of light on the moon gives different phases of the Moon • Identify the different phases of the Moon • Draw or make models of the Moon 	Week 5–6	Unit 16: The moon	125–131	88–92
Rocket systems	<ul style="list-style-type: none"> • Modelling of a rocket <p>Informal assessment:</p> <ul style="list-style-type: none"> • Making a model of a balloon rocket, test it • Investigating distances travelled by different balloon rockets • Evaluating balloon rockets 	Week 7–8	Unit 17: Rocket systems	132–140	93–97
Remediation, revision, and consolidation		Week 9			



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Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 5		
			Unit	LB	TG
	Life and living				
Plants and animals on Earth	<ul style="list-style-type: none"> Many different plants and animals Inter-dependence Animal types <p>Informal assessment:</p> <ul style="list-style-type: none"> Identify different habitats in South Africa and some of the plants and animals that we find there. Describe and compare animals without bones with animals with bones. Describe interdependence between living and non-living things. Identify the interdependence between the animals and/or plants and the non-living things in their environment. Identify common characteristics of invertebrates and vertebrates animals 	Week 1–3	Unit 1: Plants and animals on Earth	1–12	1–9
Animal skeletons	<ul style="list-style-type: none"> Skeletons of vertebrates Movement <p>Informal assessment:</p> <ul style="list-style-type: none"> Identify the different types of skeletons. Use pictures of animals to identifying five groups of vertebrates and their common characteristics. Identify and describe different bones in a vertebrate skeleton and state the functions of each bone. 	Week 3–4	Unit 2: Animal skeletons	13–19	10–13
Skeletons as structures	<ul style="list-style-type: none"> Frame and shell structures <p>Informal assessment:</p> <ul style="list-style-type: none"> Label the diagram of the human skeleton. Describe how different vertebrate animals move including humans. Design, draw, make and evaluate a skeleton. Write a paragraph about the skeleton that you built to address what worked and what did not work. Your skeleton should have the following specifications: - It must be 3-dimensional; it must look realistic; it must have/show the basic parts, i.e. skull, backbone, ribs; It must be strong and rigid and so it can stand on its own. 	Week 4–6	Unit 3: Skeletons as structures	20–26	14–16

NATURAL SCIENCES AND TECHNOLOGY Term 1

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 5		
			Unit	LB	TG
Life and living					
Food chains	<ul style="list-style-type: none"> • Food and feeding <p>Informal assessment:</p> <ul style="list-style-type: none"> • Describe how each living thing gets food and how energy is passed from one organism to the next. • Sequence plants and animals to make up a proper food chain in which the energy is transferred from one organism to the next with up to four organisms each, describing their relationships. • Classify the animals according to their feeding relationships (as herbivores, omnivores, carnivores, scavengers or decomposers) 	Week 6–7	Unit 4: Food chains	27–33	17–20
Life cycles	<ul style="list-style-type: none"> • Growth and development <p>Informal assessment:</p> <ul style="list-style-type: none"> • Explain the four stages in the life cycle of a flowering plant. • Describe the different stages in the life cycle of an animal. 	Week 8–9	Unit 5: Life cycles	34–42	21–28
Remediation, revision, and consolidation		Week 10–11			

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 5		
			Unit	LB	TG
Matter and materials					
Metals and non-metals	<ul style="list-style-type: none"> • Properties of metals • Properties of non-metals <p>Informal assessment:</p> <ul style="list-style-type: none"> • Investigate, compare and record the properties of some metal objects (such as copper wire, coins, nails, cooking pots, knives and forks) and some non-metal objects (such as a piece of chalk, a stone, a pile of sand, a piece of coal). • Investigate ways to make old and dull metal objects shiny again. • Investigate how rust occurs 	Week 1–3	Unit 6: Metals and non-metals	43–50	29–32
Uses of metals	<ul style="list-style-type: none"> • Other properties of metals • Uses of metals <p>Informal assessment:</p> <ul style="list-style-type: none"> • Research and writing about the property and uses of metals from home environment. 	Week 3–5	Unit 7: Uses of metals	51–56	33–36
Processing materials	<ul style="list-style-type: none"> • Combining materials <p>Informal assessment:</p> <ul style="list-style-type: none"> • Investigate reasons why we process materials • Describe with examples the properties of processed materials • Explain with examples the purpose processing materials 	Week 6–8	Unit 8: Processing materials	57–63	37–40
Processed materials	<ul style="list-style-type: none"> • Properties and uses <p>Informal assessment:</p> <ul style="list-style-type: none"> • Explain the difference between raw materials, natural materials and processed materials. • Research the traditional processing methods that humans have been using to give materials more desirable properties. 	Week 8–9	Unit 9: Processed materials	64–74	41–46
Remediation, revision, and consolidation		Week 10–11			

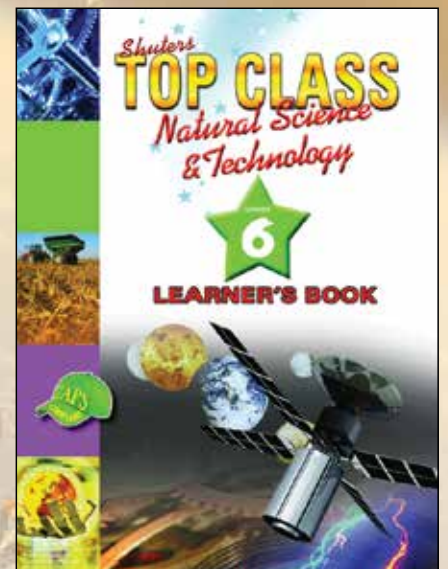
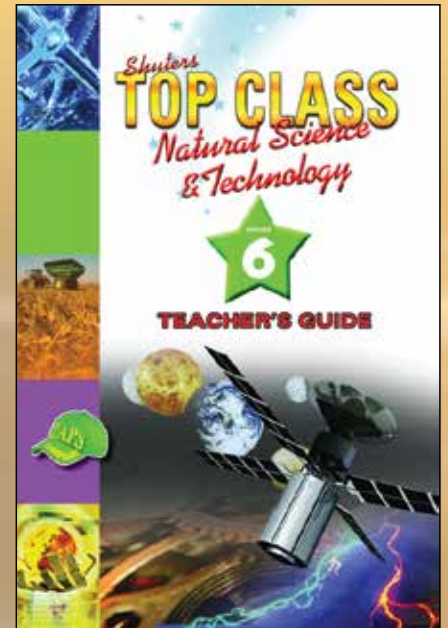
NATURAL SCIENCES AND TECHNOLOGY Term 3

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 5		
			Unit	LB	TG
	Energy and change				
Stored energy in fuels	<ul style="list-style-type: none"> Fuels Burning fuels Safety with fire Informal assessment: Compare energy from various packaging for foods collected from home. Examine various fuels including wood, coal, candle (wax), paraffin, peanut, a biscuit. Burn three different fuels from above, and compare and describe the: <ul style="list-style-type: none"> input energy needed to make them burn output energy obtained from the fuel. Investigate how long a candle will burn when covered with different-sized containers (the candle will stop burning when all the oxygen is used up). Write and draw about fires in our communities, including causes, prevention, and act out what action to take during a fire. 	Week 1–3	Unit 10: Stored energy in fuels 75–86	47–54	
Energy and electricity	<ul style="list-style-type: none"> Cells and batteries Mains electricity Safety with electricity Informal assessment: Investigate the source of electricity in a torch. Compare the differences between batteries and cells. Explore and explain various ways of making a complete simple circuit. Draw simple circuit diagrams with correct symbols and labels. Use diagrams to trace and explain how the electricity comes from the power station to our homes/schools, including power station, pylons, substation, electricity boxes, wall sockets, plugs and appliances such as the TV, a kettle, stove, torch, radio, iron, fan/hair dryer and computer, etc. Use pictures and illustrations to explain the safety tips for using electricity. 	Week 4–6	Unit 11: Energy and electricity 87–98	55–61	

Topic	Content	Time allocation	Where to find it in <i>Top Class Natural Sciences and Technology Grade 5</i>		
			Unit	LB	TG
Energy and change					
Energy and movement	<ul style="list-style-type: none"> Elastic and springs Informal assessment: <ul style="list-style-type: none"> Explain how stored energy can be changed into movement energy using elastic bands, compressed metal spring, etc. Investigate the different ways in which stored energy can be changed into movement energy using elastic bands, compressed metal spring, etc. 	Week 7–9	Unit 12: Energy and movement	99–102	62–65
Remediation, revision, and consolidation		Week 10–11			

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 5		
			Unit	LB	TG
Planet Earth and beyond					
Planet Earth	<ul style="list-style-type: none"> The Earth moves <p>Informal assessment:</p> <ul style="list-style-type: none"> Describe and identify the main features of the Earth Draw or make models of the Earth. Demonstrate the Earth's movement in its orbit around the Sun. Describe the Earth's movement around its own axis. 	Week 1	Unit 14: Planet Earth	111–114	70–71
Surface of the Earth	<ul style="list-style-type: none"> Rocks Soil comes from rocks Soil types <p>Informal assessment:</p> <ul style="list-style-type: none"> Identify the main elements (soil, air, water, and sunlight) that support life on Earth. Identify and describe different soil types correctly. 	Week 2–4	Unit 15: Surface of the Earth	115–125	72–78
Sedimentary rocks	<ul style="list-style-type: none"> Formation of sedimentary rock Uses of sedimentary rock <p>Informal assessment:</p> <ul style="list-style-type: none"> Explain the formation of sedimentary rock. 	Week 4–6	Unit 16: Sedimentary rocks	126–132	79–82
Fossils	<ul style="list-style-type: none"> Fossils in rock Body and trace fossils Importance of South African fossils <p>Informal assessment:</p> <ul style="list-style-type: none"> Distinguish between body and trace fossils. Explain aspects of South Africa's fossil record. 	Week 6–8	Unit 17: Fossils	133–141	83–87
Remediation, revision, and consolidation		Week 9			

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NATURAL SCIENCES AND TECHNOLOGY Term 1

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 6		
			Unit	LB	TG
Life and living					
Photosynthesis	<ul style="list-style-type: none"> Plants and food Plants and air <p>Informal assessment:</p> <ul style="list-style-type: none"> Explain and illustrate how plants make food. Compare glucose sugar (such as glucose sweets) and starch (such as maize flour) according to their taste and colour. Test various foods for the presence of starch with iodine solution (e.g. cooked rice, flour, potato, bread, oil, boiled egg, cheese, etc.) 	Week 1–3	Unit 1: Photosynthesis	1–10	1–7
Nutrients in food	<ul style="list-style-type: none"> Food groups <p>Informal assessment:</p> <ul style="list-style-type: none"> Classifying food into the different food groups, namely, Carbohydrates, Proteins and Fats and oils, vitamins, and minerals. State reasons why each food group is important in our diet. Read labels on food packaging to look for the nutrients and/or the additives in the food. Explain whether each of the additives make these products more or less healthy to eat. 	Week 3–5	Unit 2: Nutrients in food	11–18	8–14
Nutrition	<ul style="list-style-type: none"> Balanced diets <p>Informal assessment:</p> <ul style="list-style-type: none"> Carefully study various diets to evaluate if they contain all the food groups / balanced diet? Explain why different portions of the different food groups are necessary for a balanced diet Discuss various diseases caused by an unhealthy diet such as tooth decay, obesity, diabetes, or deficiency diseases. 	Week 5–6	Unit 3: Nutrition	19–27	15–20
Food webs	<ul style="list-style-type: none"> Different ecosystems Living and non-living things in ecosystems <p>Informal assessment:</p> <ul style="list-style-type: none"> Describe different types of ecosystems on our planet. 	Week 7–9	Unit 5: Ecosystems and food webs	40–50	27–35

Topic	Content	Time allocation	Where to find it in <i>Top Class Natural Sciences and Technology Grade 6</i>		
			Unit	LB	TG
	Life and living				
Food webs	<ul style="list-style-type: none"> Identify an ecosystem, describe, and draw the feeding relationships (food webs) within it. Investigate an ecosystem in or near the school grounds. Mark out the area with the sticks and string using the quadrant method, ensuring that you do not damage any of the plants and animals. Study both the living and non-living thing within the ecosystem. Identify the possible threats to this ecosystem and possible ways to overcome them. 	Week 7–9	Unit 5: Ecosystems and food webs	40–50	27–35
Remediation, revision, and consolidation		Week 10–11			

NATURAL SCIENCES AND TECHNOLOGY Term 2

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 6		
			Unit	LB	TG
Matter and materials					
Solids, liquids and gases	<ul style="list-style-type: none"> Arrangement of particles Informal assessment: <ul style="list-style-type: none"> Draw and explain how particles are arranged in a solid, liquid and gas. Identify the three (3) states of matter in everyday life. Describe solids, liquids and gases in terms of the arrangement of their particles. 	Week 1	Unit 6: Solids, liquids and gases	51–53	36–39
Mixtures	<ul style="list-style-type: none"> Mixtures of materials Solutions Informal assessment: <ul style="list-style-type: none"> Explain and demonstrate the different ways in which solids, liquids and gases can be combined to form mixtures. Explain and demonstrate the different ways in which mixtures can be separated such as: sieving and hand sorting. Investigate different solids to see if they dissolve in water including: salt, sugar (soluble substances); sand, mealie meal, flour, maize flour, sump, curry powder, custard powder (insoluble substances). Investigate solutions to see whether we can recover the solute by: filtering, settling followed by decanting and evaporating the water (crystallisation). Investigate and make sugar crystals. Explain different kinds of mixtures (including solutions). 	Week 2	Unit 7: Mixtures	54–57	40–43
Solutions as special mixtures	<ul style="list-style-type: none"> Solutions Soluble substances Insoluble substances Informal assessment: <ul style="list-style-type: none"> Distinguish between soluble and insoluble substances. Recover the solute from the solvent and draw and write about the process. 	Week 3–4	Unit 8: Solutions as special mixtures	58–65	44–52

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 6		
			Unit	LB	TG
Matter and materials					
Dissolving	<ul style="list-style-type: none"> Rates of dissolving <p>Informal assessment:</p> <ul style="list-style-type: none"> Investigate the difference between melting and dissolving. Investigate, measure, and draw graphs of the time taken to dissolve a solute: in hot or cold water when stirring/shaking or not, and while stirring/shaking using coarse or fine salt. Tell what factors affect the rate of dissolving. 	Week 5	Unit 9: Dissolving	66–73	53–59
Mixtures and water resources	<ul style="list-style-type: none"> Water pollution Importance of wetlands <p>Informal assessment:</p> <ul style="list-style-type: none"> Discuss pollution and where it comes from. Identify three main categories of pollutants found in water and explain how you think they entered / end up in water. Explain why are wetlands so important Research the different wetlands in South Africa. 	Week 6–7	Unit 10: Mixtures and water resources	74–85	60–65
Processes to purify water	<ul style="list-style-type: none"> Clean water <p>Informal assessment:</p> <ul style="list-style-type: none"> Design, make and evaluate a system to process and purify dirty water. Investigating how to best purify dirty water in class or/and at home. 	Week 8–9	Unit 11: Processes to purify water	86–91	66–68
Remediation, revision, and consolidation		Week 10–11			

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 6		
			Unit	LB	TG
Energy and change					
Electric circuits	<ul style="list-style-type: none"> A simple circuit Circuit diagrams <p>Informal assessment:</p> <ul style="list-style-type: none"> Investigate different ways of making a simple circuit. Investigate how a switch works. Design and make a switch to control the circuit. Investigate bulbs by comparing torch light bulbs with a light bulb that are used in a light fitting in a house or in your classroom. Identify the six parts of a light bulb. Draw a circuit diagram using various components (e.g.; 1 cell and 2 bulbs; 2 cells and 2 bulbs; 3 cells and 3 bulbs; 3 cells, a bulb and an open switch; 1 cell, 2 bulbs and a closed switch (the switch must be in between the bulbs); etc. 	Week 1–3	Unit 12: Electric circuits	92–100	69–74
Electrical conductors and insulators	<ul style="list-style-type: none"> Conductors Insulators <p>Informal assessment:</p> <ul style="list-style-type: none"> Investigate what conductors and insulators are. Test different materials (such as metal paper clips, nails, wire, steel-wool, coins, plastic, glass, ceramic, cardboard, paper, wood, rubber, chalk) in an electric circuit to see if they are conductors or insulators, and recording the results in a table. Glass and ceramic insulators on power lines. Design systems that use circuits to solve problems for people, whether it is the wiring in a house, an alarm bell, a lighthouse on the coast, or constructing toys, which use electrical energy to work. 	Week 4–5	Unit 13: Electrical conductors and insulators	101–105	75–77
Systems to solve problems	<ul style="list-style-type: none"> Using electric circuits <p>Informal assessment:</p> <ul style="list-style-type: none"> Design, make, evaluate, and present a system that uses a circuit to produce movement, light, sound or heat* in a structure such as a steady hand game, house, light house or a toy. The circuit should include components such as cells, light bulbs, buzzers, and switches. 	Week 6–7	Unit 14: Systems to solve problems	106–111	78–81

Topic	Content	Time allocation	Where to find it in <i>Top Class Natural Sciences and Technology Grade 6</i>		
			Unit	LB	TG
	Energy and change				
	<ul style="list-style-type: none"> Fossil fuels and electricity Cost of electricity Renewable ways to generate electricity <p>Informal assessment:</p> <ul style="list-style-type: none"> Explain steps which outline the process to make electricity from coal. Use diagrams to trace and explain the electrical energy in a sequence from an appliance, such as from your TV set to the coal-fired power station and back to the original source, namely the Sun. Examine labels (in adverts, or real electrical appliances) to find out how much power they require in a certain time (e.g.; kettles, a radio, a TV, an iron, a hot plate, charging a cell phone, etc.) and make comparisons. Explain different ways to save electricity, from small actions to larger actions. Using diagrams, describe and illustrate safety rules when working with electricity. Research and write about renewable ways to generate electricity including in wind power generators, solar panels (photovoltaics), hydro- electric power generators, biomass, and geothermal energy. 	Week 8–9	Unit 15: Mains electricity	112–121	82–87
Mains electricity					
Remediation, revision, and consolidation		Week 10–11			

NATURAL SCIENCES AND TECHNOLOGY Term 4

Topic	Content	Time allocation	Where to find it in Top Class Natural Sciences and Technology Grade 6		
			Unit	LB	TG
Planet Earth and beyond					
The Solar System	<ul style="list-style-type: none"> The Sun, planets and asteroids Moons <p>Informal assessment:</p> <ul style="list-style-type: none"> Describe the position of the Earth in relation to the Sun and in relation to the size and features of the other planets. Describe and draw the objects in the Solar System. Describe the main features of the Sun and Moon. 	Week 1–3	Unit 16: The solar system	122–128	88–91
Movements of the Earth and planets	<ul style="list-style-type: none"> Rotation (Earth) Revolution (Earth) <p>Informal assessment:</p> <ul style="list-style-type: none"> Explain how the Earth moves around the Sun. Demonstrate the Earth's movement in its orbit around the Sun. Describe the Earth's movement on its own axis. 	Week 3–4	Unit 17: Movements of the Earth and planets	129–132	92–95
The movement of the moon	<ul style="list-style-type: none"> Rotation (moon) Revolution (moon) <p>Informal assessment:</p> <ul style="list-style-type: none"> Recognise that the phases of the Moon are a result of the changing pattern of sunlight that we see on the Moon. 	Week 4–5	Unit 18: The movement of the moon	133–135	96–98
Systems for looking into space	<ul style="list-style-type: none"> Telescopes <p>Informal assessment:</p> <ul style="list-style-type: none"> Identify the different telescopes and how they work. 	Week 5–6	Unit 19: Systems for looking into space	136–139	99–101
Systems to explore the moon and Mars	<ul style="list-style-type: none"> Vehicles used on the Moon Vehicles used on Mars <p>Informal assessment:</p> <ul style="list-style-type: none"> Describe the vehicles used to explore the Moon and Mars. 	Week 6–8	Unit 20: Systems to explore the moon and Mars	140–147	102–105
Remediation, revision, and consolidation		Week 9			

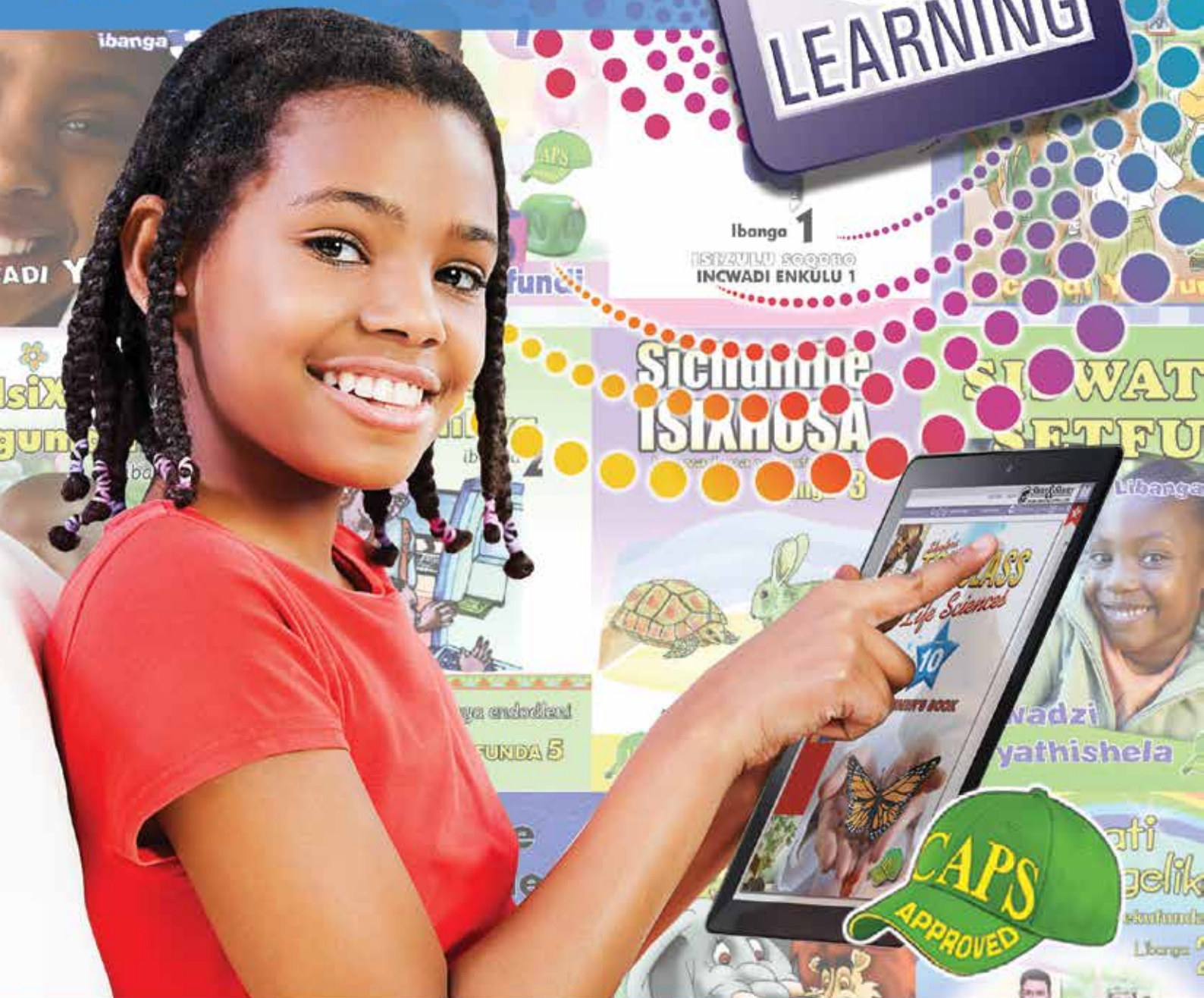
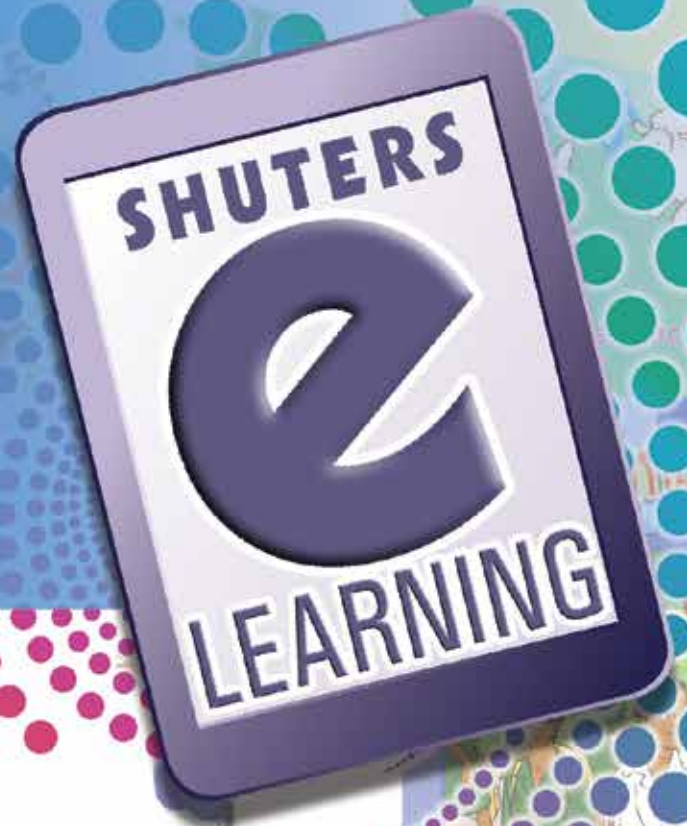
PROGRAMME OF ASSESSMENT

Grade 4		
Term	Assessment task	Page references
1	Practical/Investigation	LB page 15 TG page 128
	Test	TG page 130
2	Practical task/Investigation	LB page 63 TG page 45
	Test	TG page 135
3	Practical task/Investigation	LB page 96 TG page 70
	Test	TG page 141
4	Test	TG page 145

Grade 5		
Term	Assessment task	Page references
1	Practical/Investigation	LB page 37 TG page 123
	Test	TG page 125
2	Practical task/Investigation	LB page 67 TG page 127
	Test	TG page 129
3	Practical task/Investigation	TG page 133
	Test	TG page 134
4	Test	TG page 138

Grade 6		
Term	Assessment task	Page references
1	Practical/Investigation	LB page 6 TG page 138
	Test	TG page 140
2	Practical task/Investigation	LB page 71 TG page 142
	Test	TG page 144
3	Practical task/Investigation	LB page 106 TG page 148
	Test	TG page 150
4	Test	TG page 153

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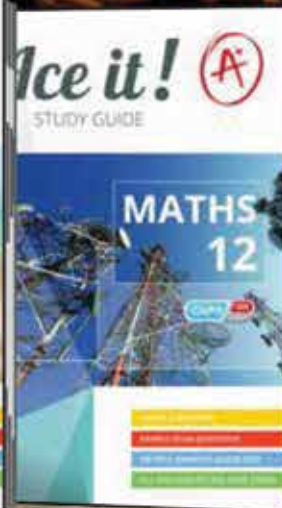
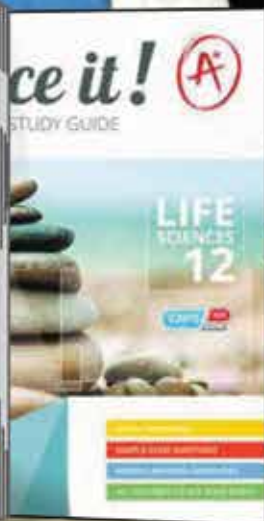
8-12

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