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COVID-19 safety guidelines for teachers and learners

Gatherings at school

Where schools are open for learning, it is up to management to take decisive action to ensure sites are not simultaneously used for other functions such as shelters or treatment units in order to reduce the risk.

Implement social distancing practices that may include:

• A staggered timetable, where teachers and learners do not arrive/leave at the same time for the beginning and end of the school day.
• Cancelling any community meetings/events such as assemblies, cake sales, market day, tuckshop, after-care classes, matric dance, Eisteddfod and other events.
• Cancelling any extra-mural activities such as ballet classes, swimming lessons, sport games, music class and other events that create a crowd gathering.
• Teaching and modeling creating space and avoiding unnecessary touching.
• Limiting movement and interaction between classes.
• Schools with an established feeding scheme plan are to ensure that hygiene and social distancing is always implemented. Teachers and staff members assisting with food distribution are to wear masks, sanitise prior to issuing food items and learners are to stand 1,5m apart in the queue.

Wear a mask at all times.

1. Restrooms/ toilets

Hand washing

Washing hands with soap and water 🧼 or using alcohol-based hand sanitisers ☢️ is one of the most important ways to help everybody stay healthy at school. Critical to this is preparing and maintaining handwashing stations with soap and water at the toilet and in each classroom.

Teachers and learners should always wash their hands after:

• eating
• entering the classroom
• using the toilet
• blowing your nose or coughing
• touching tears, mucous, saliva, blood or sweat.
2. Premises and Classroom setting

When schools open, classroom settings should be altered in order to promote hygiene, safety and social distancing.

**Changed classroom settings may include:**

- Cleaning and disinfecting school buildings, classrooms and especially sanitation of facilities at least once a day, particularly surfaces that are touched by many people (railings, lunch tables, sports equipment, door and window handles, toys, teaching and learning tools etc.).
- Ensure the proper ventilation and fresh flow of air through classrooms.
- Providing learners with vital information about how to protect themselves by incorporating the importance of hygiene, handwashing and other measures of protecting themselves, into the lessons.
- Promoting best handwashing and hygiene practices and providing hygiene supplies.

**Social distancing**

- Prepare and maintain handwashing stations with soap and water, and if possible, place alcohol-based hand sanitisers in each classroom, at entrances and exits, and near lunchrooms and toilets.
- Ensure teachers and learners wear a mask at all times.

- Space the learners out in the classroom (or outdoors) – try to keep learners separated by a minimum of 1,5m.
- Learners should not share cups, eating utensils, or food
- Do not let learners eat items that fall on the floor or chew on pencils or other objects
- Avoid close contact, like shaking hands, hugging or kissing
- Create space for learner's desks to be at least 1,5m apart
- Learners are not to exceed 30 per class or 50% of original class size
3. Social behaviour

It is extremely vital during a pandemic that focus is not only directed towards optimal physical health and hygiene but finding ways to facilitate mental health support.

- Treat everybody with respect and empathy – no teasing about COVID-19.
- Encourage kindness towards each other and avoid any stereotyping when talking about the virus.
- Stay home if you have a temperature or are ill.
- Do not touch people who are ill, but be empathetic.

- Wear a mask at all times.

Dear Teacher

The National State of Disaster due to the COVID-19 pandemic has resulted in the disruption of Education in South African and the loss of valuable teaching time and disruption of the school calendar.

As a result of this the DBE has created a Recovery Framework including revised ATPs to assist schools and teachers in ensuring the 2020 school year is completed.

This plan addresses curriculum trimming and reorganisation to ensure core skills and knowledge are taught so that learners may progress to the next grade.

The following DBE website https://www.education.gov.za/Home/RecoveryPlan2020.aspx has the following useful documents available for you to use:

- Circular S2 of 2020 Revised ATPs for Gr 12 and Gr 7
- ATP Mediation documents by grade and subject
- National Phase Content Plans by phase and subject
- National Revised ATPs by grade and subject

At Pearson South Africa, we believe that education is the key to every individuals’ success.

To ensure that despite the shortened teaching year, teachers and learners can meet all the necessary learning outcomes for the year, we have created this resource to support teachers and learners during this difficult time.

This Survival Guide aims to identify areas where teacher-facing time is reduced and various strategies such as trimming the curriculum, grouping or reorganising content and creating opportunities for learner-centered work and blended learning can take place.
### HOW TO USE THIS SURVIVAL GUIDE

**CAPS curriculum:** comprehensive summary of the CAPS topics and sub-topics and time allocation

1. **CAPS time allocation**
2. **Revised CAPS time allocation according to the Revised ATPs**

**Survival guide strategy:** proposed strategies that can be used to save teaching time. Two approaches to reducing teaching time are suggested:
1. **Trimming** the curriculum and therefore teaching time
2. **Curriculum reorganisation/clustering/grouping** topics across the year where it makes sense and therefore reducing teaching time

#### CAPS CURRICULUM VS SURVIVAL GUIDE STRATEGY

<table>
<thead>
<tr>
<th>SUB-TOPIC</th>
<th>UNITS</th>
<th>CAPS TIME ALLOCATION</th>
<th>RECOVERY TIME ALLOCATION</th>
<th>CURRICULUM TRIMMING</th>
<th>CURRICULUM REORGANISATION/GROUPING</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Floods</td>
<td>Unit 1 Causes of floods</td>
<td>4 hours</td>
<td>1.5 hours</td>
<td>Retain</td>
<td>Group with Unit 2 Effects of floods</td>
</tr>
<tr>
<td></td>
<td>Unit 2 Effects of floods</td>
<td></td>
<td></td>
<td>Retain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unit 3 Why some communities are at higher risk than others</td>
<td>1.5 hours</td>
<td></td>
<td>Retain but reduce</td>
<td>Flipped concept, learners prepare before lesson in preparation and then class discussion *4</td>
</tr>
<tr>
<td>Revision and assessment</td>
<td>Revision and assessment formal and informal including feedback should be done on an ongoing basis</td>
<td>3 hours</td>
<td>Reduced</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revision and end-of-year examination: Formal assessment Task: Source-based &amp; paragraph writing 50 Marks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>November examination: 50 marks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL HOURS = 15**

<table>
<thead>
<tr>
<th>ASSESSMENT</th>
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<tr>
<td><strong>TERM 1</strong></td>
</tr>
<tr>
<td>POA</td>
</tr>
<tr>
<td>SBA</td>
</tr>
</tbody>
</table>

*1 Learners bring summaries to class for class discussions. Flipped concept, learners prepare before lesson and then class discussion around content. Teacher chooses 1 resource. Natural resources on Earth and use and abuse of them have been omitted according to the Recovery national teaching plans.

*2 Learners prepare at home by reading content choose either community or eco tourism. Flipped concept, learners prepare before lesson and then class discussion around content.

*3 Remove due to time constraints and addressed in Gr 10

Explain the rationale behind the trimming or grouping suggested

Assessment and revision for POA and SBA as per Revised ATPs.

### Notes

- Grade 12 subjects’ content will not be trimmed/cut, but time can be saved through grouping and reorganising content.
- Teachers should follow the amended guidelines for assessment as set out by the DBE. Revised ATPs per subject and grade.
- No curriculum condensing strategies have been suggested for Term 1, as it is assumed that Term 1 content was taught.
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Strand: Matter and materials ................................................................................................... 4

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Strand: Energy and Change ...................................................................................................... 7

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Strand: Planet Earth and beyond ............................................................................................. 11
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### Grade 7

#### Natural Sciences

<table>
<thead>
<tr>
<th>GRADE</th>
<th>NO OF WEEKS</th>
<th>CONTENT, CONCEPTS &amp; SKILLS (WEEKS)</th>
<th>FORMAL ASSESSMENT (WEEKS)</th>
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</thead>
<tbody>
<tr>
<td>7</td>
<td>40</td>
<td>34</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>40</td>
<td>34</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>40</td>
<td>34</td>
<td>6</td>
</tr>
</tbody>
</table>

*3 hours teaching time per week, with 40 weeks per grade, means the total teaching time per year is 120 hours*

<table>
<thead>
<tr>
<th>THEME</th>
<th>GRADE 7</th>
<th>GRADE 8</th>
<th>GRADE 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIFE AND LIVING</td>
<td>The biosphere, Biodiversity, Sexual Reproduction, Variation [No amendment]</td>
<td>Photosynthesis and Respiration, Interactions and interdependence within the environment, Micro-organisms [No amendment]</td>
<td>Cells as the basic units of life, Systems in the human body, Human reproduction, Circulatory and respiratory systems, Digestive system [No amendment]</td>
</tr>
<tr>
<td>MATTER AND MATERIALS</td>
<td>Properties of materials, Separating mixtures, Acids, bases and neutrals, Introduction to Periodic Table of Elements [Reduced properties of materials.]</td>
<td>Atoms, Particle model of matter, Chemical reactions [Reduced content on Atoms. Removed chemical reactions.]</td>
<td>Compounds, Chemical reactions, Reactions of metals with oxygen, Reactions of non-metals with oxygen, Acids and bases and pH value [Reactions of metals and non-metals with oxygen reduced. Reaction of acids with metals removed.]</td>
</tr>
<tr>
<td>PLANET EARTH AND BEYOND</td>
<td>Relationship of the Sun to the Earth, Relationship of the Moon to the Earth, Historical development of astronomy [Historical development of astronomy reduced.]</td>
<td>The Solar System, Beyond the Solar System, Looking into space [Removed Planet Earth and Beyond completely.]</td>
<td>The Earth as a system, Lithosphere, Mining of mineral resources, Atmosphere, Birth, life and death of stars [Removed Planet Earth and Beyond completely.]</td>
</tr>
<tr>
<td>TOPICS</td>
<td>CAPS CURRICULUM</td>
<td>CONTENT SPECIFICATION/CONCEPTS</td>
<td>TIME ALLOCATION *1</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td><strong>Strand: Life and living</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Unit 1:</strong> The biosphere (1 week/3 hours)</td>
<td>Existence of life, including the lithosphere, hydrosphere, atmosphere, living things (plants, animals, microorganisms), and dead organic matter. Seven life processes.</td>
<td>1 hours</td>
<td>1½ hours</td>
</tr>
<tr>
<td><strong>Unit 2:</strong> Requirements for sustaining life</td>
<td>Living things need energy, gases, water, soil and favourable temperatures. Living things are adapted to the environment in which they live.</td>
<td>1½ hours</td>
<td>3 hours</td>
</tr>
<tr>
<td><strong>Biodiversity (3½ weeks/10½ hours)</strong></td>
<td>Biodiversity of the Earth made up of plants, animals and microorganisms. Living organisms classified according to similar characteristics. Five main kingdoms. Kingdoms further subdivided: Phyla, then Classes, then Orders, then Genera, then Species.</td>
<td>4½ hours</td>
<td>3 hours</td>
</tr>
<tr>
<td><strong>Unit 1:</strong> Classification of living things</td>
<td>Classify vertebrates or invertebrates. Five classes of vertebrates, two classes of invertebrates.</td>
<td>3 hours</td>
<td>3 hours</td>
</tr>
<tr>
<td><strong>Unit 2:</strong> Diversity of animals</td>
<td>Plants classified as with seeds or without seeds. Seeds are classified into dicots and monocots.</td>
<td>3 hours</td>
<td>2 hours</td>
</tr>
<tr>
<td><strong>Unit 3:</strong> Diversity of plants</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CAPS Suggested Time**

9 weeks/27 hours
### Topics: Life and living

<table>
<thead>
<tr>
<th>Topics</th>
<th>Units</th>
<th>Content Specification/Concepts</th>
<th>Time Allocation</th>
<th>Curriculum Trimming</th>
<th>Curriculum Reorganisation/Grouping</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual reproduction</td>
<td>Unit 1: Sexual reproduction in Angiosperms</td>
<td>The sexual organs of angiosperms. Pollination and fertilisation. The importance of pollinators in the production of food crops.</td>
<td>4½ hours</td>
<td>Retain</td>
<td>N/A</td>
<td>4½ hours</td>
</tr>
<tr>
<td></td>
<td>Unit 2: Human reproduction</td>
<td>Puberty. Male and female production organs. Pregnancy and pregnancy preventative measure. Sexually transmitted diseases.</td>
<td>6 hours</td>
<td>Retain</td>
<td>N/A</td>
<td>6 hours</td>
</tr>
<tr>
<td>Variation</td>
<td>Unit 1: Variations exists within a species</td>
<td>Homo sapiens (humans) all belong to the same species but have variations in some characteristics.</td>
<td>3 hours</td>
<td>Retain</td>
<td>N/A</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

#### Assessment

- **Informal Assessment**: Revision/homework questions
- **SBA (Formal)**: Formal practical task, Test

**Total Time = 9 Weeks/27 Hours**

**Total Time Saved = 1 Week/3 Hours**

---

*1 The per unit time allocation listed, is an estimate of the time taken to teach that unit. This is not specified in CAPS but is an estimate from experienced teachers.

*2 Assuming that Term 1 content was taught before school closure – therefore no proposal for survival strategy for Term 1
## CAPS Suggested Time

8 weeks/24 hours

### CAPS Curriculum

<table>
<thead>
<tr>
<th>TOPOS</th>
<th>CAPS TIME ALLOCATION</th>
<th>RECOVERY TIME ALLOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properties of materials</td>
<td>3 hours</td>
<td>2 hours</td>
</tr>
<tr>
<td>Unit 1: Physical properties of materials</td>
<td>6 hours over 4 weeks</td>
<td>3 hours</td>
</tr>
<tr>
<td>Impact on the environment</td>
<td>3 hours</td>
<td>1 hour</td>
</tr>
<tr>
<td>Unit 2: Impact on the environment</td>
<td>6 hours over 4 weeks</td>
<td>3 hours</td>
</tr>
<tr>
<td>Separating mixtures</td>
<td>2 hours</td>
<td>1 hour</td>
</tr>
<tr>
<td>Unit 1: Mixtures of two or more substances can be separated</td>
<td>2 hours</td>
<td></td>
</tr>
<tr>
<td>Different methods of separation</td>
<td>2 hours</td>
<td></td>
</tr>
<tr>
<td>Unit 2: Methods of separation</td>
<td>2 hours</td>
<td></td>
</tr>
<tr>
<td>Sorting and recycling materials</td>
<td>2 hours</td>
<td></td>
</tr>
<tr>
<td>Unit 3: Sorting and recycling materials</td>
<td>2 hours</td>
<td></td>
</tr>
<tr>
<td>Unit 4: Some materials can be recycled</td>
<td>1 hour</td>
<td></td>
</tr>
</tbody>
</table>

### Curriculum Reorganisation/Grouping

- **Unit 1: Physical properties of materials**
  - Relate materials properties to its use. Boiling point, strength, flexibility, conductivity, cost, colour, texture.
  - Unit 3. For example, consider the properties of the material you are recycling.

- **Unit 2: Impact on the environment**
  - Producing and using materials have an impact on the environment.

- **Unit 3: Separating mixtures**
  - Mixtures are made up of two or more substances and can be separated.

- **Unit 4: Sorting and recycling materials**
  - Every person’s responsibility to recycle, and only some materials can be recycled. Non-recyclable materials must be dumped.

### Survival Guide Strategy

- Retain, Learners should already be familiar with some properties. Use two materials, such as concrete and steel, as examples. Work through the properties.

- Let learners revise Grade 6 as pre-reading to save time.

- Let learners revise Grade 6 methods of separation, sieving, hand sorting and filtration.

- Focus on new methods including separation using magnets, evaporation, distillation, chromatography.

- Learners can design posters to educate the school or encourage learners to set up a recycling station at home. This way, this section can be ongoing throughout the whole year. This should reduce teacher talking time.

### Recovery Time Allocation

- 2 hours
- 2 hours
- 2 hours
- 2 hours
- 2 hours

---

*1 The per unit time allocation listed, is an estimate of the time taken to teach that unit. This is not specified in CAPS, but is an estimate from experienced teachers.

*2 Flipped concept, learners prepare before lesson and then class discussion around content.

*3 Concepts taught holistically together to reduce time spent teacher talking time.

*4 Concepts taught again in different grades. Reduce content to basic introductory information.
<table>
<thead>
<tr>
<th>TOPICS</th>
<th>UNITS</th>
<th>CONTENT SPECIFICATION/ CONCEPTS</th>
<th>CAPS TIME ALLOCATION</th>
<th>RECOVERY TIME ALLOCATION</th>
<th>CURRICULUM TRIMMING</th>
<th>CURRICULUM REORGANISATION/ GROUPING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids, bases and neutrals [2 weeks/ 6 hours to 2 weeks/ 6 hours (no change)]</td>
<td>Unit 1: Tastes of substances</td>
<td>The human tongue can sense four different tastes. Not all substances are safe to taste.</td>
<td>2 hours</td>
<td>2 hours</td>
<td>The content of this unit can be reduced significantly, so more focus and attention can be given to Unit 3. Acids and bases, Unit 3 is important for Grade 9 work.</td>
<td>Some of the content from this unit can be taught holistically with Unit 3. *3</td>
</tr>
<tr>
<td></td>
<td>Unit 2: Properties of acids, bases and neutrals</td>
<td>Acids taste sour, feel rough on the skin, and are corrosive. Bases taste bitter, feel slippery, and are corrosive. Neutrals are neither acids nor bases.</td>
<td>2 hours</td>
<td>2 hours</td>
<td>The content of this unit can be reduced significantly, so more focus and attention can be given to Unit 3. Acids and bases, Unit 3 is important for Grade 9 work.</td>
<td>Some of the content from this unit can be taught holistically with Unit 3. *3</td>
</tr>
<tr>
<td></td>
<td>Unit 3: Acid-base indicators</td>
<td>Red and blue litmus paper can be used to test whether a substance is an acid or base.</td>
<td>2 hours</td>
<td>2 hours</td>
<td>Retain. This is sometimes a difficult concept for learners to understand. Show a virtual experiment of litmus paper in acids, bases and neutral substances – ensure learners adhere to social distancing if experiment is demonstrated in class. Use the experiment as an opportunity for incidental learning.</td>
<td>Teach this section holistically with Unit 1, and Unit 2. For example, set up an experiment where you taste test lemon juice, and showcase to learners how the litmus test works, and then discuss the properties of lemon/acids. *3</td>
</tr>
</tbody>
</table>

*1 The per unit time allocation listed, is an estimate of the time taken to teach that unit. This is not specified in CAPS but is an estimate from experienced teachers.

*2 Flipped concept, learners prepare before lesson and then class discussion around content

*3 Concepts to be taught holistically together to reduce time spent teacher talking time.

*4 Concepts taught again in different grades. Reduce content to basic introductory information.
<table>
<thead>
<tr>
<th>TOPICS</th>
<th>UNITS</th>
<th>CONTENT SPECIFICATION/CONCEPTS</th>
<th>CAPS TIME ALLOCATION *1</th>
<th>RECOVERY TIME ALLOCATION</th>
<th>CURRICULUM TRIMMING</th>
<th>CURRICULUM REORGANISATION/GROUPING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to the Periodic Table of Elements</td>
<td>Unit 1: Arrangement of elements on the Periodic Table</td>
<td>Classification system for all the elements that make up matter. Elements are arranged into 3 categories: metals, non-metals and semi-metals.</td>
<td>3 hours</td>
<td>3 hours</td>
<td>Only spend an hour introducing learners to the basic concepts of the periodic table.</td>
<td>Periodic Table of elements discussed again in Grade 8. Basic concepts can be taught here but teaching time can be limited and refocused to Grade 8. Teach this unit 1 holistically with Unit 2. *4</td>
</tr>
<tr>
<td>Unit 2: Some properties of metals, semi-metals and non-metals</td>
<td>Properties and uses of metals and non-metals done in Grade 5. Try and link to Periodic Table.</td>
<td>Teach this unit 2 holistically with Unit 1. *3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ASSESSMENT**

- **INFORMAL ASSESSMENT**
  - Revision/homework questions

- **SBA (FORMAL)**
  - Test (counts 100% towards term mark)

---

*1 The per unit time allocation listed, is an estimate of the time taken to teach that unit. This is not specified in CAPS but is an estimate from experienced teachers.

*2 Flipped concept, learners prepare before lesson and then class discussion around content

*3 Concepts to be taught holistically together to reduce time spent teacher talking time.

*4 Concepts taught again in different grades. Reduce content to basic introductory information.
## Natural Sciences Grade 7

### Term 3  Strand: Energy and Change

**CAPS Suggested Time**
9 weeks/27 hours

<table>
<thead>
<tr>
<th>TOPICS</th>
<th>CONTENT/ SPECIFICATIONS/ CONCEPTS</th>
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<th>CURRICULUM TRIMMING/ REORGANISATION/ GROUPING</th>
<th>SURVIVAL GUIDE STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit 1: Non-renewable sources of energy</strong></td>
<td>Sources of energy</td>
<td>1½ hours</td>
<td>1½ hours</td>
<td>Retain.</td>
<td>Teach with Planet Earth fossil fuels, from Term 4. *3</td>
</tr>
<tr>
<td><strong>Unit 2: Renewable sources of energy</strong></td>
<td>Renewable sources of energy are continually replaced such as hydropower, wind, sunlight and biotrol.</td>
<td>1½ hours</td>
<td>1½ hours</td>
<td>Retain.</td>
<td>Let learners lead the class discussion by saying what they know about renewable energy sources. *2. Correct any misconceptions.</td>
</tr>
<tr>
<td><strong>Potential and Kinetic Energy</strong></td>
<td>Potential energy is stored energy. Examples of potential energy is rubber band, cell, fuel, and food. Energy measured in joules.</td>
<td>1½ hours</td>
<td>1½ hours</td>
<td>Retain.</td>
<td>Important concepts for sciences in higher grades. Teach these four units together *3. Energy is an abstract concept that will be developed in higher grades. *4</td>
</tr>
<tr>
<td><strong>Unit 2: Kinetic energy</strong></td>
<td>Kinetic energy is moving energy. Examples include wind blowing, water falling, current flowing through a circuit.</td>
<td>1½ hours</td>
<td>1½ hours</td>
<td>Retain.</td>
<td>Important concepts for sciences in higher grades. Teach these four units together *3. Energy is an abstract concept that will be developed in higher grades. *4</td>
</tr>
<tr>
<td><strong>Unit 3: Potential and kinetic energy in systems</strong></td>
<td>System are parts working together. Potential and kinetic energy are involved in mechanical, thermal, electrical and biological systems.</td>
<td>1½ hours</td>
<td>1½ hours</td>
<td>Retain.</td>
<td>Important concepts for sciences in higher grades. Teach these four units together *3. Energy is an abstract concept that will be developed in higher grades. *4</td>
</tr>
<tr>
<td><strong>Unit 4: Law of Conservation of Energy</strong></td>
<td>Energy can be converted, but not created or destroyed.</td>
<td>1½ hours</td>
<td>1½ hours</td>
<td>Retain.</td>
<td>Spend some time explaining the concept of this unit, and then give learners an activity.</td>
</tr>
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*4 Concepts taught again in different grades. Reduce content to basic introductory information.
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| Heat transfer  
[2 weeks/ 
6 hours to  
2 weeks/ 
6 hours (no change)] | Unit 1: Heating as a transfer of energy | Heating is when energy moves from hotter body to cooler body. Three methods of heat transfer. Introduction the terms conduction, convection and radiation. | 1½ hours | 1½ hours | Retain | |
| Heat transfer  
[2 weeks/ 
6 hours to  
2 weeks/ 
6 hours (no change)] | Unit 2: Conduction | Transfer of heat between solid objects in direct physical contact with each other. | 1½ hours | 1½ hours | Reduce teacher talking time, by explaining the different heat transfer concepts to learners through experiments. | Use one example of a pot over a fire to explain Conduction, Convection and Radiation (Unit 2, 3 and 4). Conduction is the transfer of the heat from the hot pot to the hot pot handle. Convection is the transfer of heat from the fire through the air to a person sitting near the fire. *3 |
| Heat transfer  
[2 weeks/ 
6 hours to  
2 weeks/ 
6 hours (no change)] | Unit 3: Convection | Transfer of heat by the movement of liquid or gas particles. | 1½ hours | 1½ hours | Reduce teacher talking time, by explaining the different heat transfer concepts to learners through experiments. | Another example that shows all three heat transfer methods is a thermos flask. The integration of these methods of heat transfer can also be used to introduce the next topic, insulation *3 |
| Heat transfer  
[2 weeks/ 
6 hours to  
2 weeks/ 
6 hours (no change)] | Unit 4: Radiation | Transfer of heat and does not require physical contact or movement of particles. | 1½ hours | 1½ hours | Reduce teacher talking time, by explaining the different heat transfer concepts to learners through experiments. | Use the examples given in Unit 2 and Unit 3 to explain the concept of radiation. *3 |
| Insulation and energy saving  
[2 weeks/ 
6 hours to  
1 week/ 
3 hours] | Unit 1: Using insulating materials | Insulating materials slow down heat from being lost through conduction, convection or radiation. | 6 hours | 3 hours | Pose the question to learners, ‘What is insulating materials. If available, a short video can be shown on topic while learners take notes. Teacher supply them with short summary afterwards | Use the concepts taught in the topic above to introduce insulation. *3 |

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<td>Energy transfer to surroundings [1 week/3 hours to 1 week/3 hours (no change)]</td>
<td>Unit 1: Useful and wasted energy</td>
<td>Energy escapes into the environment in the form of sound and heat. This is called wasted energy.</td>
<td>3 hours</td>
<td>3 hours</td>
<td>Retain. Give learners brief introduction to concept, and then ask learners to think of examples of wasted energy. *2. Discuss this in class and clear up any misconceptions.</td>
<td></td>
</tr>
<tr>
<td>The national electricity supply system [1 week/3 hours to 0 weeks/0 hours]</td>
<td>Unit 1: Energy transfers in the national grid</td>
<td>Sequence of energy transfer in national grid is 1) from coal, oil, gas, wind, water, nuclear 2) to the turbines that move the energy to a generator, 3) generator converts mechanical energy into electrical energy, and 4) electricity is transfers along wires to appliances.</td>
<td>1½ hours</td>
<td>0 hours</td>
<td>Omit</td>
<td>The national electricity supply system is removed in the revised ATP.</td>
</tr>
<tr>
<td>Unit 2: Conserving electricity in the home</td>
<td>Unit 2: Conserving electricity in the home</td>
<td>South Africa has a limited supply of electricity, and we need to not waste electricity by using energy saving lightbulbs, wearing warm clothes, matching pot size to the stove plate, etc.</td>
<td>1½ hours</td>
<td>0 hours</td>
<td>Omit</td>
<td>The national electricity supply system is removed in the revised ATP.</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SBA (FORMAL)</td>
<td>Practical Task/</td>
<td>Practical Task/ Investigation (counts 40% towards</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Investigation</td>
<td>term mark)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Test</td>
<td>Test (counts 60% towards term mark)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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TOTAL TIME = 9 WEEKS/27 HOURS  TOTAL REVISED TIME = 7 WEEKS/21 HOURS

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<tr>
<td>Relationship of the Sun to the Earth [4 weeks/ 12 hours to 4 weeks/ 12 hours (no change)]</td>
<td>Unit 1: Solar energy and the Earth's seasons</td>
<td>Sun radiates heat to the Earth. Earth spins on its tilted axis once a day. Earth orbits around the Earth. Creation of the four seasons. Length of the day impacted by tilt of Earth's axis.</td>
<td>4 hours</td>
<td>4 hours</td>
<td>Learners to revise Solar System and movement of plants and Moon from Grade 6. *2</td>
<td>Incorporate early indigenous knowledge from the topic: Historical development of astronomy, into this unit. *3</td>
</tr>
<tr>
<td></td>
<td>Unit 2: Solar energy and life on Earth</td>
<td>Plants and animals need energy for life to be sustained on Earth.</td>
<td>4 hours</td>
<td>4 hours</td>
<td>Learners to revise Grade 5 and 6 work on solar energy for life on Earth. *2 Retain and teach the remainder of the content as per curriculum.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unit 3: Stored solar energy</td>
<td>Dead plants and animals form coal, oil, and gas, as a form of stored energy. This forms from pressure and layers of mud and soil over time.</td>
<td>4 hours</td>
<td>4 hours</td>
<td>This is done again in Grade 8, so just introduce basic concepts. *4</td>
<td>Teach fossils within Unit 3 with the section on non-renewable energy from Term 3, Sources of energy, Unit 1. *3</td>
</tr>
<tr>
<td>Relationship of the Moon to the Earth [2 weeks/ 6 hours to 2 weeks/ 6 hours (no change)]</td>
<td>Unit 1: Relative positions</td>
<td>The Moon revolves around the Earth in its orbit.</td>
<td>2 hours</td>
<td>2 hours</td>
<td>Learners to revise the Moon and its orbit.</td>
<td>Explain tides while discussing the Moon.</td>
</tr>
<tr>
<td></td>
<td>Unit 3: Tides</td>
<td>Define tides. Tides are caused mostly by the gravity of the Moon. Create unique shoreline ecosystems.</td>
<td>2 hours</td>
<td>2 hours</td>
<td>Teach Unit 3 before Unit 2. This should reduce the revision time required on Moons before explaining tides.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unit 2: Gravity</td>
<td>Define gravity. Bigger objects exert a stronger pull. Objects that are closer together also have a stronger pull than the same objects that are further apart.</td>
<td>2 hours</td>
<td>2 hours</td>
<td>Retain. Important concept for later grades.</td>
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<td>Historical development of astronomy</td>
<td>Unit 1: Early indigenous knowledge</td>
<td>People used the movement of planets and the moon to help measure time. This also helped people with planting, finding direction and celebrate special holy days.</td>
<td>3 hours</td>
<td>0 hours</td>
<td>Omit</td>
<td>This Unit has been excluded in the revised ATP.</td>
</tr>
<tr>
<td>Unit 2: Modern developments</td>
<td>Discuss important modern astronomy discoveries from Copernicus, Galilei, Kepler, and Newton.</td>
<td>3 hours</td>
<td>3 hours</td>
<td>Retain. Reduce teacher talking time by letting learners do research on the astronomers’ discoveries. *2 Spend some time discussing learners’ findings.</td>
<td></td>
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<td></td>
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TOTAL TIME = 8 WEEKS/24 HOURS  TOTAL REVISED TIME = 7 WEEKS/21 HOURS

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