

**INTERMEDIATE PHASE****GRADE 5****NATURAL SCIENCES AND
TECHONOLOGY EXEMPLAR
NOVEMBER 2021**

NAME AND SURNAME: _____

MARKS: 40

TIME :1 hour

PART 1	PART 2	TOTAL
24	16	40

THIS QUESTION PAPER CONSISTS OF 10 PAGES INCLUDING COVER PAGE**Instructions to candidates:**

1. Answer all the Questions.
2. Write your answer on the spaces provided.
3. Ink to be used to answer in the spaces.

PART 1: 26 MARKS**Question 1:** Multiple choice

1. Circle the letter corresponding to the correct answer
 - 1.1 A radio changes electrical energy into _____ energy
 - A. Light
 - B. Heat
 - C. Movement
 - D. Sound
 - 1.2 South –Africa’s electricity is mostly generated using _____.
 - A. Water
 - B. Wind
 - C. Sun
 - D. Coal
 - 1.3 Forms of energy which are produced when a light bulb glows.
 - A. Heat and light
 - B. Electrical and potential
 - C. Potential and kinetic
 - D. Sound and elastic
 - 1.4 What is the function of a conductor in an electrical circuit?
 - A. It decreases the brightness of the bulb.
 - B. It prevents short circuit.
 - C. It allows the electricity to flow easily from one point to another.
 - D. It increases the brightness of the bulb

Question 2: Matching Columns

2. Match the words in Column A with their meanings in Column B. Write down your answer (Column B's letter) in column C.

Column A	Column B	Column C
2.1 Day and night	A. Source of stored energy	
2.2 Seasons	B. Caused by the rotation of the Earth	
2.3 Revolution	C. Movement of a planet around its own axis	
2.4 Rotation	D. Caused by the tilt of the Earth	
2.5 Battery	E. Movement energy	
	F. Caused by the Earth's orbit	
	G. Movement of a planet around the sun	
	h. Fossil fuels	

[5]

Question 3

3. Give one word/correct term for each of the following statements: -

3.1 Gas that is needed for combustion to take place. _____

3.2 Two or more parts working together to perform a function. _____

3.3 A machine that produces electricity. _____

[3]

Question 4: Energy and Movement

- 4.1. Write down 1 example of a device that you know uses a spring to store energy.

(1)

- 4.2. Explain how a catapult



works.

(2)

Question 5 Stored Energy in Fuels

5. Look at the picture below.



5.1 From the picture above, list 3 types of fuel that are used.

[3]**Question 6** Energy and Electricity

6.1. Read the Case Study below and answer the question that follows:

Safety with fire

One tiny candle flame can produce a lot of heat energy. Large fires with lots of fuel reach very high temperatures and can do a lot of damage.

Fires can start naturally when lightning strikes the Earth. Fires can help some natural areas. For example, the fynbos vegetation in the Western Cape needs fire about every eight years. The fire burns the seed husks so that they can release the seeds.

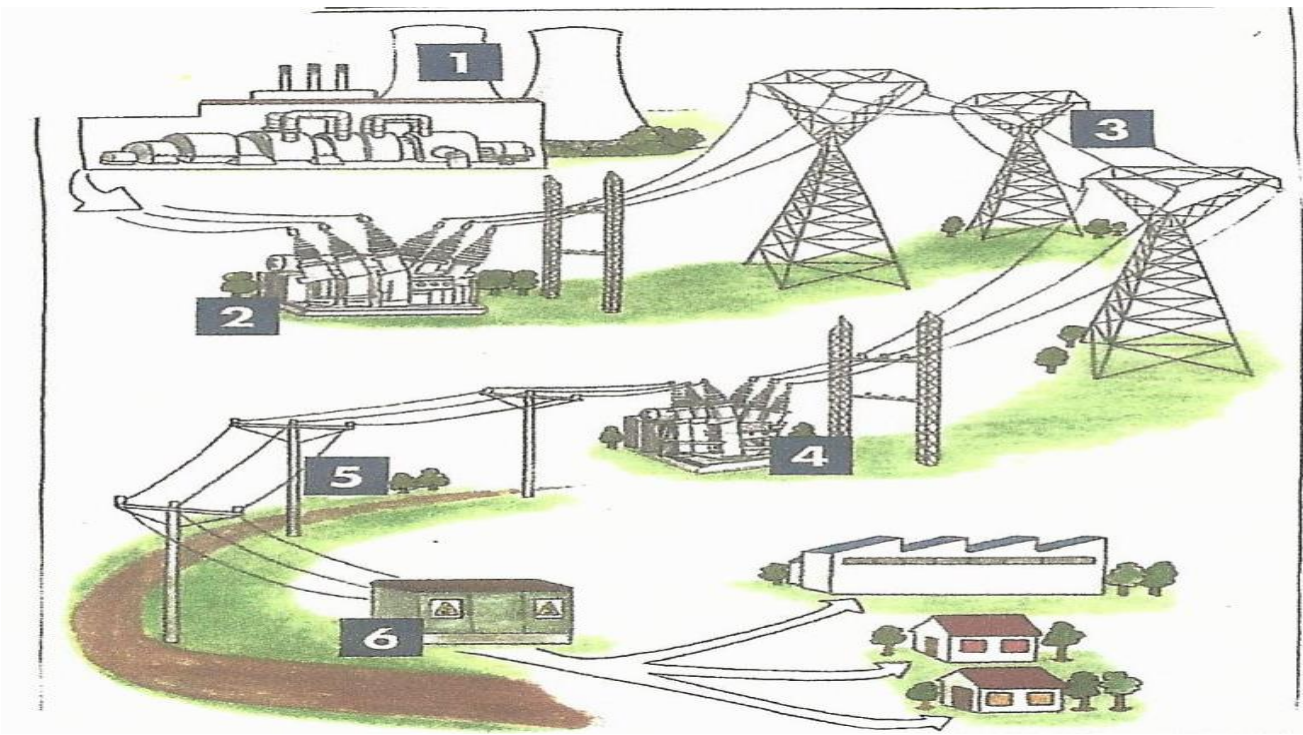
Many fires start in houses because people are not careful enough with stoves, candles or small fires. Electrical faults can also cause fires in houses.



6.1.1 Study the case study above and describe any 2 different causes of fires and how they could have been prevented, use the table below:- (4)

How fires are caused	How the fires could have been prevented

4.2 Look at the picture below of the mains electricity system, describe what happens at the parts labelled 1 and 6 (2)



1. _____
- _____
6. _____
- _____
- _____

PART 2**Question 7** Surface of the Earth

7.1 Compare the 3 different soil types by completing the table. (3)

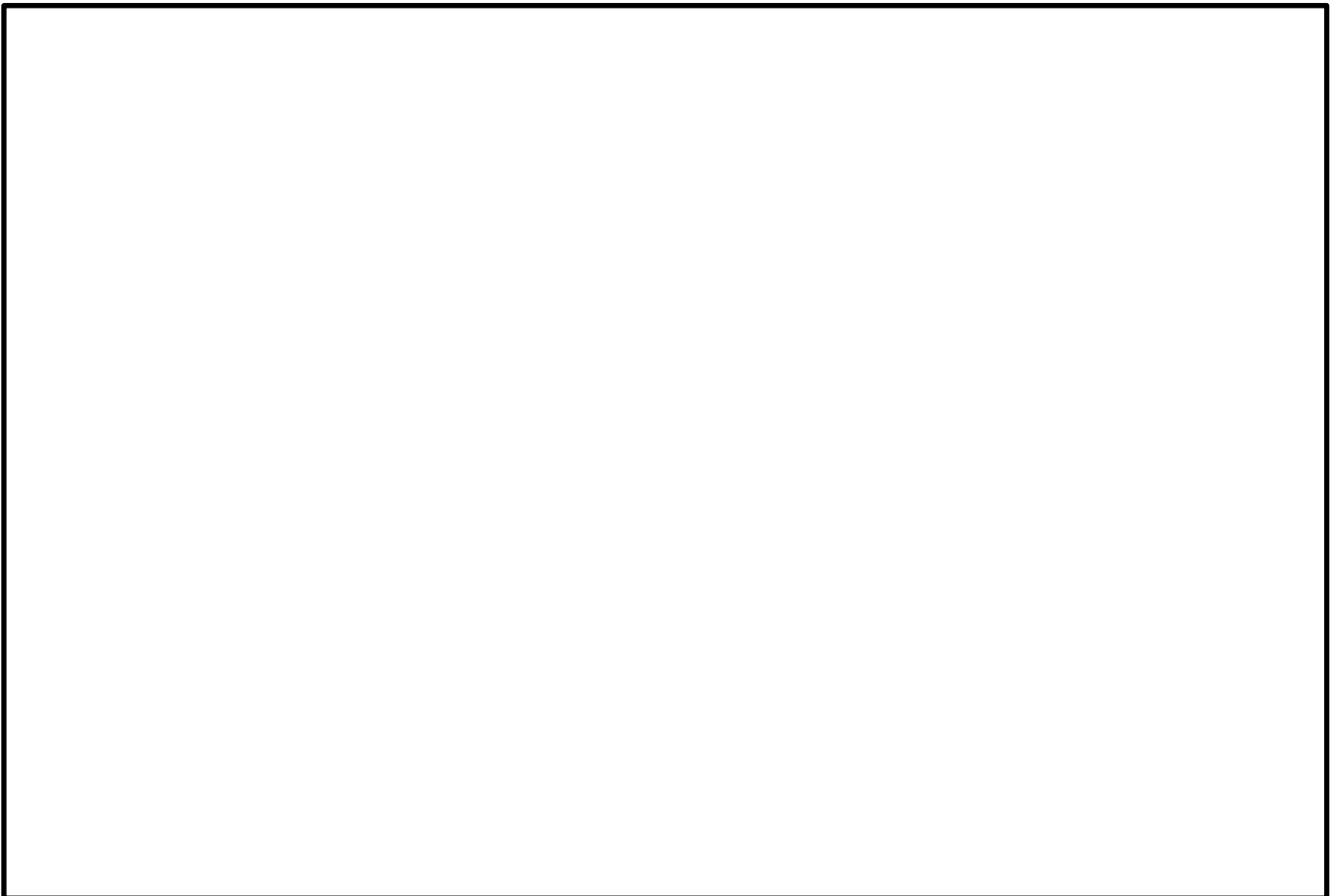
Soil type	Sand	a)	Loam
Grain size	b)	Mostly small grains	c)

7.2. What is the surface of the Earth called?

(1)

[4]**Question 8**

8.1 Draw a sketch showing how the Earth revolves around the sun with the following using these labels: **Sun, Earth, Axis, Orbit** (4)

**[4]**

Question 9 Sedimentary Rocks

9.1. What are sedimentary rocks?

_____ (1)

9.2. Give one example of sedimentary rock.

_____ (1)

9.3 Read the passage about Early Human fossils and the Cradle of Humankind and answer the questions that follow

There are many fossil sites in South Africa. In Gauteng is the Cradle of Humankind Maropeng Centre outside Johannesburg. Some of the world's most famous and important fossils have been found at the Sterkfontein Caves near Johannesburg. This area is called the Cradle of Humankind. The first fossils found at the Sterkfontein Caves were the skeleton of Little Foot and the skull of Mrs Ples. It is a world Heritage Site, this means that it is protected because it has something that is very vulnerable.

9.3.1 What type of fossils were found in the Sterkfontein caves (Body fossils or Trace fossils), give a reason for your answer.

_____ (2)

Mention 2 examples of fossils you know and describe how they contribute to our daily lives.

_____ (4)

[8]

TOTAL PART 2: 16 Marks

TOTAL = [40 Marks]