

MTUBATUBA AND KWAMSANE CLUSTER

NATURAL SCIENCES

GRADE 7

TERM 3

TEST

TIME : 60 MINUTES

MARKS : 30

NAME OF LEARNER : _____

CLASS : _____

CIRCUIT : _____

DATE : _____

INSTRUCTION TO LEARNERS:

- **THIS PAPER CONSISTS OF 4 PAGES INCLUDING THE COVER PAGE.**
- **READ ALL INSTRUCTIONS CAREFULLY.**
- **ANSWER ALL QUESTIONS.**
- **PAY ATTENTION TO THE MARK ALLOCATIONS.**
- **WRITE YOUR ANSWERS IN THE FRAMES OR SPACES PROVIDED.**
- **WRITE NEATLY AND LEGIBLY.**

QUESTION 1

Read each question and circle the letter that shows the correct answer. (5)

1.1 A material that does not transfer heat well is called a/an _____

- A. Conduction
- B. Insulator
- C. Conductor
- D. Metal spoon

1.2 In which pair will convection take place?

- A. Solids and solids
- B. Solids and liquids
- C. Liquids and gases
- D. Liquids and vacuum

1.3 Why is a heating coil placed at the bottom of a kettle?

- A. It will save space.
- B. Conduction occurs in metals
- C. Cold air rises.
- D. Hot water rises.

1.4 An example of a renewable energy source is _____

- A. Oil
- B. Sunlight
- C. Coal
- D. Gas

1.5 Which one of these is NOT a fossil fuel?

- A. Coal
- B. Natural gases
- C. Hydro power
- D. Oil

QUESTION 2

MATCH THE COLUMNS AND WRITE YOUR ANSWER ON THE THIRD COLUMN (5)

COLUMN A	COLUMN B	ANSWER
2.1 Needed by all living things to survive.	A. Particles	2.1 _____
2.2 Part of a heating appliance that outputs energy.	B. Element	2.2 _____
2.3 An energy space that has no particles.	C. Biofuel	2.3 _____
2.4 An extremely small part of a matter.	D. Vacuum	2.4 _____
2.5 Plant or animal waste used to produce energy.	E. Air	2.5 _____

QUESTION 3

Write the word or words that is/are being described in the sentences below.

Only write the answer.

(5)

3.1 The upward movement of heated particles and the downward movement of cooled particles in a liquid or gas during heat transfer.

3.2 Special waves that can transfer heat energy.

3.3 Materials that are poor conductors of heat.

3.4 Energy saving light bulbs that can be used to light a room.

3.5 The transfer of heat energy by electromagnetic wave.

QUESTION 4

Look and analyse the drawing of the car below. The car has a petrol engine. (4)



4.1 What do we call the input energy of the car?

4.2 The released energy is heat energy, sound energy and what other kind of energy?

4.3 What is the useful output energy in this situation?

4.4 Name one wasted output energy in this situation.

QUESTION 5

Explain the difference between:

(4)

- A) Renewable and non-renewable energy
- B) Potential and kinetic Energy

QUESTION 6

A girl makes a catapult with an elastic band. She stretches it and then fires a ball of paper across the classroom so it hits a boy. Identify the energy conversions that will take place. (3)

QUESTION 7

Draw a diagram of a burning candle. Identify the forms of energy in the burning candle. (4)