

WorksheetCloud.com - Question Sheet

Subject: Grade 7 NATURAL SCIENCES

Topic: Natural Sciences: Exam Term 4

Total Marks: 99

Question 1: Multiple Choice [4]

Which of the following is NOT true about a dynamo?

- A** A dynamo is an example of a generator.
 - B** A dynamo converts electrical energy to mechanical energy.
 - C** A dynamo needs coils of conducting wire and magnets to work. The coils or the magnets must rotate.
 - D** The dynamos that are used in bicycle lights only work when the wheels of the bicycle turn.
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Question 2: Multiple Choice [4]

Which statement best explains why cooking pots are made of metal?

- A** Metals can conduct heat from the stove to the food in the pot so that the food is cooked.
 - B** Metals can keep heat inside the pot so that cooked food does not cool down quickly.
 - C** Metals do not rust easily and therefore the food does not get affected by chemicals.
 - D** Metals can withstand high temperatures and therefore the food does not burn.
-

Question 3 refers to the following graphic

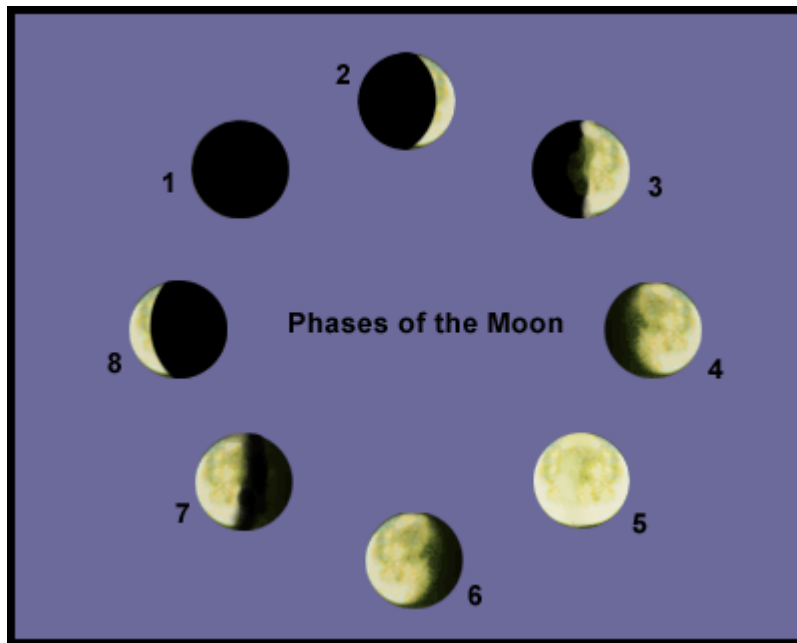


Figure 1: Moon

Question 3: Multiple Choice [4]

Which heavenly body has an orbit of $\pm 29\frac{1}{2}$ days in length?

- A Earth around the Sun
- B Moon around the Earth
- C Earth on its own axis
- D Sun around the Earth

Question 4: Multiple Choice [4]

When is the Earth closest to the Sun in the Southern Hemisphere?

- A 22 June
- B 23 September
- C 21 December
- D 21 March

Question 5: Multiple Choice [4]

Why is nuclear waste disposal a problem?

- A** nuclear waste is unsightly
 - B** nuclear waste is filled with radioactivity
 - C** nuclear waste is biodegradable
 - D** nuclear waste is used for nuclear bombs
-

Question 6: Multiple Choice [4]

Which of the following contains the least energy?

- A** Two thin slices of bread, 205 kJ each
 - B** Banana, 475 kJ
 - C** Two tablespoons of cheese, 212 300 J each
 - D** Boiled egg, 316 000 J
-

Question 7: Write Your Answer [3]

The national grid is an example of an electrical

Question 8: Write Your Answer [3]

The more efficient an electrical appliance is, the more input energy is converted to energy.

Question 9: Write Your Answer [3]

The transfer of heat from one place to another by the movement of liquid or gas particles is called

Question 10: Write Your Answer [3]

When the moon is growing smaller we refer to it as

Question 11: Write Your Answer [3]

... can be described as the tendency of all objects to attract each other because of their mass.

Question 12: Write Your Answer [3]

An extra-low low tide is called a ... tide.

Question 13: Write Your Answer [3]

Energy received from the Sun in the form of heat and light is called

Question 14: Write Your Answer [3]

In June, the ... Pole is turned towards the Sun.

Question 15: Write Your Answer [3]

An equinox occurs ... during a year.

Question 16: Write Your Answer [3]

A battery constantly produces an electric current until all the ... are exhausted or used up.

Question 17: Write Your Answer [3]

Fossil fuels that are being utilised faster than they can be produced are referred to as a ... resource?

Question 18: Fill In The Blanks [8]

Match the correct description to each of the following types of power station:

1. (1) Hydro-electric
2. (2) Nuclear power
3. (3) Wind farm
4. (4) Tidal power plant

1	
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2	
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3	
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4	
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▶ Up and down movement of water creates an air column. Changes in the air column turn the blades of a turbine.

▶ Blades turn an axle attached to a gearbox. The gearbox transfers mechanical energy to a generator.

▶ Blades of the turbine is turned by steam. Steam is produced by a chemical reaction. Mechanical energy is transferred to a generator.

▶ Blades of the turbine is turned by falling water. Mechanical energy is transferred to a generator.

Question 19 refers to the following graphic

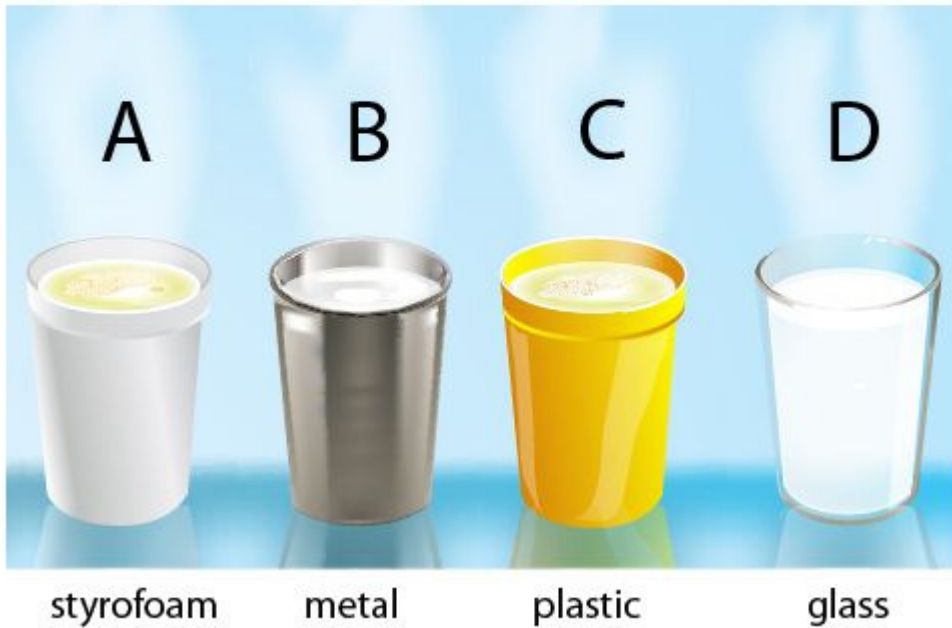


Figure 2: glass metal plastic containeri-01

Question 19: Fill In The Blanks [8]

The graphic shows containers of identical size, but each made of a different material.

The containers have the same amount of hot milk in each of them. They are all left to stand for five minutes. Then the temperature of the milk in each container is measured.

Arrange the containers from the one that will have the hottest milk to the one that will have the coolest milk:

- Hottest: (1) .
- Hot: (2) .
- Cool: (3) .
- Coolest: (4) .

1	
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2	
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3	
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4	
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▶ A: styrofoam

▶ B: metal

▶ C: plastic

▶ D: glass

Question 20 refers to the following graphic

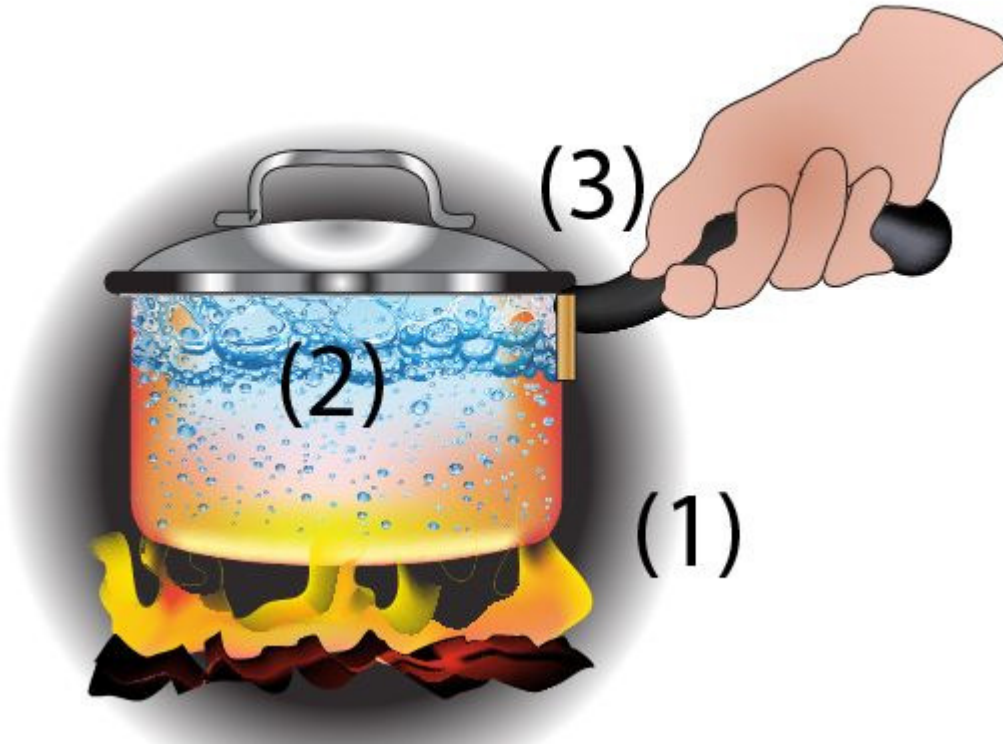


Figure 3: glass metal plastic containeri-05

Question 20: Fill In The Blanks [6]

The attached graphic shows a pot of water that is heated over a fire.

Three examples of heat transfer are shown. Identify the correct labels:

- (1) .
- (2) .
- (3) .

1	
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2	
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3	
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- ▶ conversion
- ▶ insulation
- ▶ convection
- ▶ transformation
- ▶ conduction
- ▶ radiation

Question 21: Fill In The Blanks [8]

Arrange the following celestial bodies from the one that exerts the greatest force of gravity to the one that exerts the smallest force of gravity.

1. (1) .
2. (2) .
3. (3) .
4. (4) .

1	
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2	
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3	
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4	
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▶ the Sun

▶ the Moon

▶ Earth

▶ Jupiter

Question 22 refers to the following graphic

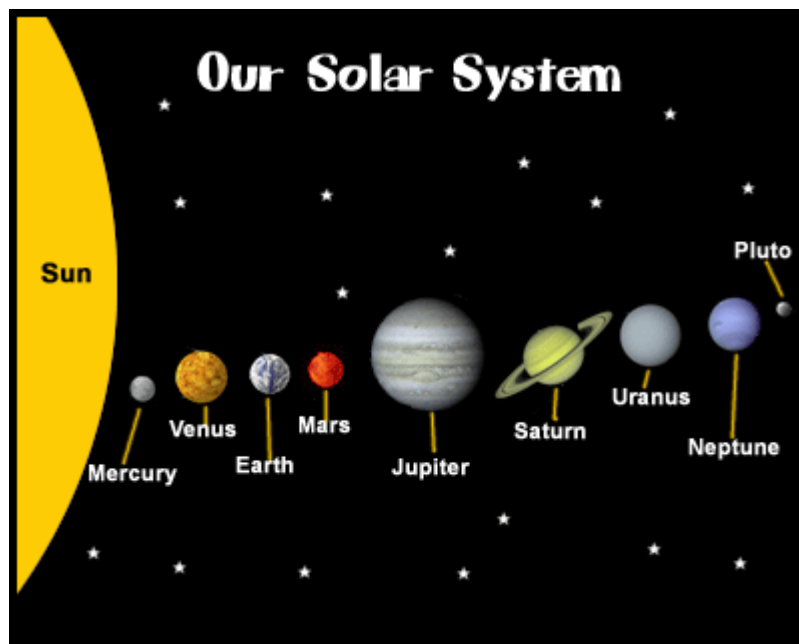


Figure 4: solar

Question 22: Fill In The Blanks [4]

(1) is furthest from the Sun and (2) is closest.

1	
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2	
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▶ Saturn

▶ Uranus

▶ Mercury

▶ Jupiter

▶ Earth

▶ Neptune

Question 23 refers to the following graphic



Figure 5: Solar energy

Question 23: Fill In The Blanks [4]

To save electricity, hot water geysers can use (1) to heat water. Such systems are called (2) geysers.

1		2	
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- ▶ fire
- ▶ furnace
- ▶ solar
- ▶ the sun's energy

Question 24: Fill In The Blanks [4]

The temperature of your body is about (1) , much warmer than the temperature of the air around you on a winter's day. You feel cold because your body (2) .

1		2	
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- ▶ 32 degrees Celsius
- ▶ 37 degrees Celsius
- ▶ absorbs the cold from the air
- ▶ radiates heat