

IEA - Data Enhancement Project

Questionnaire printing

Study: SC2

Population: 2

Instrument: STD_2

Student Science Achievement Test (2D)

Population 2

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1 If you are facing North early in the morning, where is the Sun?

- A to your left
- B to your right
- C behind you
- D in front of you
- E above you

P2D01

2 The diagram shows five different Celsius thermometers. The normal human body temperature is 37 °C (degrees Celsius). The body temperature of sick people ranges from about 36 °C to 42 °C. Which thermometer would be most suited for accurately measuring body temperature?

- A thermometer A
- B thermometer B
- C thermometer C [5 Pictures of thermometers]
- D thermometer D
- E thermometer E

P2D02

3 A dish contains 2 g (grams) of salt dissolved in 8 g of water. The dish of salty water is placed in the Sun. 5 g of the contents of the dish evaporates into the atmosphere. What is in the remaining 5 g of solution?

- A 2 g of salt and 3 g of water
- B more than 1.5 g of salt and 3.5 g of water
- C 1 g of salt and 4 g of water
- D 5 g of water only
- E less than 0.5 g of salt and 4.5 g of water

P2D03

4 The table below shows the melting point of five elements.

Element	Melting point
aluminium	660 °C
magnesium	649 °C
iron	1535 °C
lead	327 °C
copper	1083 °C

Samples of all these elements are heated in an oven to a temperature of 1555 °C. If the temperature of the oven is then lowered, which of the samples would solidify first?

- A aluminium
- B magnesium
- C iron
- D lead
- E copper

P2D04

5 The table below gives the name, chemical formula and boiling point for some chemicals called alkanes.

Name	Formula	Boiling point
methane	CH ₄	- 161 °C
ethane	C ₂ H ₆	- 88 °C
propane	C ₃ H ₈	- 42 °C
pentane	C ₅ H ₁₂	36 °C
hexane	C ₆ H ₁₄	69 °C
heptane	C ₇ H ₁₆	99 °C

Butane, which is an alkane, has a boiling point of 0 °C. What is its chemical formula most likely to be?

- A C₈H₁₈
- B C₃H₆
- C C₃H₈
- D C₄H₁₀
- E C₃H₁₂

P2D05

6 The surface of the Earth is not level although weathering and erosion by wind and water have been occurring for millions of years. Which of the following is the best explanation of this observation?

- A The sea level keeps changing.
- B Movements in the Earth's surface continue to occur.
- C There has not been enough time.
- D Temperature differences at the Earth's surface are not large enough.
- E Wind and water erosion are not strong enough.

P2D06

7 If equal amounts of the following foods are eaten, which one would provide the most protein for the body?

- A potatoes
- B apples
- C rice
- D bread
- E chicken

P2D07

8 What is the main way that sweating helps your body?

- A It cools your body.
- B It keeps your skin moist.
- C It keeps you from catching cold.
- D It gets rid of the salt in your body.
- E It gets rid of excess water in your body.

P2D08

9 The blood has many functions in the human body. Which one of the following is not a function of the blood?

- A to digest food
- B to protect against disease
- C to carry food to the cells
- D to carry waste material away from the cells
- E to carry oxygen to different parts of the body

P2D09

10 Why are green plants important to animals?

- A Green plants consume both food and oxygen.
- B Green plants consume food and give off oxygen.
- C Green plants consume food and give off carbon dioxide.
- D Green plants produce food and give off oxygen.
- E Green plants produce food and give off carbon dioxide.

P2D10
