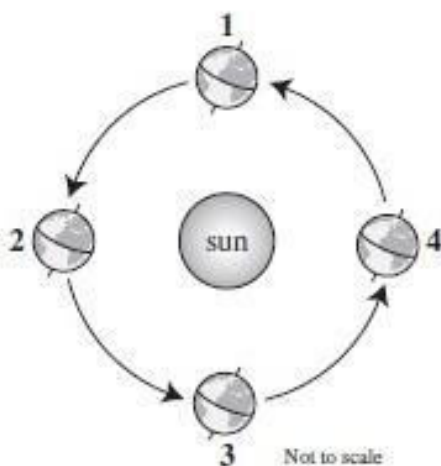


**1** Which of these forms of water has the **greatest** kinetic energy?

- A boiling water
- B melting water
- C freezing water
- D condensing water

**2** The diagram below shows four different positions of Earth during the year as it orbits the sun.



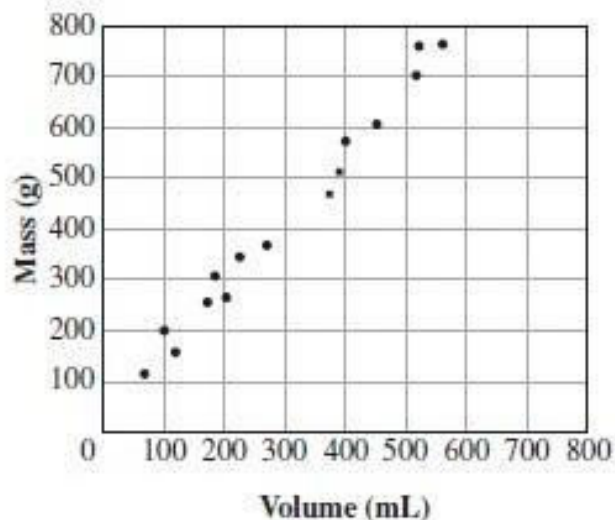
In which position is the northern hemisphere experiencing winter?

- A position 1
- B position 2
- C position 3
- D position 4

**3** Which infection of the human body can **most likely** be directly treated with an antibiotic?

- A a viral infection
- B a fungal infection
- C a protist infection
- D a bacterial infection

**4** A student collected many different-sized samples of the same kind of rock from a certain area. She measured the mass and volume of each sample and plotted the results on the scatter plot below.



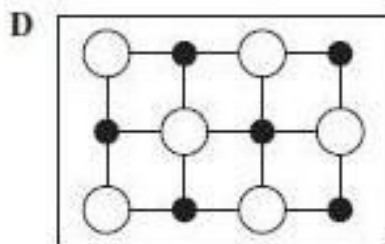
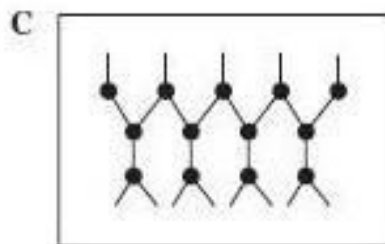
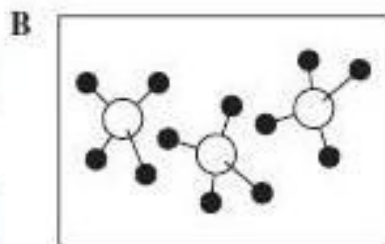
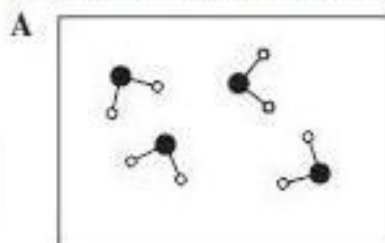
Based on the scatter plot, which is the **best** estimate of the mass of a rock sample taken from the same area that has a volume of 300 mL?

- A 350 g
- B 450 g
- C 550 g
- D 650 g

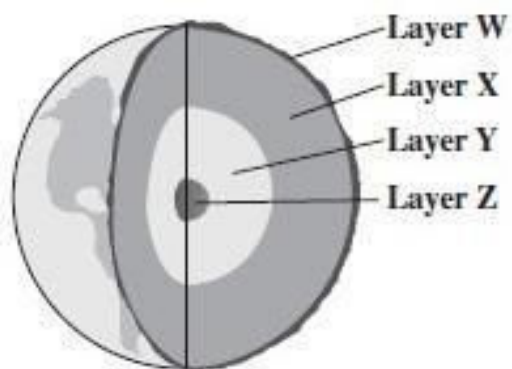
**5** Which of these is an example of chemical energy being converted into thermal energy?

- A water boiling
- B butter melting
- C candles burning
- D steam condensing

- 6** Which of these diagrams **most** likely represents the chemical structure of a substance that is a pure element?



- 7** The diagram below shows four layers of Earth's internal structure.



Which layer is composed mostly of solid iron and nickel?

- A** layer W
- B** layer X
- C** layer Y
- D** layer Z

- 8** Which of these is an SI unit of measure for the mass of an object?

- A** meter
- B** ounce
- C** milliliter
- D** kilogram

**Answers:**

**1. A**

**2. D**

**3. D**

**4. B**

**5. C**

**6. C**

**7. D**

**8. D**