

**COPERNICUS OLYMPIAD**  
Natural Sciences – Category 2 Sample Questions

**Q:** Which shows the correct arrangement of the levels of biological organization?

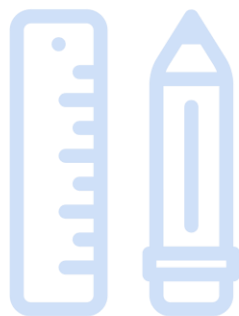
- A.** cell → tissue → organ system → organ → organism
- B.** cell → organ → tissue → organ system → organism
- C.** cell → organ system → organ → tissue → organism
- D.** cell → tissue → organ → organ system → organism

**Q:** Which information in the periodic table of elements tells the total number of protons and neutrons of an atom?

- A.** Atomic Number
- B.** Chemical Symbol
- C.** Indicator
- D.** Mass Number

**Q:** Which element is a nonmetal?

- A.** carbon
- B.** calcium
- C.** iron
- D.** manganese



**Q:** Which of the following statements correctly describes a magma chamber?

- A.** It is the ductile upper layer of the Earth's mantle.
- B.** It is a large cavern full of molten rock and volatile gases.
- C.** It is the pathway by which magma traverses to the surface.
- D.** It is a reservoir of porous or fractured rock, where magma accumulates.

**Q:** What is the primary process behind the movement of tectonic plates away from each other along divergent margins?

- A.** normal faulting
- B.** seafloor spreading
- C.** strike-slip faulting
- D.** subduction

**Q:** What is a particle that represents a quantum of light or other electromagnetic radiation?

- A.** electron

- B.** neutron
- C.** photon
- D.** proton

**Q:** Which unit is used to express work?

- A.** calorie
- B.** hertz
- C.** joule
- D.** watts

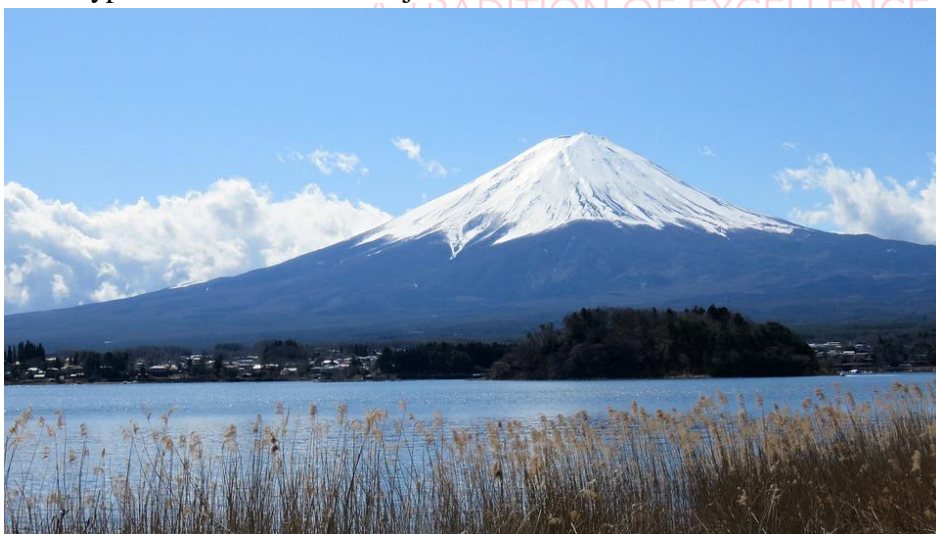
**Q:** In which region in the solar system do most long-term comets originate?

- A.** Asteroid belt
- B.** Kuiper belt
- C.** Magellanic cloud
- D.** Oort cloud

**Q:** What objective lens must be used in observing the entire body of an ant?

- A.** Scanner objective lens
- B.** Low-power objective lens
- C.** High-power objective lens
- D.** Oil-immersion objective lens

**Q:** Below is an image of Mt. Fuji, the tallest mountain in the world, which is also a dormant volcano. What type of volcano is Mt. Fuji?



- A.** cinder cone
- B.** composite

- C. shield
- D. supervolcano

**Q:** What is the process of converting carbon dioxide and water into glucose and oxygen in the presence of light?

- A. digestion
- B. photosynthesis
- C. respiration
- D. transpiration

**Q:** Element X has an electron configuration of  $1s^2 2s^2 2p^6 3s^1$ . How many electrons does element X have?

- A. 5
- B. 7
- C. 9
- D. 11

**Q:** In which layer of the atmosphere is the ozone layer found?

- A. mesosphere
- B. stratosphere
- C. thermosphere
- D. troposphere

**Q:** Photosynthesis cannot take place if \_\_\_\_ is not available.

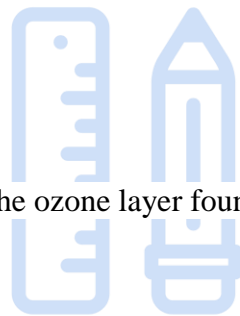
- A. Ammonia
- B. Sodium chloride
- C. Oxygen
- D. Light

**Q:** What law of matter states that mass can neither be created nor destroyed?

- A. law of mass action
- B. law of mass balance
- C. law of mass-energy balance
- D. law of conservation of mass

**Q:** How are faults described?

- A. Faults are locations that generate earthquakes.

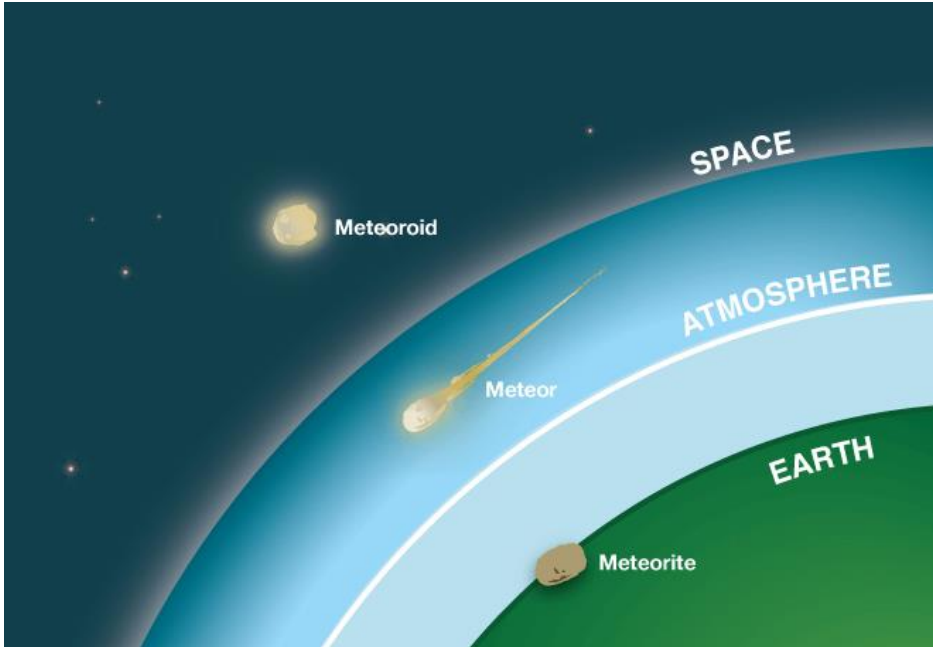


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- B.** Faults are boundaries between tectonic plates.
- C.** Faults are breaks in Earth's crust with a displacement.
- D.** Faults are raised portions of the ground after an earthquake.

**Q:** Analyze the given diagram below.



How will you describe a meteorite?

- A.** It is a boulder of rock floating in space.
- B.** It is a meteoroid that has entered the Earth's atmosphere.
- C.** It is a burning rock that flashes a streak of light in the atmosphere.
- D.** It is a meteoroid that survived the Earth's atmosphere and reached the surface.

**Q:** Which of the following diagrams represent plasma?

- A.**
- B.**
- C.**



**D.**

**Q:** An earthquake occurred and is reported to have destroyed a few poorly built structures. In addition, people described that they had a hard time standing during the shaking. What is the intensity of the earthquake based on the modified intensity scale?

- A.** Intensity V
- B.** Intensity VII
- C.** Intensity IX
- D.** Intensity X

**Q:** Who among the following scientists accurately predicted the next arrival of a certain comet?

- A.** Ed Greyjoy
- B.** Edward Collins
- C.** Eddie McFlurry
- D.** Edmond Halley

**Q:** Which among the following is an application of the law of dominance?

- A.** The inherited alleles from both parents are random
- B.** The white flowers of one parent pea plant cannot be inherited
- C.** A cross between white-flowered and purple-flowered peas produced offspring with only purple flowers
- D.** Both pea plant parents are heterozygous for purple flowers, so the offspring will have flowers that are light purple

**Q:** What type of weather disturbance is formed over the warm waters of Indian Ocean?

- A.** hurricane
- B.** tropical cyclone
- C.** typhoon
- D.** storm

**Q:** What quantity defines the amount of electric potential energy per unit charge?

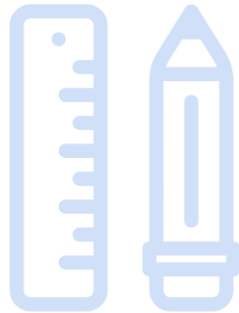
- A.** conductance
- B.** current
- C.** resistance
- D.** voltage

**Q:** In mummification, certain organs were saved in special containers to store and preserve the viscera of a person for the afterlife. What are these containers called?

- A.** Canopic jars
- B.** Nile bottles
- C.** Shabty jars
- D.** Shabty bottles

**Q:** Natron is one of the main substances used in mummification. Why this powder is used to cover the body being mummified?

- A.** to dry it out
- B.** to add moisture
- C.** to add fragrance
- D.** to call the Gods



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