

Volcanology and Human Health

Volcanology · Answer Key · 10 Questions

1. Which organ system is most directly irritated by inhaling fine volcanic ash particles?

- A) The digestive system
- B) The respiratory system**
- C) The skeletal system
- D) The nervous system

2. What is the primary substance in volcanic ash that can cause physical damage to the eyes?

- A) Silica glass shards**
- B) Liquid sugar
- C) Soft cotton fibers
- D) Moist organic matter

3. Which common volcanic gas, if inhaled in high concentrations, replaces oxygen in the human bloodstream?

- A) Carbon dioxide**
- B) Helium
- C) Argon
- D) Neon

4. Volcanic ash is abrasive; which part of the human body is most at risk of superficial scratching from prolonged exposure to airborne ash?

- A) The inner ear
- B) The cornea**
- C) The bone marrow
- D) The heart muscle

5. Skin contact with acidic volcanic ash or rain can lead to which health issue?

- A) Dermatitis or irritation**
- B) Increased hair growth
- C) Improved skin elasticity
- D) Vitamin D deficiency

6. When volcanic ash settles on clothing, what is the recommended way to remove it to avoid respiratory irritation?

A) Shaking it vigorously in an enclosed room

B) Using a damp cloth to wipe it off

C) Blowing it off with a fan

D) Running in the wind

7. Which gas emitted by volcanoes is known to cause a 'rotten egg' smell and is toxic to humans at high levels?

A) Nitrogen

B) Hydrogen sulfide

C) Oxygen

D) Water vapor

8. Fine volcanic ash can trigger flare-ups in people who suffer from which chronic medical condition?

A) Asthma

B) Color blindness

C) Flat feet

D) Insomnia

9. Exposure to volcanic dust can cause a sensation often described as what in the throat?

A) Cooling

B) Grittiness

C) Sweetness

D) Numbness

10. Why is wearing a mask important during a volcanic ashfall?

A) To keep the face warm

B) To prevent inhalation of sharp particles

C) To improve the sense of smell

D) To reduce hearing loss