

NAME: \_\_\_\_\_

## ISLAND ERUPTION

In "Fire in the Sky" on p. 8, you read about glacivolcanoes under ice that explosively erupt. But some volcanoes experience slow, quiet eruptions. Kilauea, in Hawaii, for example has been erupting quietly for 28 years. Read the passage below to learn more about this volcano, and then answer the questions that follow.

### Fiery Island

Hawaii is known for its monster waves and sunny beaches. But for Earth scientists, the main attraction is a volcano called Kilauea. Kilauea is one of the world's most active volcanoes; it has been erupting continuously since 1983.

The fiery flow of lava from Kilauea continually threatens nearby towns. When the molten rock erupts, it also releases enormous amounts of toxic gases, including sulfur dioxide. When this gas reacts with oxygen, moisture, and sunlight, it forms *vog* (volcanic smog), which can be harmful if inhaled. On average, Kilauea emits 2,000 to 4,000 tons of air pollutants per day.

*Volcanologists* (scientists who study volcanoes) have used remotely controlled weather balloons to measure the levels of gases the erupting volcano produces. Hours after the gases are released, low levels of vog have been detected in the air above the populated area near the volcano. As Kilauea continues to erupt, people living at the bottom of its slopes can only hope that its lava and vog will flow toward the ocean and away from their homes.

**1. Which of the following BEST summarizes the passage above?**

- Ⓐ Hawaii is an amazing destination to witness the eruption of Kilauea.
- Ⓑ Kilauea has been erupting for the past 28 years, and it produces lots of lava and vog that can harm people living nearby.
- Ⓒ Vog is a very dangerous air pollutant produced by Kilauea's daily eruptions.
- Ⓓ Volcanologists are studying Kilauea because it is the most unique volcano in the Hawaiian Islands.

**2. What is the purpose of the second paragraph?**

- Ⓐ to describe how Kilauea formed
- Ⓑ to introduce the volcanologists who study the volcano
- Ⓒ to argue that people shouldn't live near Kilauea
- Ⓓ to describe some of the hazards of Kilauea's eruption

**3. As it erupts, Kilauea emits \_\_\_ tons of air pollutants each day.**

- Ⓐ 1,000 to 2,000
- Ⓑ 2,000 to 4,000
- Ⓒ 2,000 to 5,000
- Ⓓ 4,000 to 6,000

**4. What is vog?**

- Ⓐ A burst of sulfur dioxide that is harmful if inhaled.
- Ⓑ The ash that explodes out of Kilauea.
- Ⓒ A special type of steam that Kilauea emits during an eruption.
- Ⓓ An air pollutant created when sulfur dioxide reacts with oxygen, moisture, and sunlight.

**5. Which of the following statements is NOT a fact from the passage above?**

- Ⓐ Kilauea is a very reliable volcano that has a large eruption once a year in the summer.
- Ⓑ The volcano Kilauea has been erupting continuously since 1983.
- Ⓒ Lava from Kilauea continually threatens to damage nearby towns.
- Ⓓ Volcanologists study volcanoes.