

A Million Whys Book 12: Science Quiz

The Volcano Expedition, by Crafty Clover.

Name: _____ Date: _____ Score: _____ / 12

Fill in the missing number. Use the number bank.

Number bank: 10 11 30 50 90 150 180 350 1,000 1815 1963 7,700

1. The cinders pile up at the steepest angle they can hold, about _____ degrees, just like a pile of sand.
From: Why Do Cinder Cones Look Like Sand Piles?
2. In _____, Mount Tambora in Indonesia had the biggest eruption in recorded history.
From: What Was the Biggest Eruption People Have Ever Recorded?
3. Ash from Mount Mazama in Oregon fell across western Canada about _____ years ago and can still be found in soil.
From: Why Do People Study Ash Layers in Soil?
4. About _____ percent of the world's earthquakes and many of its volcanoes happen along it.
From: Why Is the "Ring of Fire" So Quake-Y?
5. The Mariana Trench is the deepest place in the ocean, nearly _____ kilometers down.
From: Why Is the Mariana Trench So Deep?
6. The oldest ocean floor is only about _____ million years old, but some continents have rocks billions of years old.
From: Why Is Seafloor Younger Near Ridges?
7. In _____ million years the coastlines may look very different, though we can only predict the pattern, not the details.
From: Why Will Maps Look Different in 50 Million Years?
8. Cold seawater seeps into cracks, heats up near magma to over _____ degrees Celsius, and dissolves metals and sulfur from the rock.
From: Why Do Black Smokers Exist on the Seafloor?
9. Diamonds form deep underground, over _____ kilometers down, where carbon is squeezed by great pressure and heat.
From: How Do Diamonds Come Up From Deep Inside Earth?
10. In a lab, scientists melt rocks in furnaces at over _____ degrees Celsius.
From: Why Do Labs Recreate Magma in Furnaces?
11. In _____, a new island called Surtsey appeared off Iceland.
From: Why Will New Islands Keep Appearing Sometimes?
12. Mauna Kea in Hawaii rises about _____ kilometers from the seafloor, taller than Mount Everest measured from sea level.
From: How Tall Can a Volcano Grow?

Answer key

1. **30** (The cinders pile up at the steepest angle they can hold, about 30 degrees, just like a pile of sand. Book 12, Question 14)
2. **1815** (In 1815, Mount Tambora in Indonesia had the biggest eruption in recorded history. Book 12, Question 16)
3. **7,700** (Ash from Mount Mazama in Oregon fell across western Canada about 7,700 years ago and can still be found in soil. Book 12, Question 25)
4. **90** (About 90 percent of the world's earthquakes and many of its volcanoes happen along it. Book 12, Question 42)
5. **11** (The Mariana Trench is the deepest place in the ocean, nearly 11 kilometers down. Book 12, Question 57)
6. **180** (The oldest ocean floor is only about 180 million years old, but some continents have rocks billions of years old. Book 12, Question 60)
7. **50** (In 50 million years the coastlines may look very different, though we can only predict the pattern, not the details. Book 12, Question 74)
8. **350** (Cold seawater seeps into cracks, heats up near magma to over 350 degrees Celsius, and dissolves metals and sulfur from the rock. Book 12, Question 85)
9. **150** (Diamonds form deep underground, over 150 kilometers down, where carbon is squeezed by great pressure and heat. Book 12, Question 99)
10. **1,000** (In a lab, scientists melt rocks in furnaces at over 1,000 degrees Celsius. Book 12, Question 121)
11. **1963** (In 1963, a new island called Surtsey appeared off Iceland. Book 12, Question 146)
12. **10** (Mauna Kea in Hawaii rises about 10 kilometers from the seafloor, taller than Mount Everest measured from sea level. Book 12, Question 147)