

Tectonic Hazards

Volcanoes

What are volcanoes?

Match the Heads to the Tails and write the sentences out...

Heads	Tails
Volcanoes occur where there	are found at destructive plate boundaries.
These ruptures happen where the crust	is into shield or composite (aka stratovolcano).
As a result	are found at hotspots and constructive plate boundaries.
This is why they	are ruptures in the Earth's crust.
Some volcanoes, caused by hotspots,	hot lava, ash and gases can escape from the magma chamber below.
The Hawaiian islands	is weakened by being stretched or squeezed.
One simple way of classifying volcanoes	are mostly found along plate boundaries.
Shield volcanoes	are good examples of these.
Composite volcanoes	are found in the middle of plates.

How are volcanoes different?

1. What are the differences are between **lava** and **magma**?
2. Not all lava is the same: there are different types. A simple way to classify lava is into **acid** and **basic**.
 - i. How are these two lava types different?
 - ii. At what type of plate boundary are these lava types produced?
 - iii. Find out some of the other ways in which lava flows can be described.
3. What type of lava (acid or basic) produces a **shield volcano**, and what type produces a **composite volcano**?
4. Find a real volcano of each type and:
 - Print a clear photo
 - State the type of plate boundary on which it is found
5. Describe the shapes of shield and composite volcanoes.
6. Explain, with reference to lava types, why shield and composite volcanoes have different shapes.
7. What do the terms *active*, *dormant* and *extinct* mean when used to describe volcanoes? (Remember, volcanoes are not alive, so choose your words carefully!)
8. What is the Volcanic Explosivity Index? How is it used to describe volcanoes?