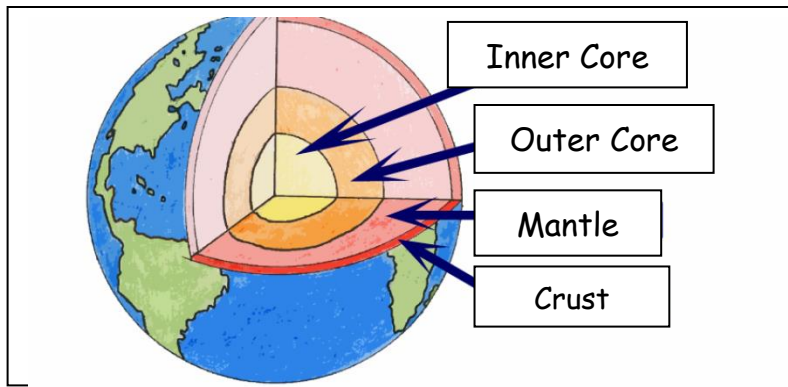
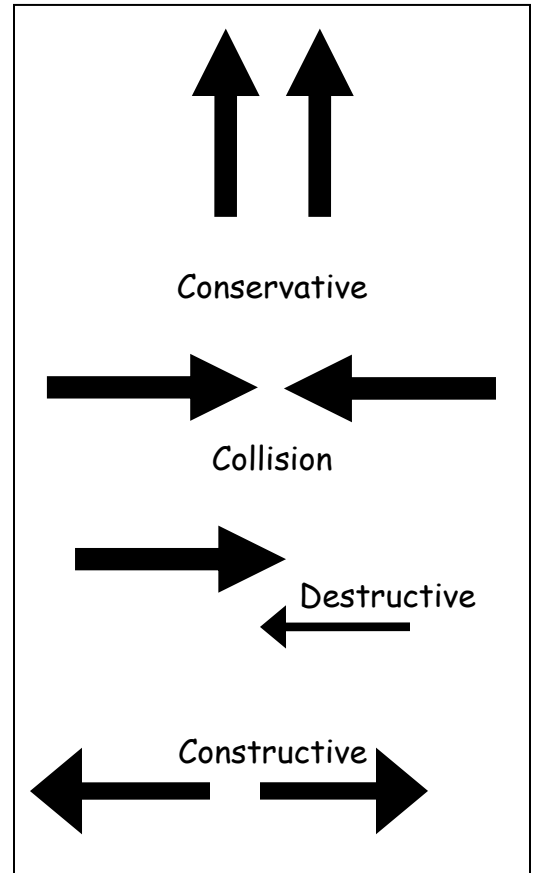


## Year 8: Tectonics: Revision worksheet



**Tsunamis** are tidal waves triggered by underwater earthquakes. The rate of travel of a tsunami is between 400- 600 miles per hour. They usually occur at destructive plate margins. The tsunami in SE Asia occurred on the 26th December 2004. The earthquake measured 9.0 on the Richter Scale and occurred off the northern tip of Sumatra. The tsunami spread across the Indian Ocean and hit coastal areas of Sri Lanka, India, Bangladesh, Myanmar, Indonesia and Malaysia. The death toll is believed to be 290,000.



### 1. Constructive plate margin

At a **constructive** plate boundary, two plates move apart. As the two plates move apart, magma rises up to fill the gap. This causes volcanoes. However, since the magma can escape easily at the surface the volcano does not erupt with much force.

### 2. Destructive plate margin

A **destructive** plate boundary is found where a continental plate meets an oceanic plate. The oceanic plate descends under the continental plate because it is denser. As the plate descends it starts to melt due to the friction caused by the movement between the plates. This melted plate is now hot, liquid rock (magma). The magma rises through the gaps in the continental plate. If it reaches the surface, the liquid rock forms a volcano.

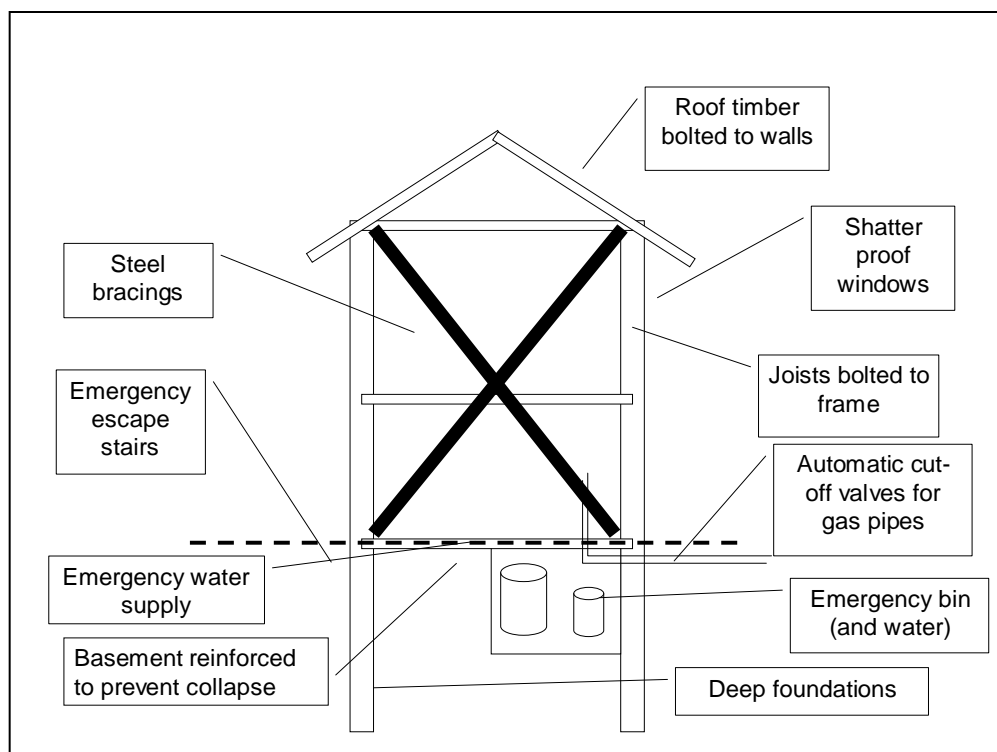
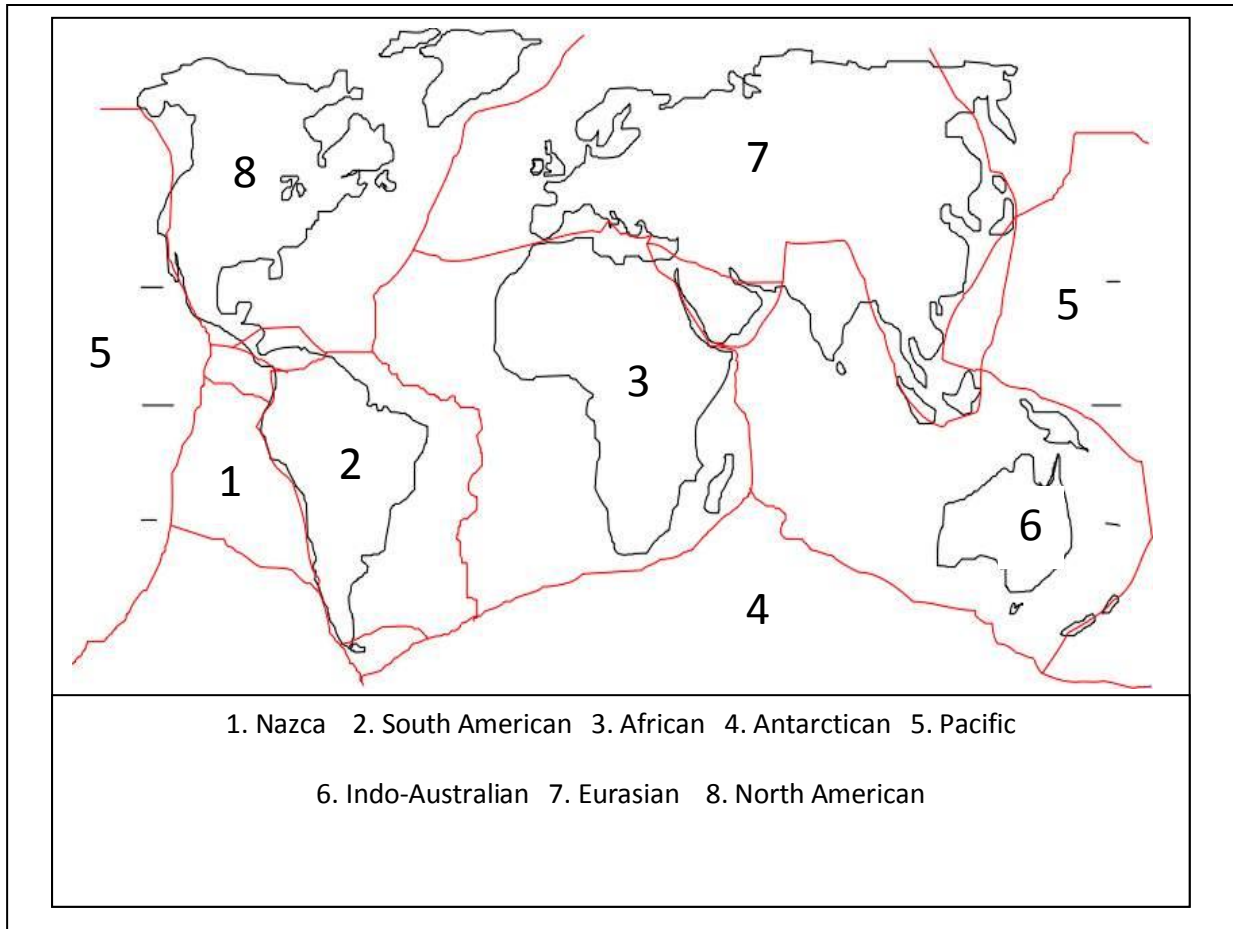
### 3. Collision plate margin

**Collision** boundaries occur when two plates of similar densities move together (i.e. a continental plate and a continental plate). This causes the material between them to buckle and rise up, forming fold mountains.

## Year 8: Tectonics: Revision worksheet

### 4. Conservative plate margin

**Conservative** plate boundaries exist where two plates do not directly collide but slide past each other along a fault (weakness). No volcanoes are found along these plate boundaries, but earthquakes do occur. An example of such a boundary is the **San Andreas Fault** in California.



## Year 8: Tectonics: Revision worksheet

### What is Continental Drift?

In 1912, a German scientist called Alfred Wegener proposed that South America and Africa were once joined together and had thus moved apart.

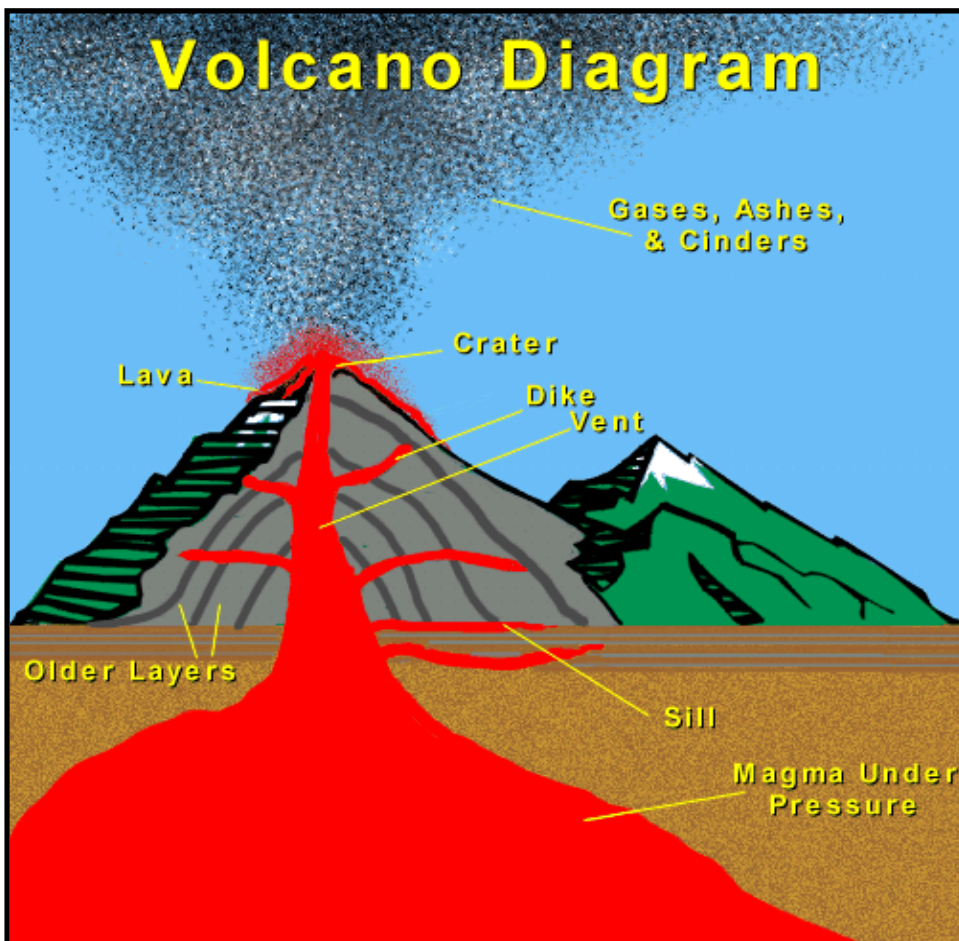
He believed that all the continents were once joined together as one big land mass called Pangaea until about 200 million years ago.

### Evidence for Continental Drift:

- \* Pattern of rocks
- \* Shapes of continents
- \* Study of fossils

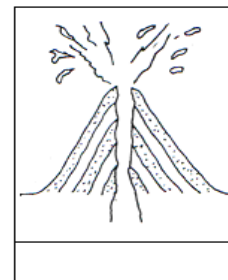
### Do all volcanoes erupt?

- \* **Active volcano** - liable to erupt e.g. Mt Etna.
- \* **Dormant (sleeping) volcano** - a volcano which has not erupted for many years. For example, Mt Pinatubo erupted in 1991 after 500 years of dormancy.
- \* **Extinct volcano** - a volcano which has not erupted for many thousands or millions of years e.g. Edinburgh.

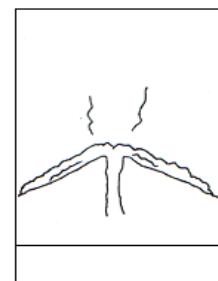


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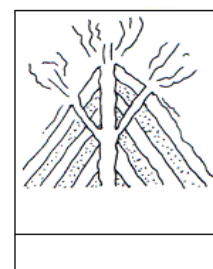
### Types of volcano:



**Cone**



**Shield**



**Composite**

