

Do Now

What places do you know that have had earthquakes recently or volcanic eruptions



Ex - Why do these events occur?

Aim

- To understand why earthquake and volcanoes occur

Keywords

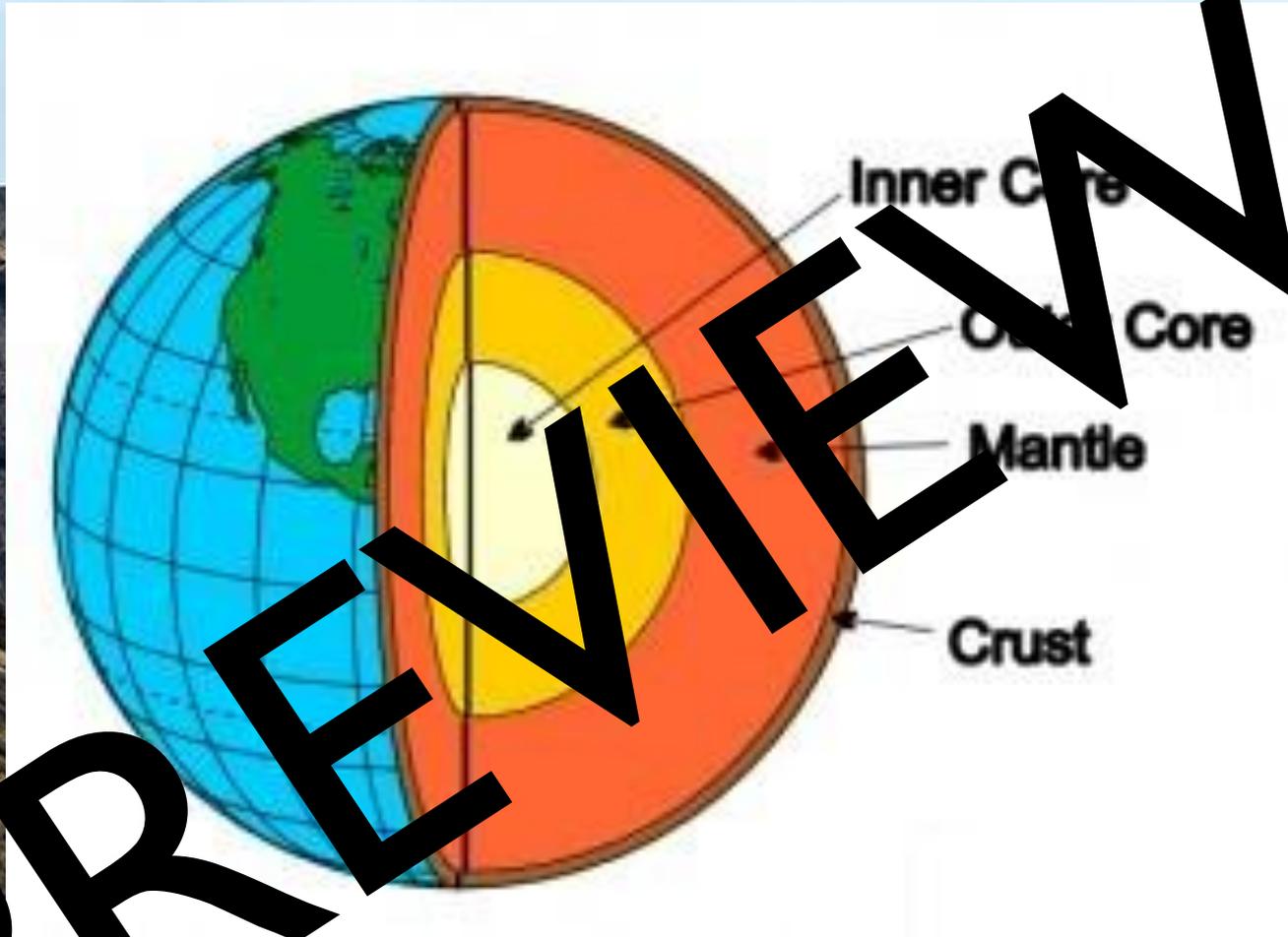
Destructive plate margins – Where two plates are moving towards each other

Constructive plate margin – Where two plates are moving away from each other

Conservative plate margins – Where two plates are moving sideways past each other

Subduction – Where one plate moves under another

The structure of the Earth



Describe what the structure of the Earth
(4 marks)

Plate Boundaries

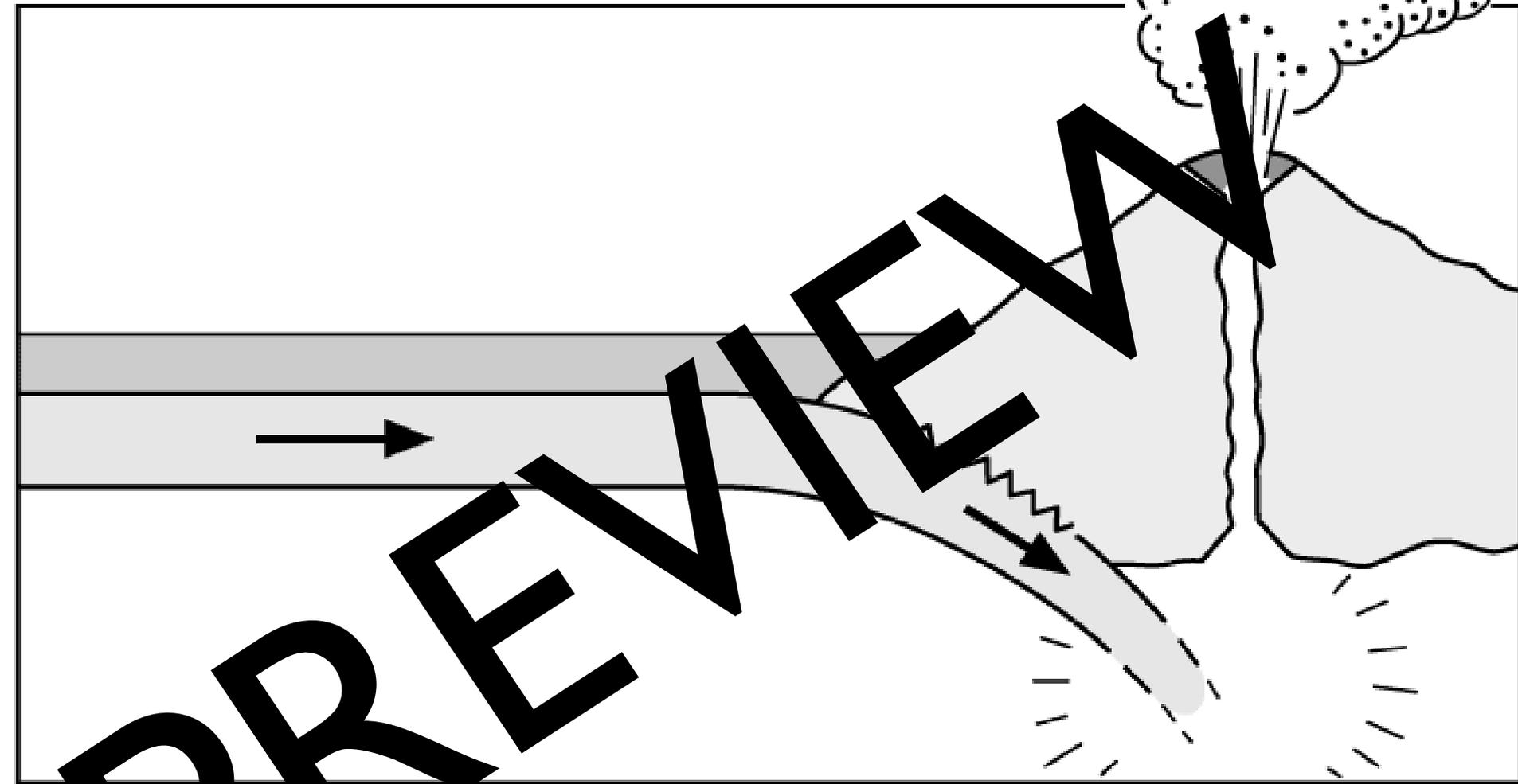


Explain the link between plate boundaries and the global distribution of volcanoes and earthquakes

Plate margins

- There are three types of plate margin
- **Destructive plate margins**
- Where oceanic plate meets a continental plate. The denser oceanic plate is forced down into the mantle and destroyed.
- This often creates volcanoes and ocean trenches.

Destructive margin



Explain what is happening at this plate boundary

Plate margins

There are three types of plate margin

Constructive plate margins

Where two plates are moving away from each other e.g. The mid Atlantic ridge. Magma rises from the mantle to fill the gap, cools and creates new crust.

Constructive margin



Give an example of a constructive plate margin and describe what happens at this type of plate margin.

Plate margins

There are three types of plate margin

Conservative plate margins

Where two plates are moving sideways past each other or are moving in the same direction but at different speeds. E.g. Along the west coast of the USA. Crust is not created or destroyed.

Conservative margin

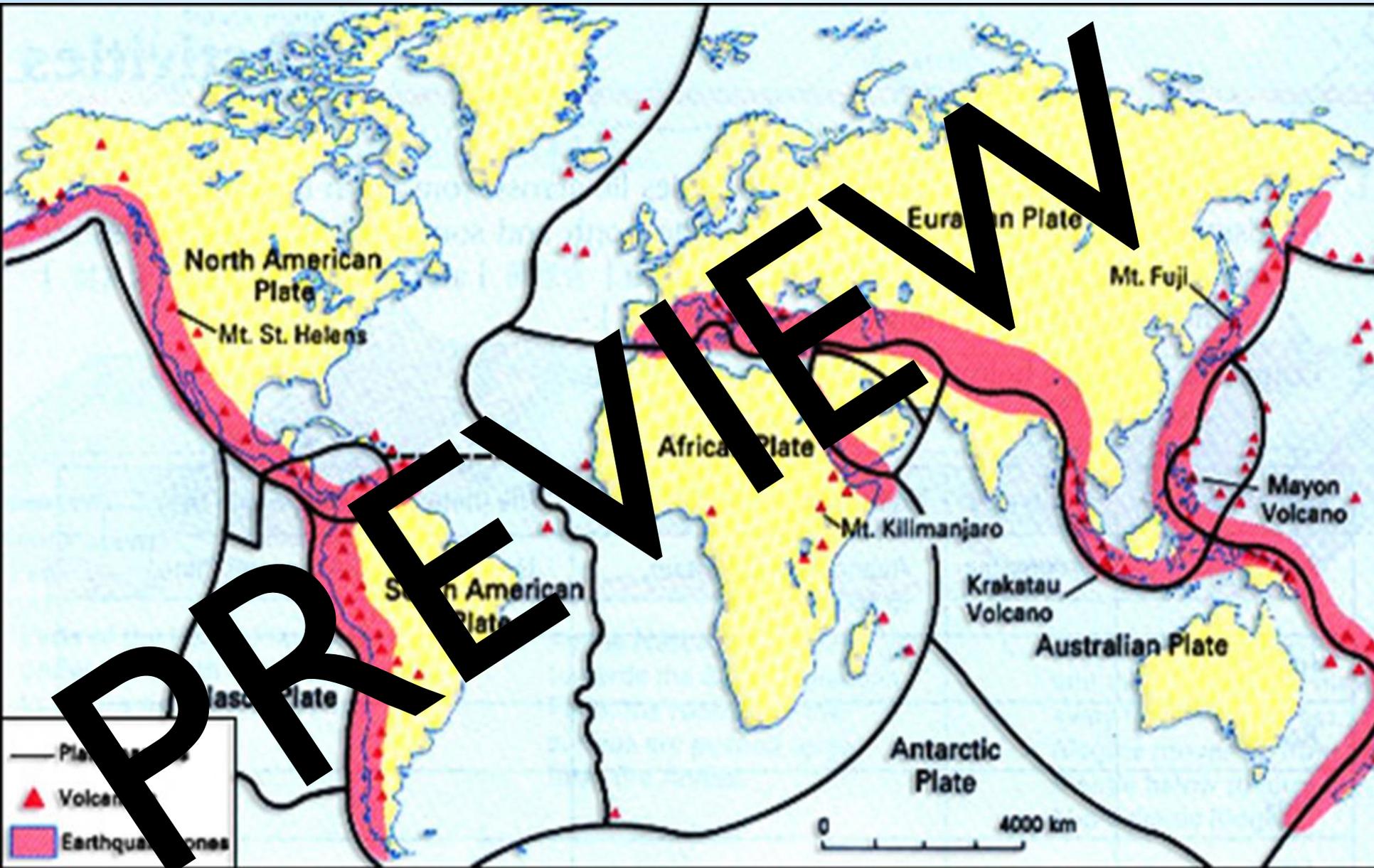


Explain the movement at this plate boundary and its effects

https://www.youtube.com/watch?v=I-HwPR_4mP4

PREVIEW





PREVIEW



RING OF FIRE

PREVIEW

- Kurile trench
- Japan trench
- Izu Ogasawara trench
- Ryukyu trench
- Philippine trench
- Marianas trench
- Challenger Deep
- Boynville trench
- Tonga trench
- Samoa trench
- Java (Sunda) trench
- Aleutian trench
- Mt. St. Helens
- Mt. Fuji
- Mt. Pinatubo
- Mt. Mayon
- Krakatoa
- Challenger Deep
- Equator
- America trench
- Puerto Rico trench
- Peru-Chile trench
- South Sandwich trench

Tasks

- Label the world map with arrows indicating the direction plates are moving
- Label and add an explanation to the 3 plate boundary diagrams



Questions

- 1 – Explain the difference between oceanic and continental crust
- 2 – Complete activity 3 on page 9 – filling out the table
- 3 - Using page 47 complete your blank map with the location of earthquakes and volcanoes
- 4 – Explain the global distribution of volcanoes and earthquakes.
(Hint link to plate boundaries)

What have we learnt today?

Aim

- To understand why earthquakes and volcanoes occur

What we will learn next...

