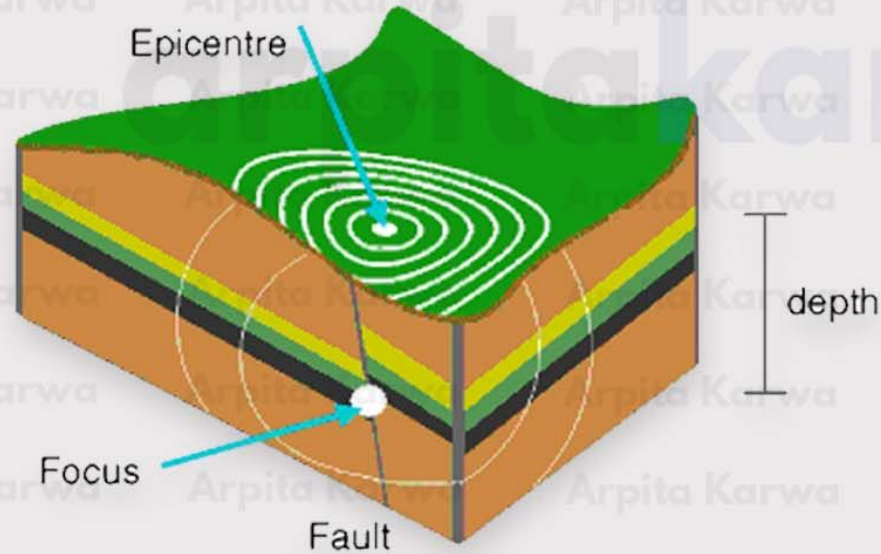


Earthquake, Tsunami & Volcano



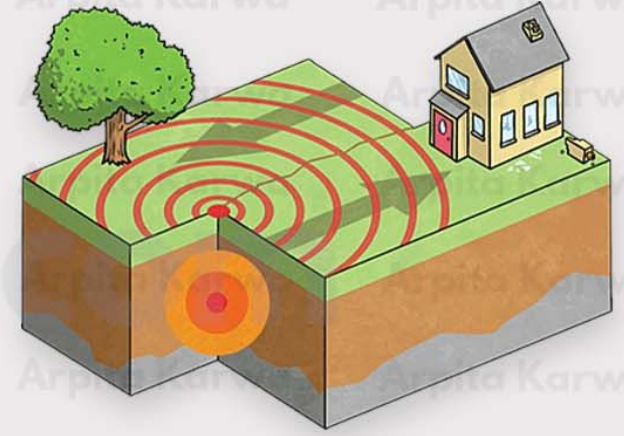
SECTION 1 : EARTHQUAKES

- 1 **Lithosphere:** Earth's crust + Uppermost part of the mantle
- 2 Tectonic plates are located in the lithosphere
- 3



SECTION 1 : EARTHQUAKES

- 4 **Earthquakes:** Tremors produced by the passage of vibratory waves
- 5 Waves produced spread out in all directions in the crust
- 6 **Focus:** Place of origin of the earthquake inside the earth
- 7 **Epicenter:** Point on the earth's surface vertically above the focus
- 8 **Seismic Waves:** Waves generated by an earthquake
Seismology: Science of earthquakes is known as Seismic waves



SECTION 1 : EARTHQUAKES

- 9 Difference between magnitude and intensity of earthquakes:
- a **Magnitude:** Determined by seismograph on Richter scale, developed by Charles Francis Richter (1935)
 - b **Intensity:** Modified Mercalli Scale describes the effects of an earthquake
- 10 Causes of earthquakes:
- a Volcanic Eruptions
 - b Faulting
 - c Plate Tectonics
 - d Anthropogenic factors



SECTION 1 : EARTHQUAKES

11 Environmental effects of an earthquake:

- a Panic
- b Deaths and casualties
- c Breakdown of public health infrastructure and civic services
- d Physical damages
- e Disruption of economic activities



SECTION 1 : EARTHQUAKES

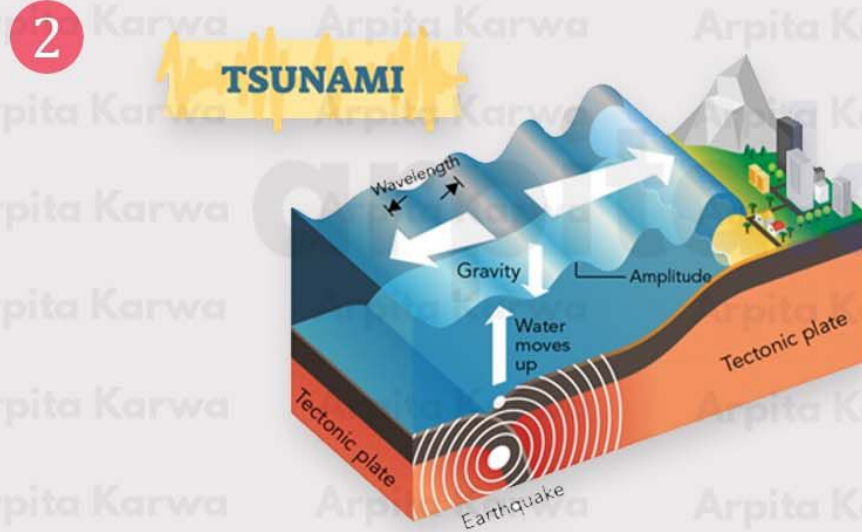
12 Mitigation Strategies:

- a Relief and Rescue
- b Use of Engineered Structures
- c Building Bylaws
- d Public Awareness



SECTION 2 : TSUNAMI

1 **Tsunami:** Ocean wave produced by an earthquake, landslide or volcanic eruption



3 Waves reach very high and travel across the oceans



SECTION 2 : TSUNAMI

4 Formation of Tsunami:

- a Under Sea Earthquakes
- b Landslides
- c Volcanic Eruptions

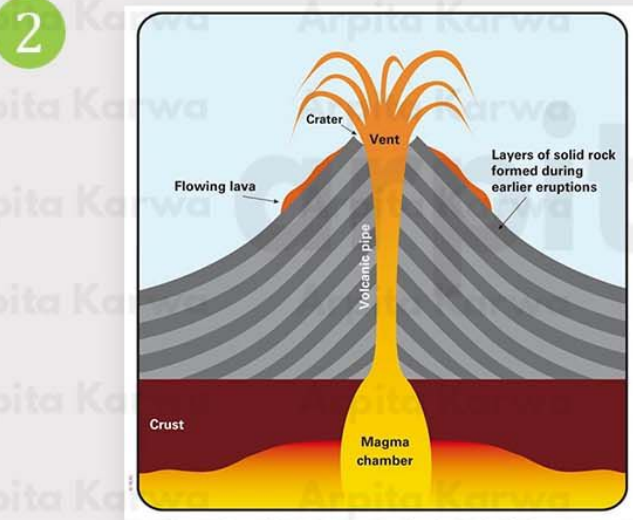
5 Management and mitigation:

- a Leaving the beaches and going to higher grounds
- b Stay away from rivers leading into the oceans
- c Wait before everything is back to normal



SECTION 3 : VOLCANOES

1 **Volcano:** Sudden, violent explosion in the crust through

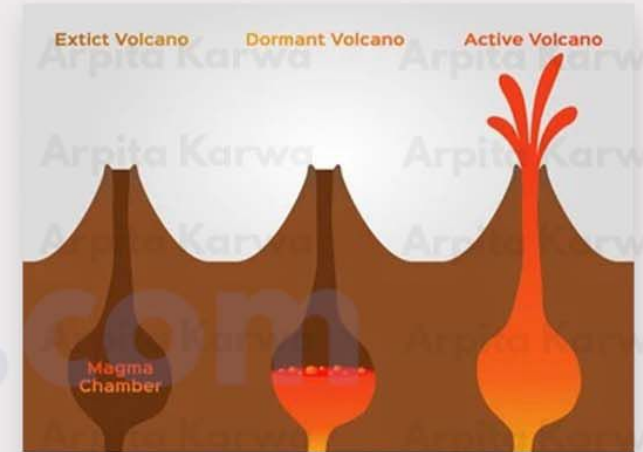


3 Many volcanoes are mountains as a result of this process

SECTION 3 : VOLCANOES

4 Types of Volcanoes:

- a Active volcanoes
- b Dormant volcanoes
- c Extinct volcanoes
- d Composite Volcanoes



SECTION 3 : VOLCANOES

- 5 A volcanic eruption can:
- a Contaminate water supplies
 - b Damage machinery
 - c Reduce visibility through smog and harmful gases that may threaten low-lying areas.
 - d Make it hard to breathe and irritate the skin, eyes,

