Class 7a:
Volcanoes
Volcanism

- *Vulcanism*: origin and movement of molten rock
- *Volcanism*: extrusive activity
Volcanism

• About 1300 worldwide
Geography of volcanism

• Sea-floor spreading and rift zones

• Subduction zones

• Hot spots
Styles of eruption

- Based on chemistry

- Also viscosity (thickness)
**Effusive eruptions**

- At hot spots or sea-floor spreading
Effusive eruptions

• *Shield* volcanoes
Explosive eruptions

- Along subduction zones
Explosive eruptions

• *Composite* volcanoes
• **Caldera**: volcano collapses on top of empty magma chamber
Predicting eruptions