

# Class 7a: Volcanoes

# Volcanism

- *Volcanism*: 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

- *Caldera*: volcano collapses on top of empty magma chamber

# Predicting eruptions