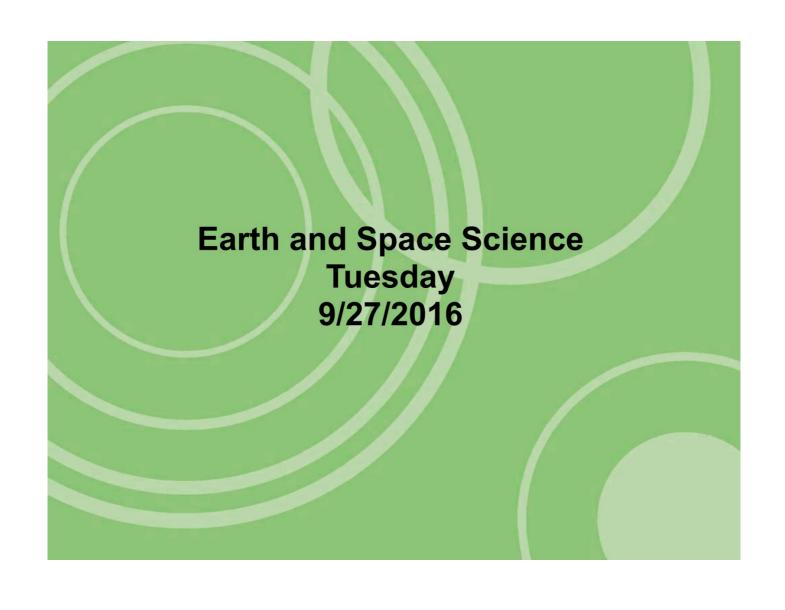


POP QUIZ! Clear your desk!





VOLCANOES!

How They Form

- Volcanoes form in subduction zones, and over hot spots on the Earth's crust.
- Sometimes the Volcano moves, when the crust moves, and the volcano stops being active. A new volcano forms over the hot spot.
- Can you think of some famous volcanoes?

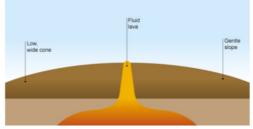
• http://video.nationalgeographic.com/video/101- videos/volcanoes-101



 http://www.history.com/this-day-in-history/eruptionof-mount-vesuvius-begins

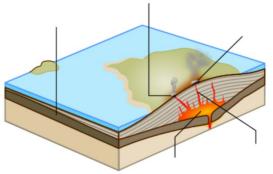


- There are 4 types of volcanoes.
 - · Shield volcanoes:



 They are broad, dome-like volcanoes that can grow to over 60 miles wide. Instead of violent, explosive eruptions they usually have steady lava fountains and flows that broaden the size of the volcano.

Shield Volcanoes



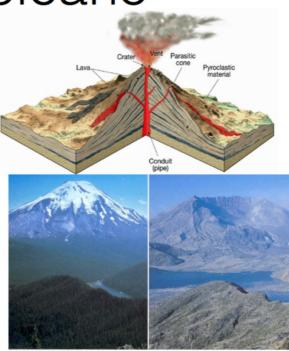
 The Hawaiian volcanoes are shield volcanoes. For example, the Mauna Loa Volcano.



- Type number 2: Stratovolcanoes
 - They are the most violent type of volcano. Their slopes rise slowly at first and then become very steep with a narrow vent at the top and often have explosive eruptions, and then go dormant for decades or even centuries.

Stratovolcano

- Mt. St. Helens, in the United States Pacific Northwest, is a Stratovolcano.
 - The picture shows Mt.
 St. Helens before and after its famous eruption on May 18th 1980.
 - http://www.history.com/ topics/us-states/ washington/videos/ mount-st-helens-erupts



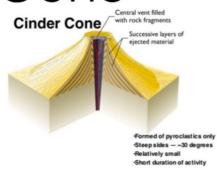




- Type #3:
 - · Scoria cone.
 - This type of volcano can appear suddenly and build a large conic-shaped mountain with steep slopes. They often erupt for less than a decade, then go dormant and never erupt again.

Scoria Cone

- They are usually relatively small
- · Have steep sides
- Have activity within a short amount of time, and then become dormant.
- - https:// www.youtube.com/ watch?v=VImqiFWRWZ4



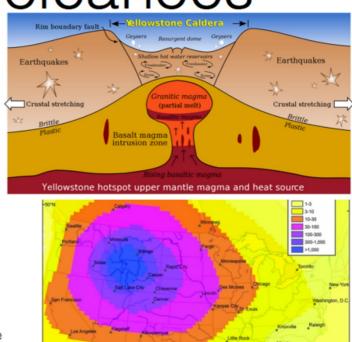


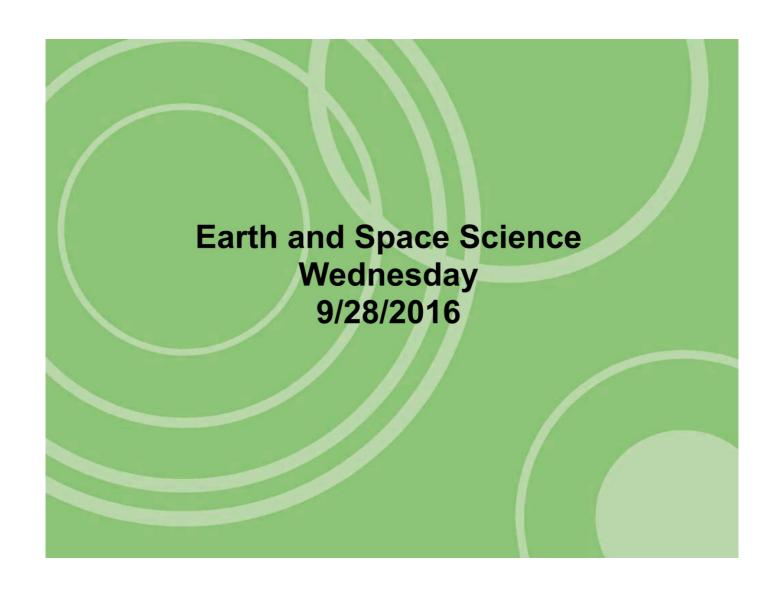
- Type #4 Super Volcanoes
 - Scientists sometimes omit this type.
 - A supervolcano is any volcano capable of producing a volcanic eruption that ejects mass greater than 10,000,000,000,000,000 kg.
 - They can also form at convergent plate boundaries (for example, Toba). Large igneous provinces can cover huge areas with lava and volcanic ash, causing long-lasting climate change (such as the triggering of a small ice age or global warming), which can threaten species with extinction.

Super Volcanoes

■USGS

- they can occur when magma in the mantle rises into the crust from a hotspot but is unable to break through the crust, and pressure builds in a large and growing magma pool until the crust is unable to contain the pressure (this is the case for the Yellowstone Caldera).
- They can also form at convergent plate boundaries (for example, Toba). An eruption can cover huge areas with lava and volcanic ash, causing long-lasting climate change (such as the triggering of a small ice age or global warming), which can threaten species with extinction.
- There are 6 known super volcanoes in the world, 3 of which are in the United States. One in New Mexico, Yellowstone, and Big Bear, California.
- Only one is about the size of Yellowstone, and it is in Indonesia.





California

- Today we are going to take a look at California Geology.
 - We know a little about the San Andreas fault, but what about the Sierra Nevada mountains? How did they form? What about farther north?



- https://www.youtube.com/watch?v=2TSTVCIZ-
- There is also more information in our textbook!



Today we are going to take a look at the text to gather more information about volcanoes.

