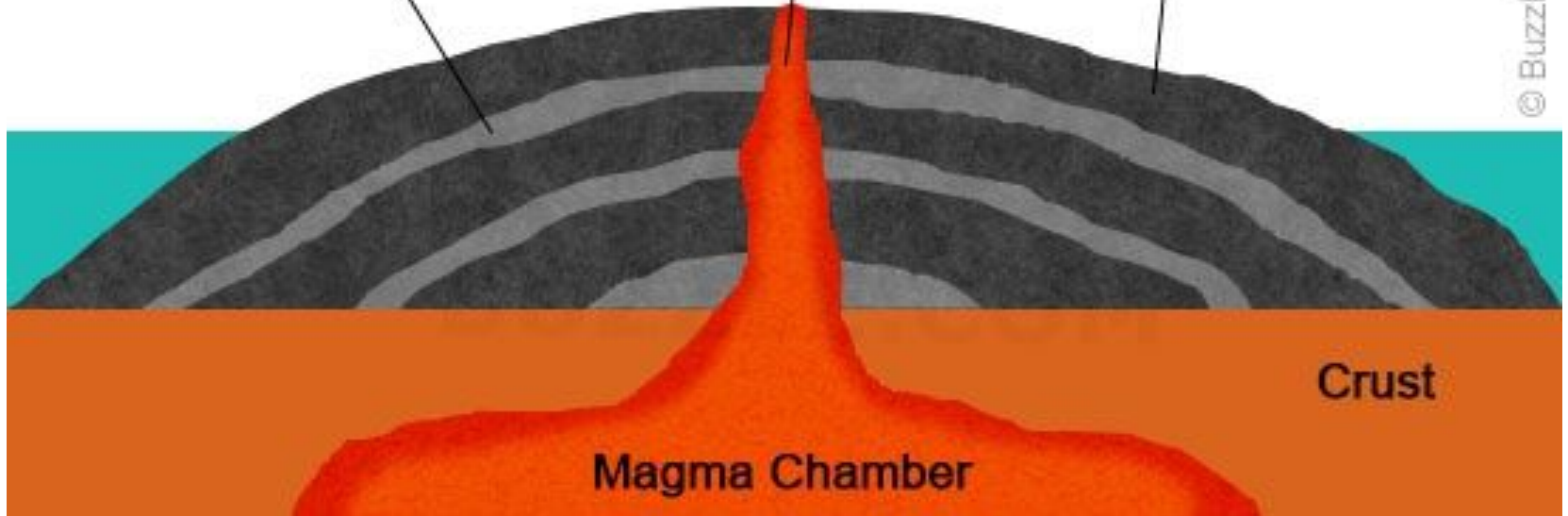


Experiment #1: Modeling a Shield Volcano

Formed through
gentle lava eruptions

Vent

Solid Lava layers



Crust

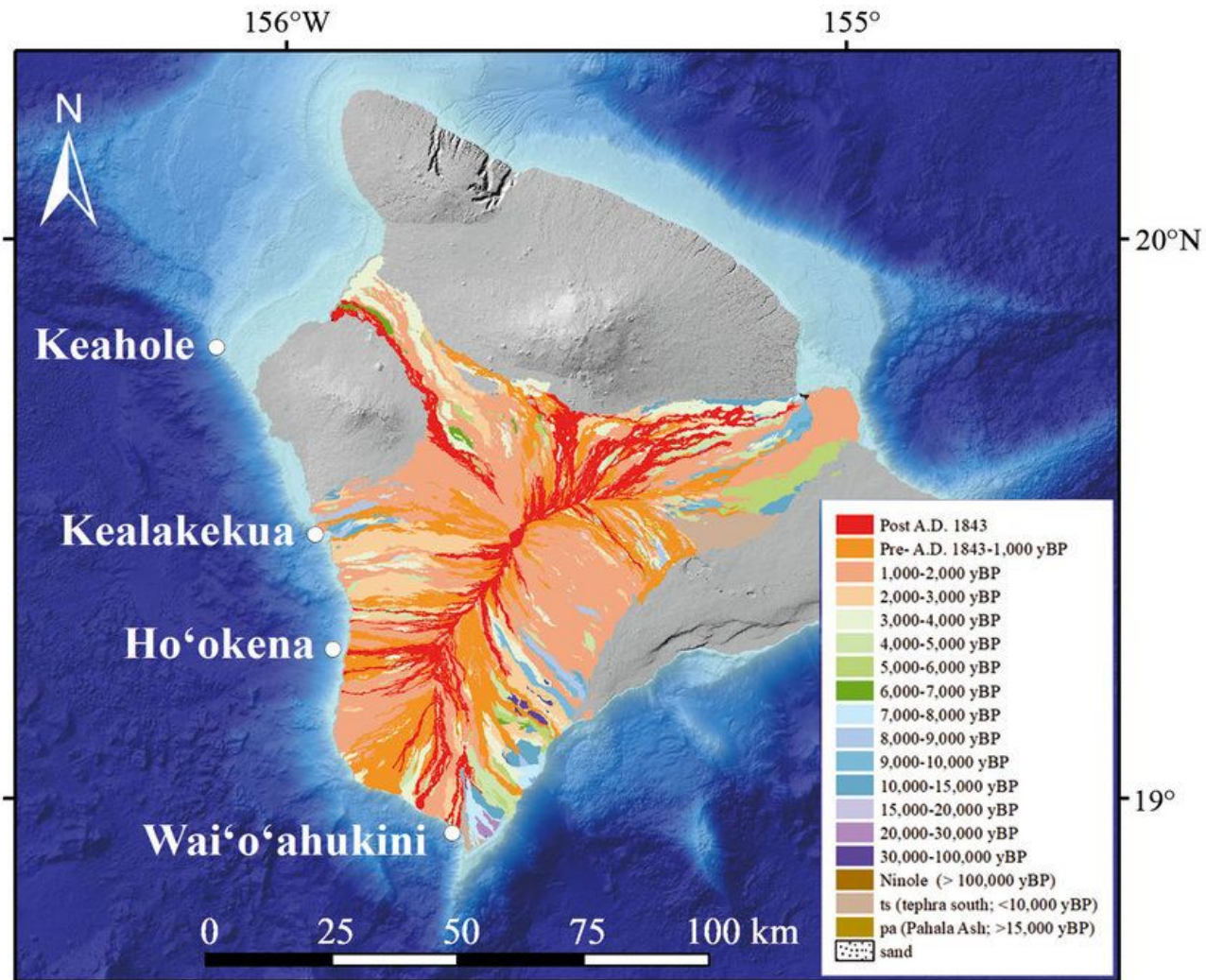
Magma Chamber

Experiment #1

1. Create your “**vent**” using the Dixie cup. Place it the middle of the cardboard and trace a circle. Be sure to also trace a circle on your graph paper.
2. Place a spoonful of baking soda in the “vent”
3. Slowly pour in a small amount of vinegar
 - amounts are trial/error, add enough to get an eruption that leaves the vent
4. When eruption stops, quickly draw around the flow edge
5. Wipe up the fluid with paper towels
6. Use a thin layer of one color of dough to cover the entire area where “lava” flowed
7. Record the lava flow using the same color of crayon
8. Repeat above steps for each dough color. Make sure to empty the vent (leftover baking soda) into one of your Dixie cups

Real life example of
a lava flow map:

Mauna Loa Hawai'i

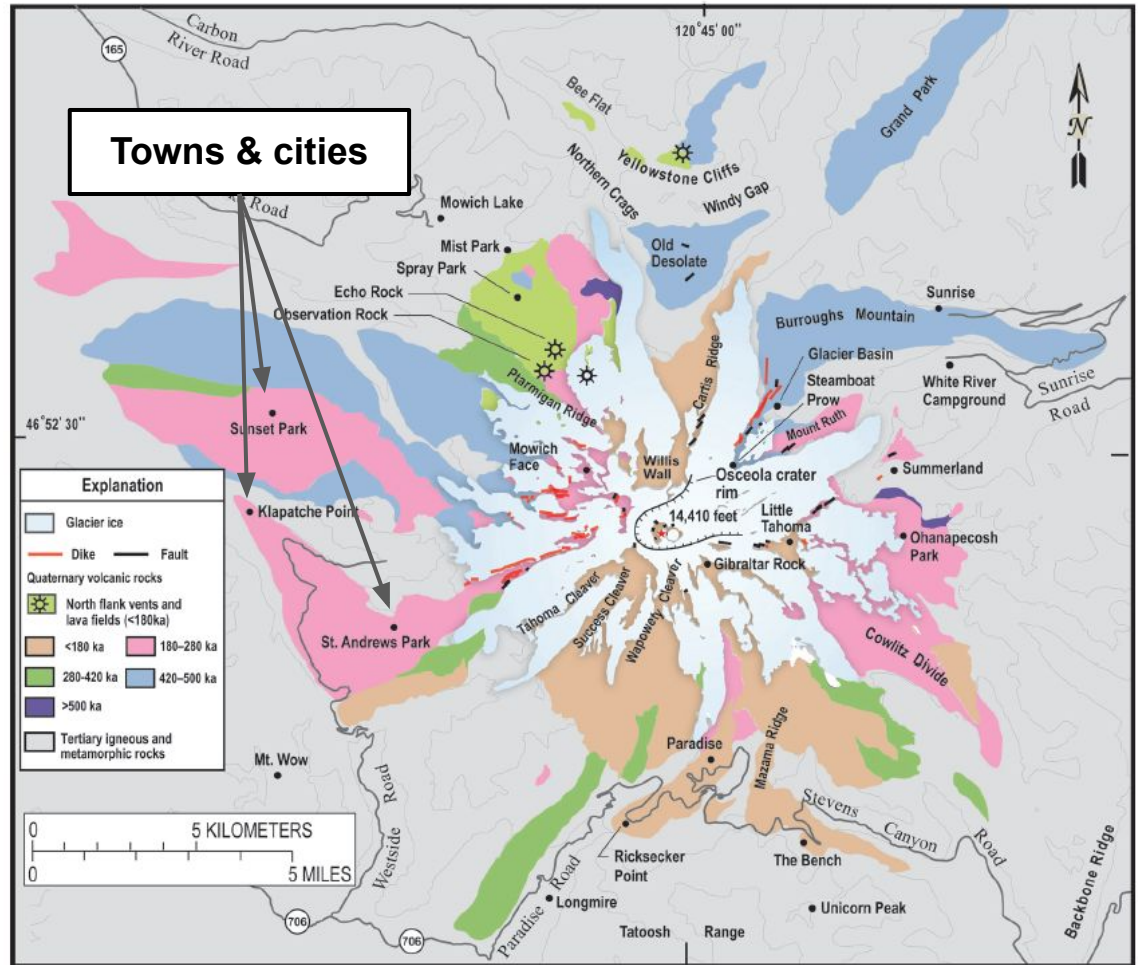


Real life example of a
lava flow map:

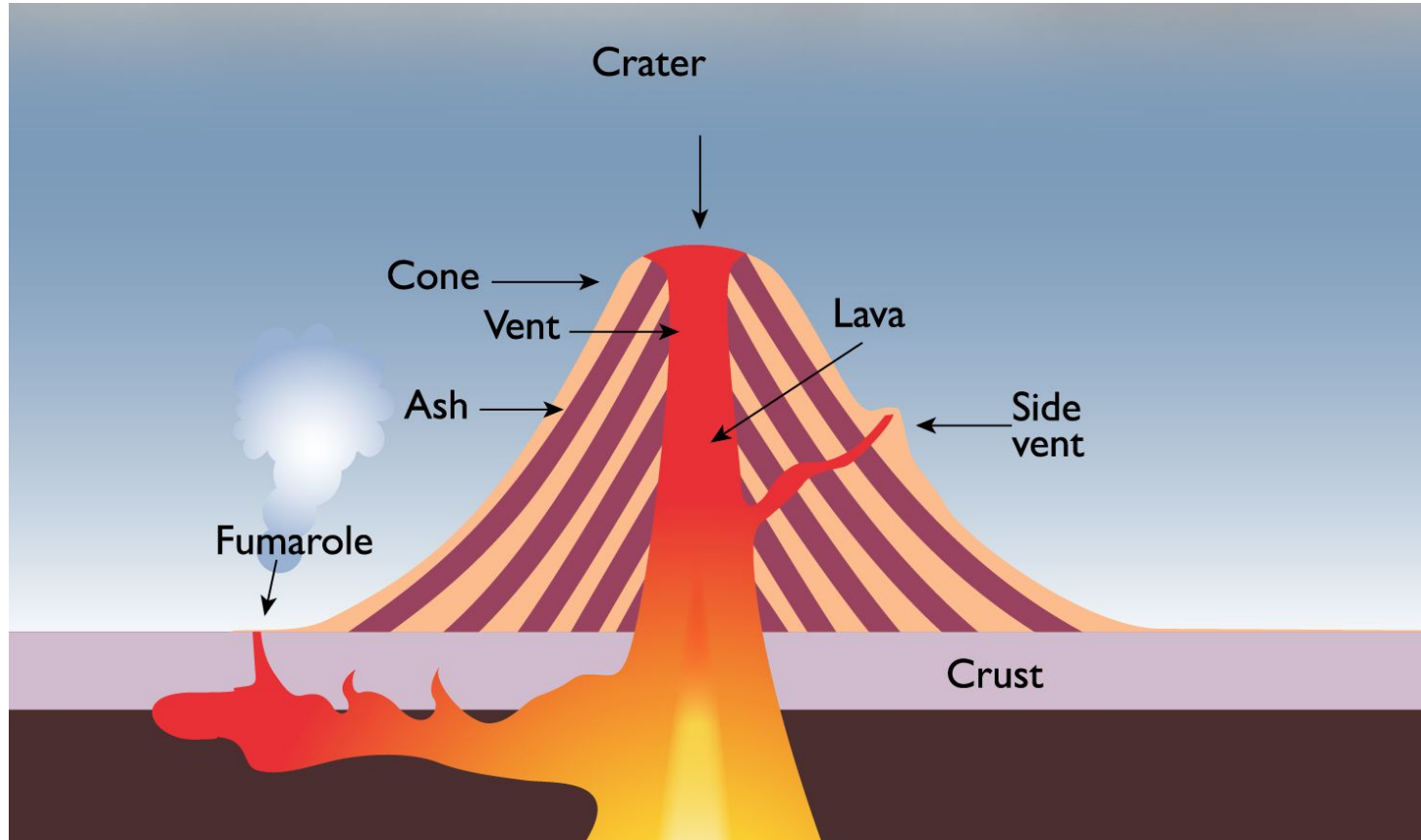
Mt. Rainier
(Mt. Tahoma)

Why is it important to study
the history of **lava** flows?

(hint: how will this
information help towns and
cities in future eruptions?)



Experiment #2: Modeling a Stratovolcano

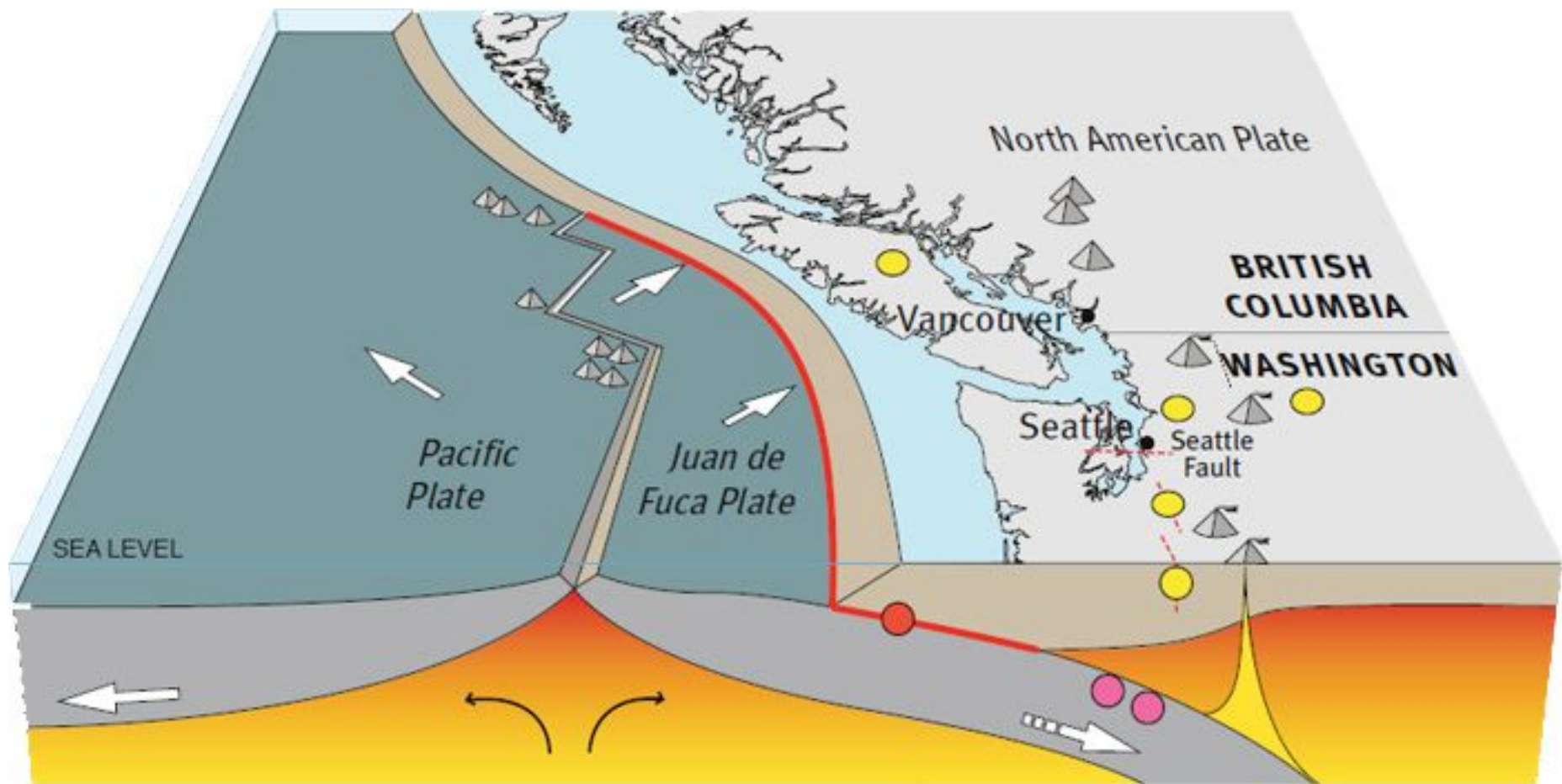


Experiment #2

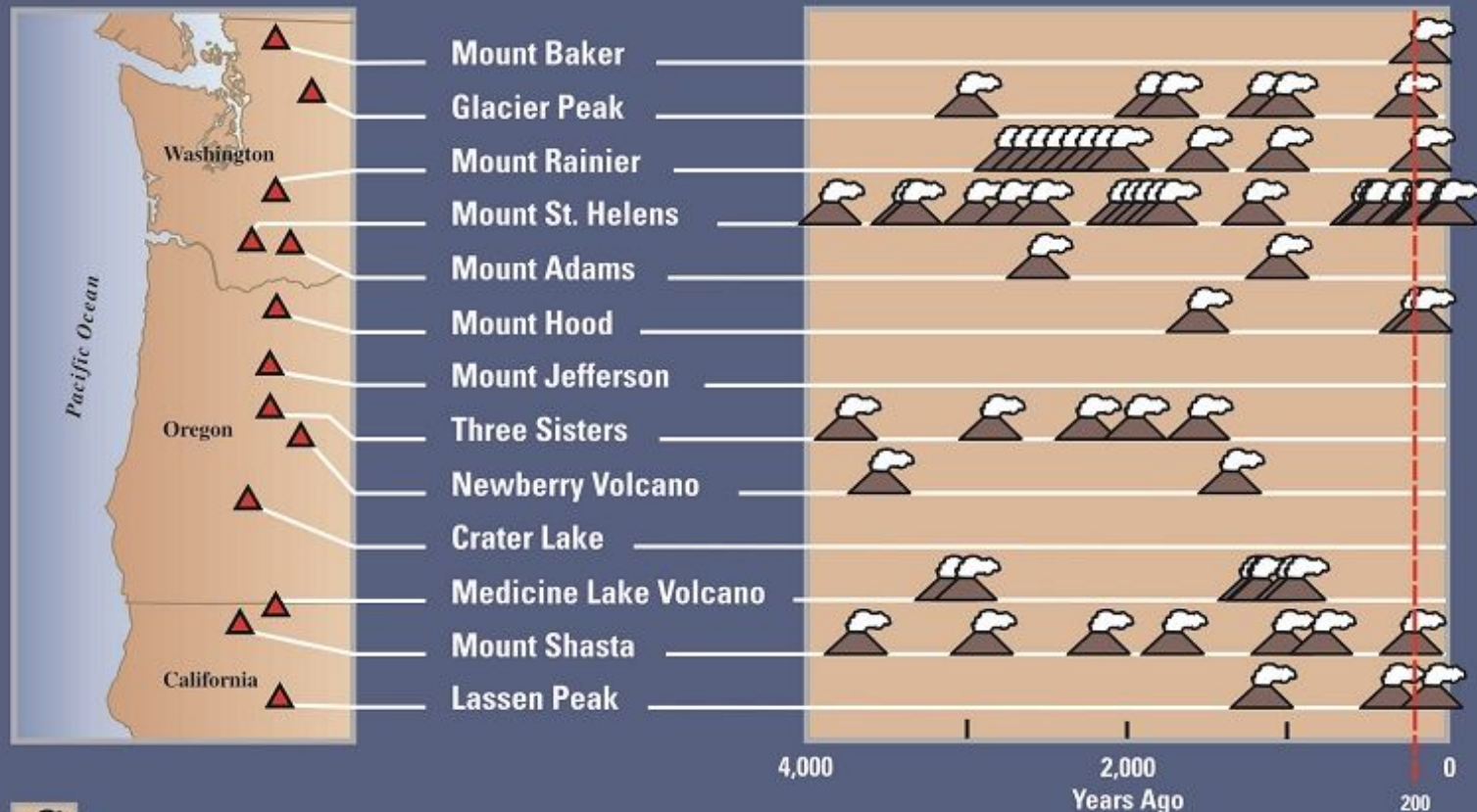
1. Pour leftover vinegar into a clean Dixie cup
2. Rinse out your bottle with water (be sure to empty as much water as possible)
3. Pour the remaining amount of baking soda into your clean bottle
4. Build your “stratovolcano” by covering the bottle with leftover playdoh
5. Place your volcano in the middle of the pan
6. Add vinegar to your volcano and watch it erupt!

Mt. Rainier (Mt. Tahoma)





Eruptions in the Cascade Range During the Past 4,000 Years



Eruption or period of multiple eruptions at or near named volcano

Extra slides

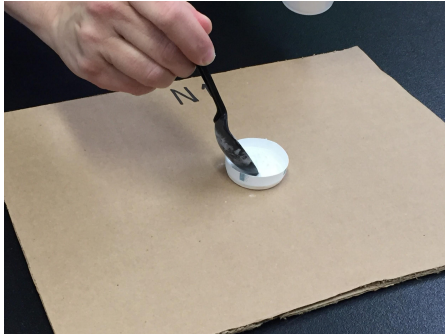
Mauna Loa



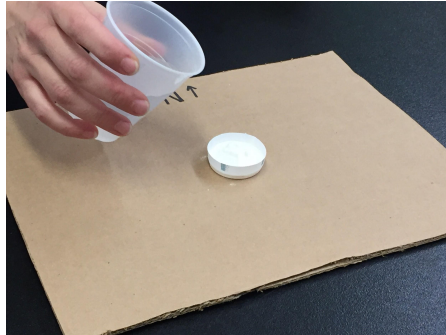
Mt. Rainier (Mt. Tahoma)



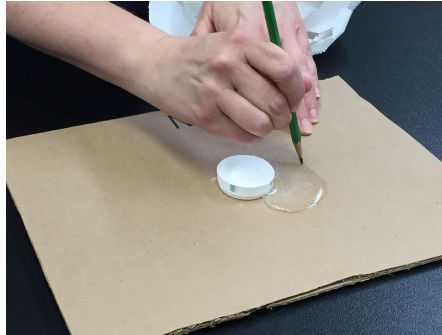
Spoonful of
baking soda



A little bit of
vinegar



Trace the outline
of the eruption



Dry your volcano;
fill the boundary
with playdoh

