

Please take out a piece of paper and answer the questions below.
You'll be turning it in 😊

What's your name....

1. What is your favorite thing to have for breakfast?
2. What color would your dream car be painted? Why?
3. What is your favorite hobby?
4. How many siblings do you have and what number are you?
5. Describe your perfect vacation destination.

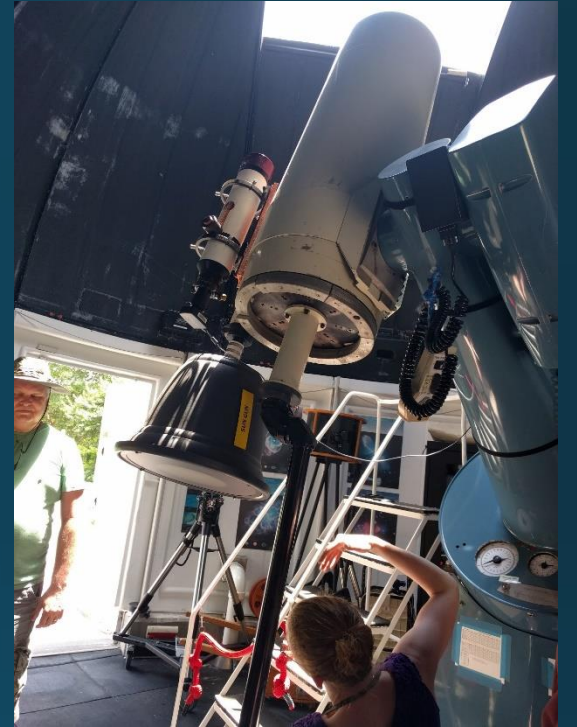
Mr. Hammer

- Yes, like the tool
- BYU
- BS – Physical Science Education
- Minor - Astronomy



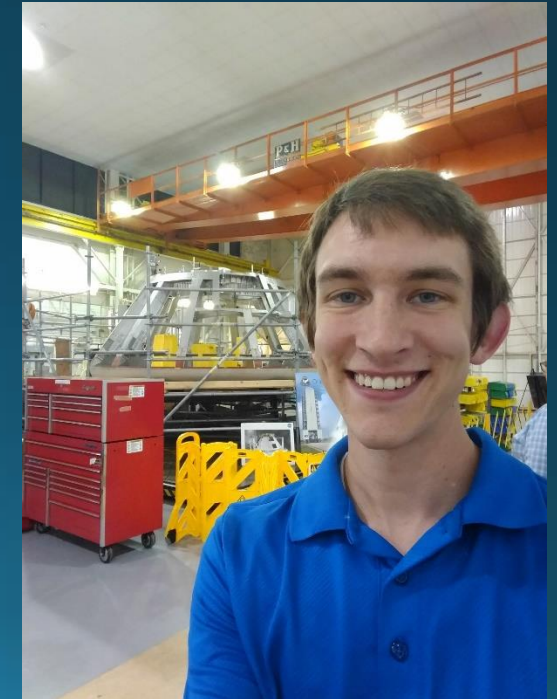
Mr. Hammer

National Air and Space Museum –
Summer 2016



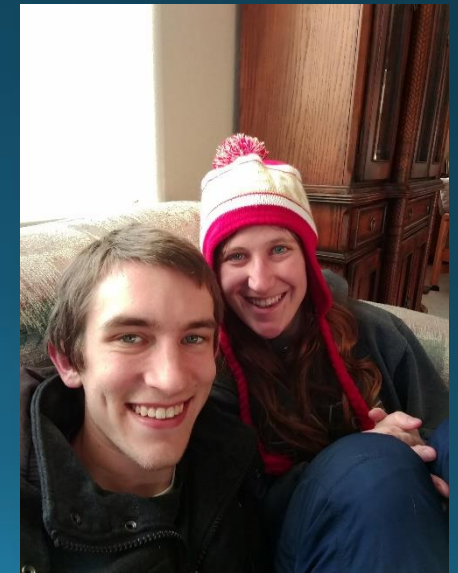
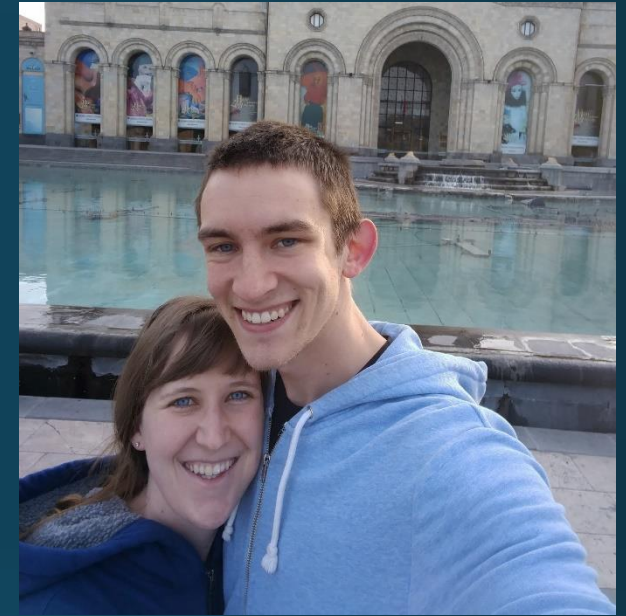
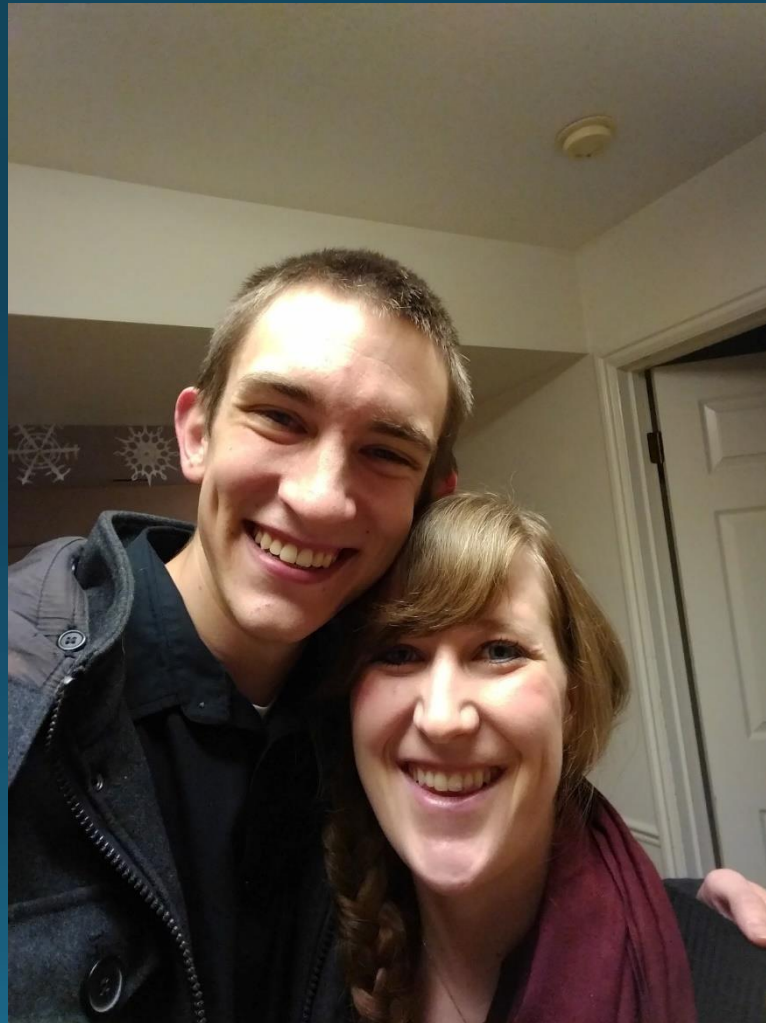
Mr. Hammer

NASA – Summer 2017



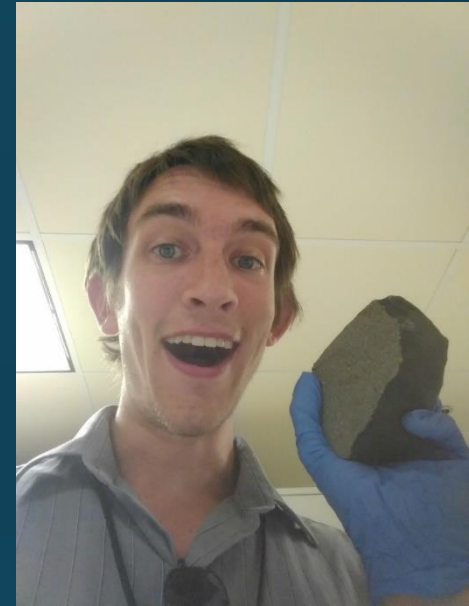
Mr. Hammer

Jill!
Married since
2014

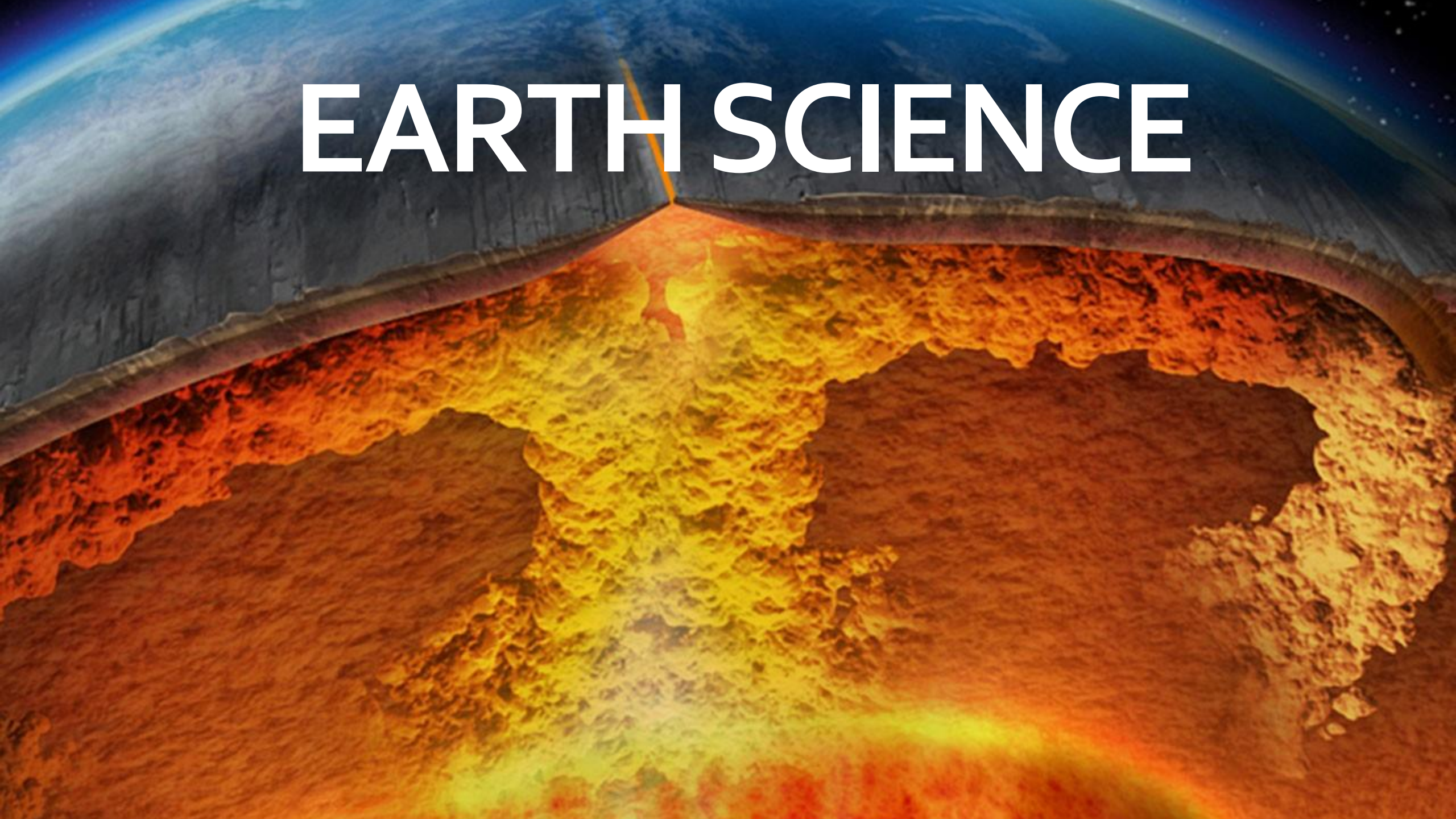


My Interests

- SPACE!
- ROCKS!
- SPACE ROCKS!
- Traveling
- Trombone
- Air Force
- Jill 😊



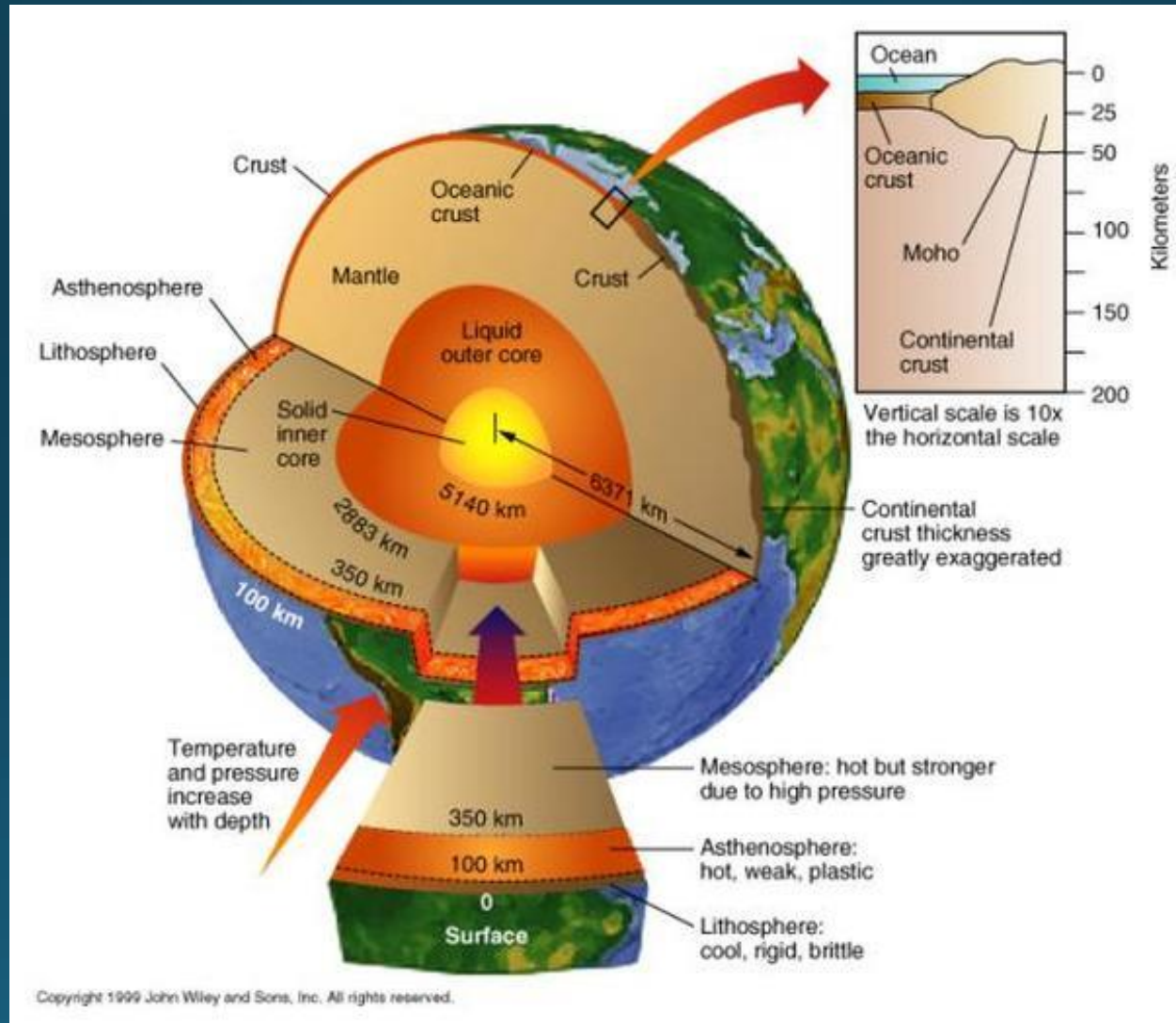
EARTH SCIENCE



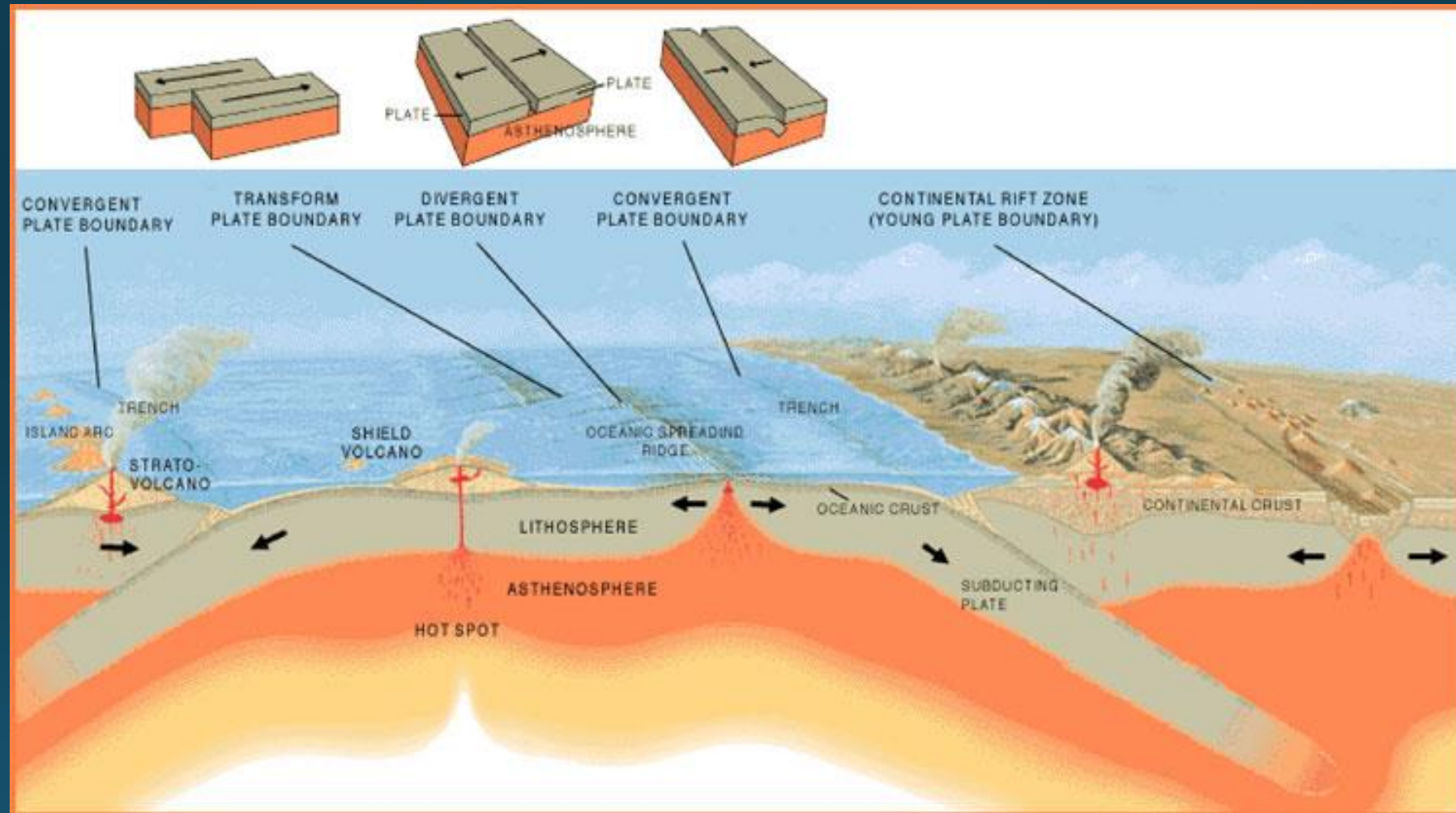
What do you see?



Lithosphere (Rock – sphere)



Lithosphere (Rock – sphere)



Hydrosphere



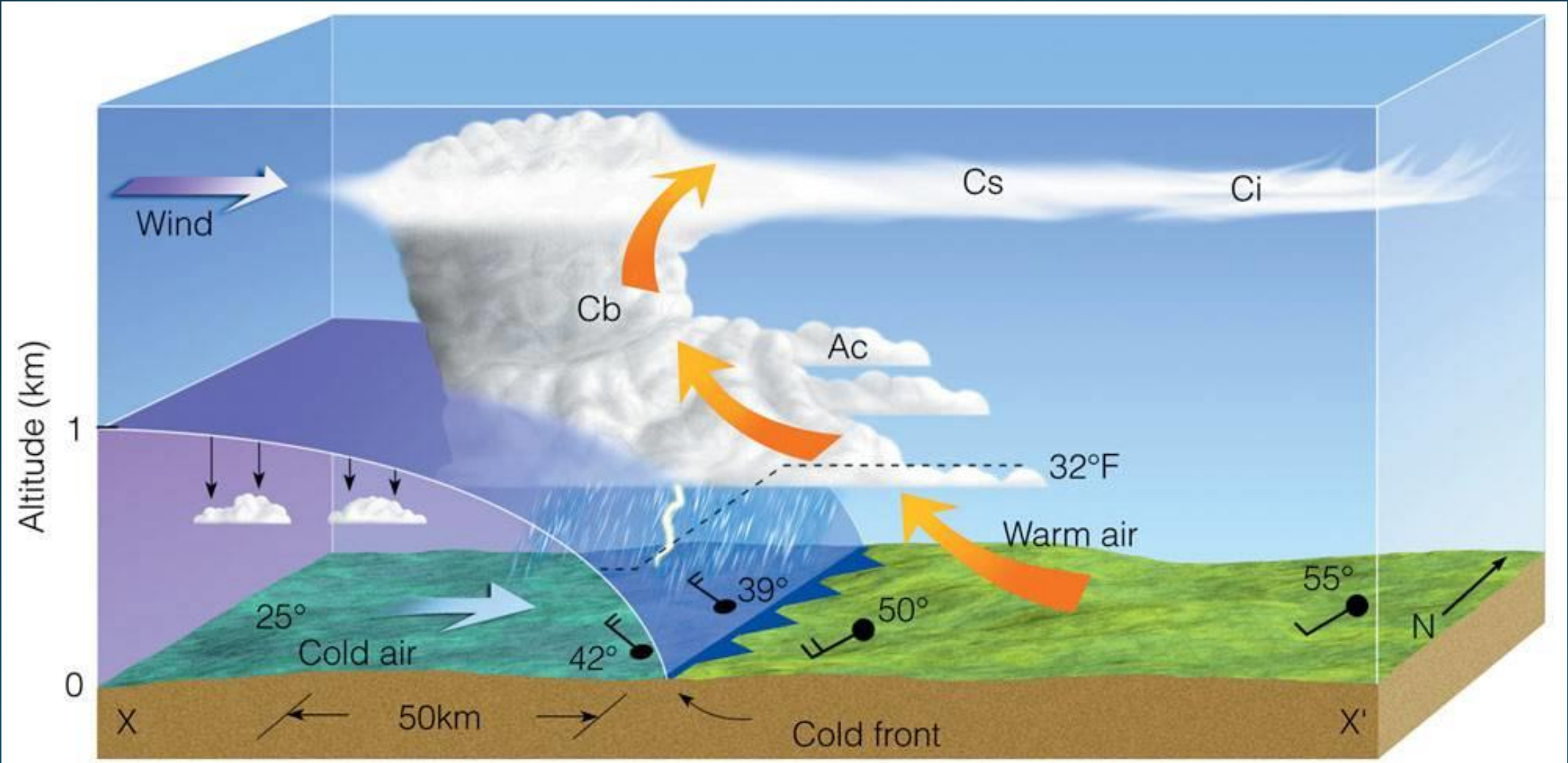
Hydrosphere



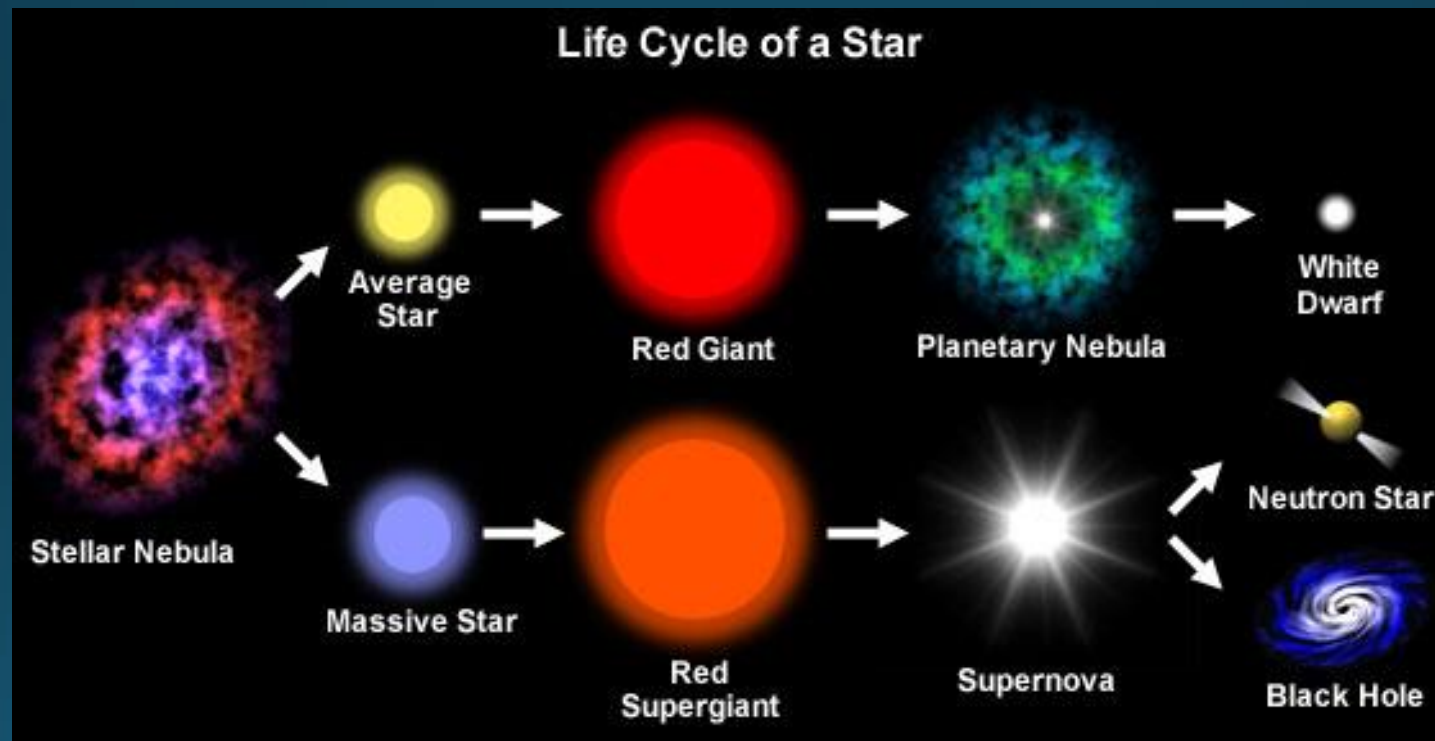
Atmosphere



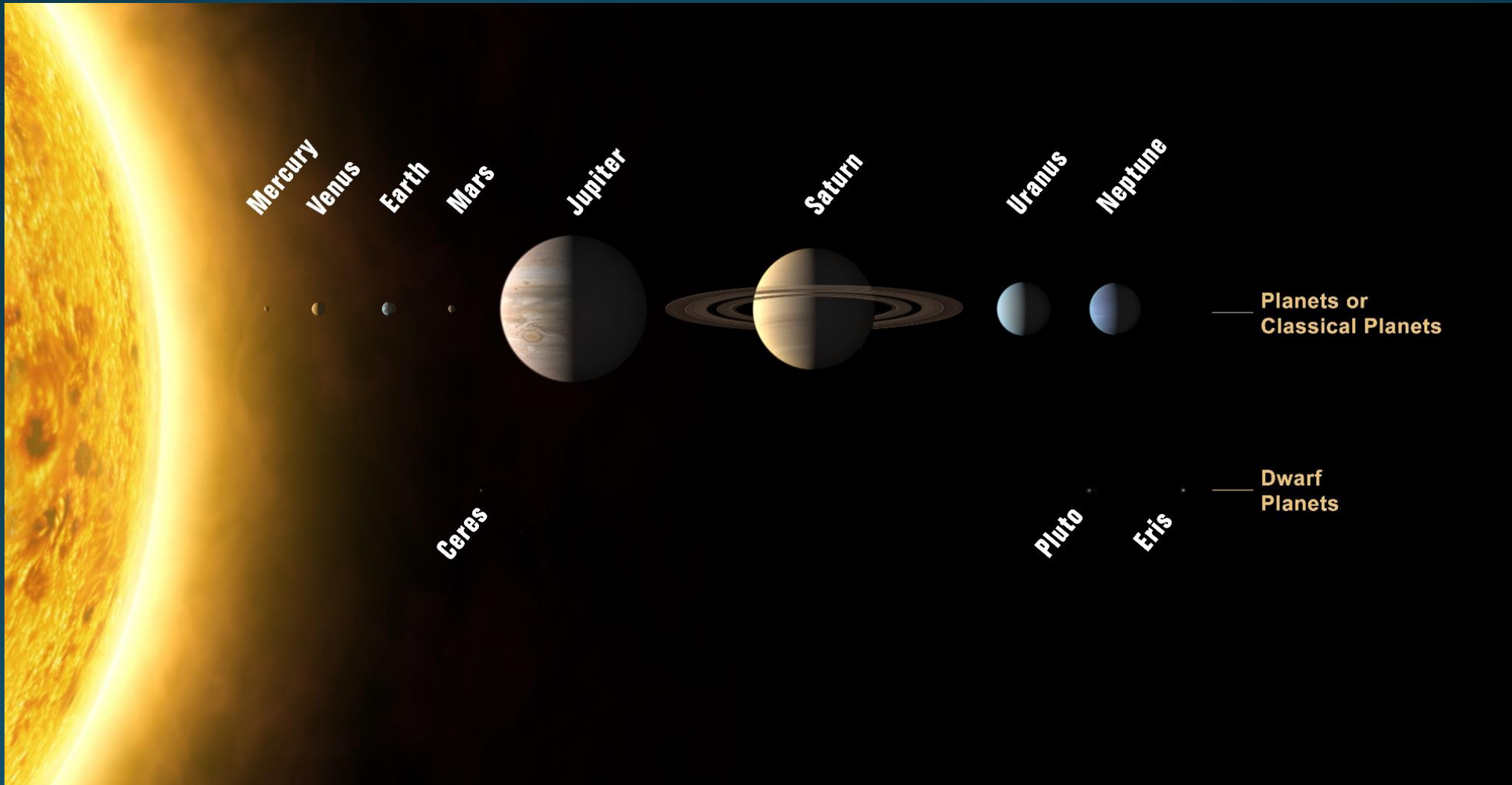
Atmosphere



Celestial Sphere



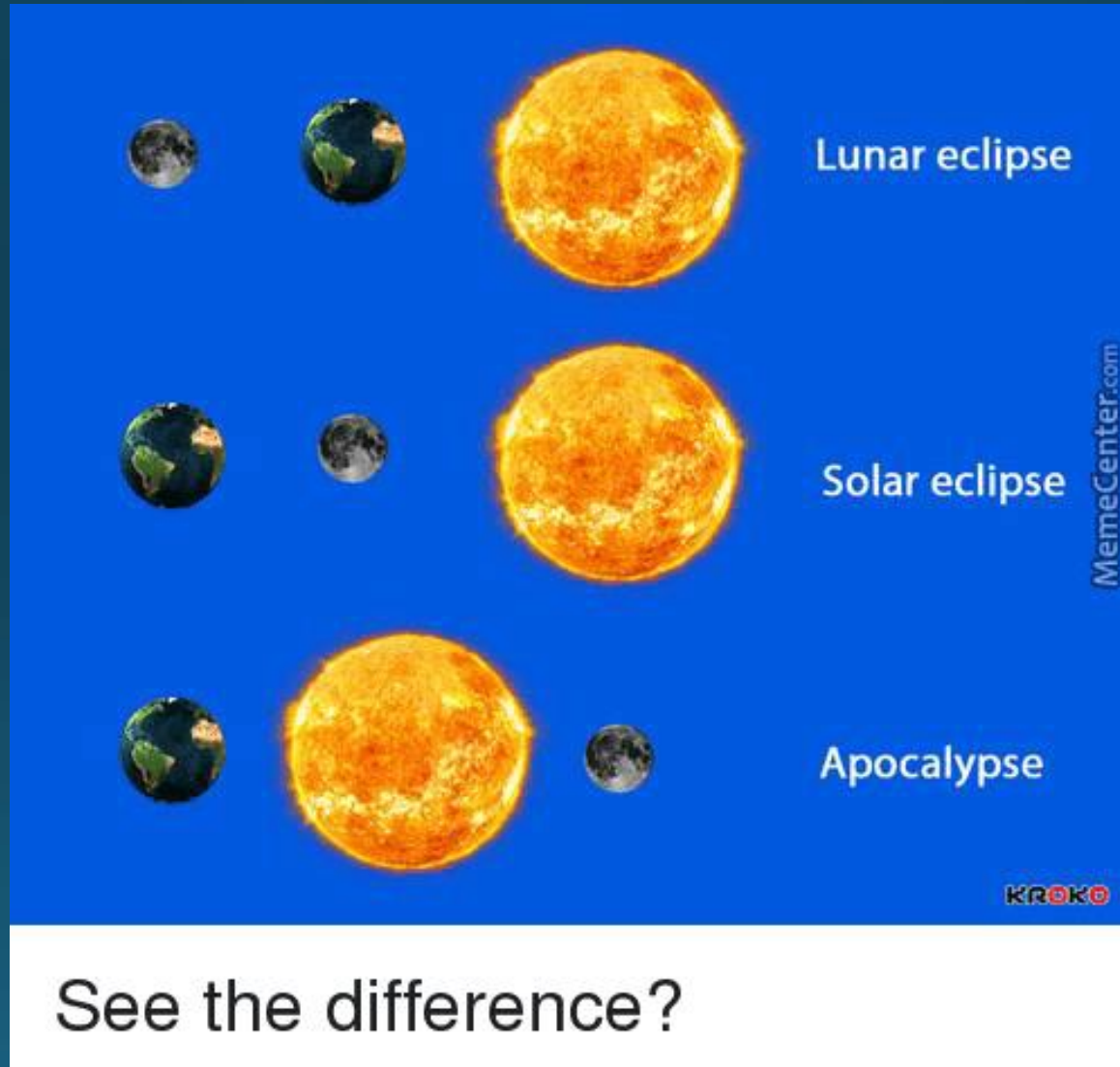
Celestial Sphere



WHY?

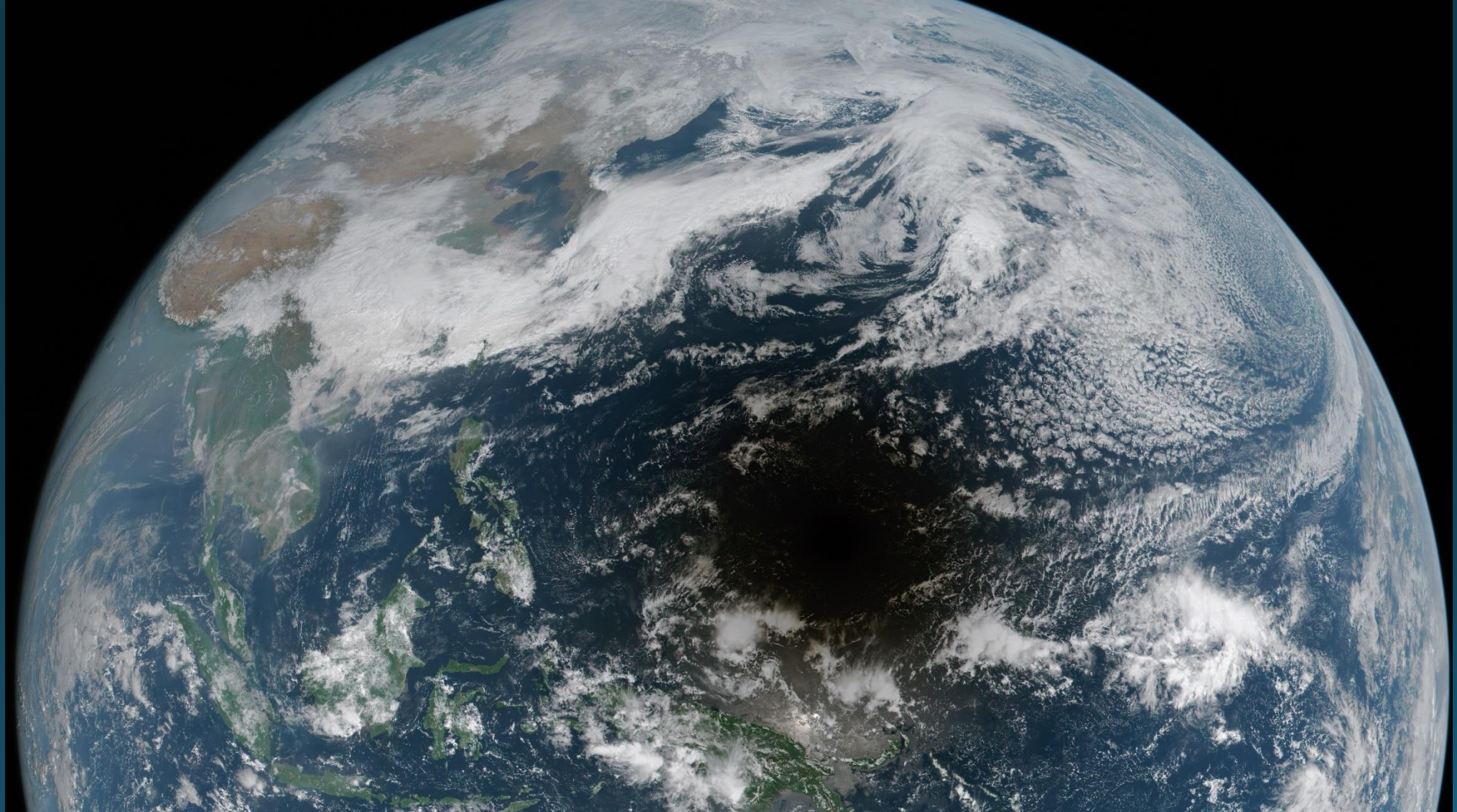
IT'S AWESOME!

Eclipse – Celestial Sphere



See the difference?

Eclipse – What?



Why don't we have eclipses every month?

- <https://www.youtube.com/watch?v=jnphul7hyeM>

Aurora Borealis (Atmosphere)

Northern Lights!



Why do the Northern Lights happen?

<https://www.youtube.com/watch?v=knwiWm4DpvQ>

Halocline – Mexico (Hydrosphere)

<https://www.youtube.com/watch?v=dHn8of3IAUs>

What's happening?



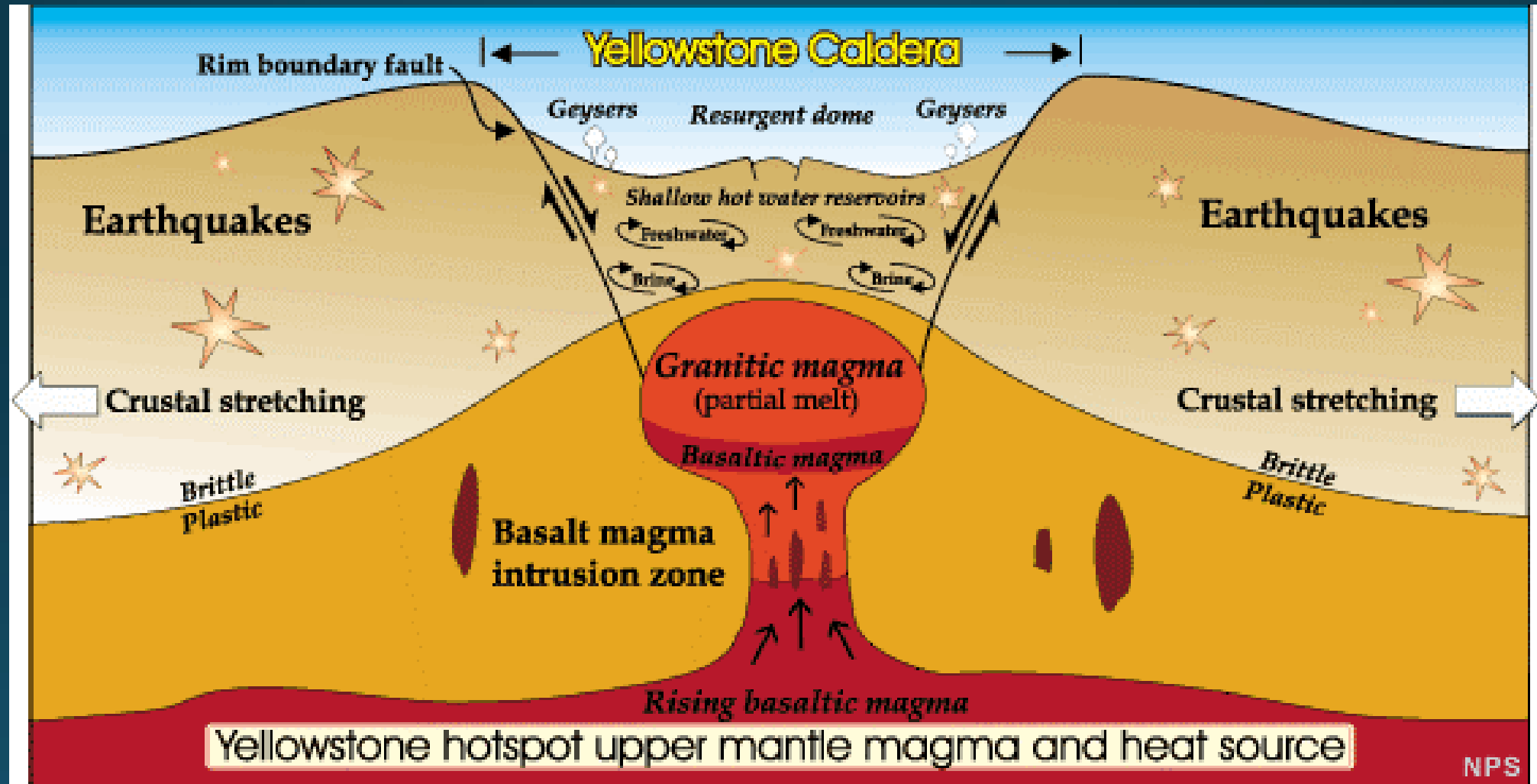
Brazil – Meeting of waters



Yellowstone - Lithosphere

https://www.youtube.com/watch?v=AKoFNgbrF_Y

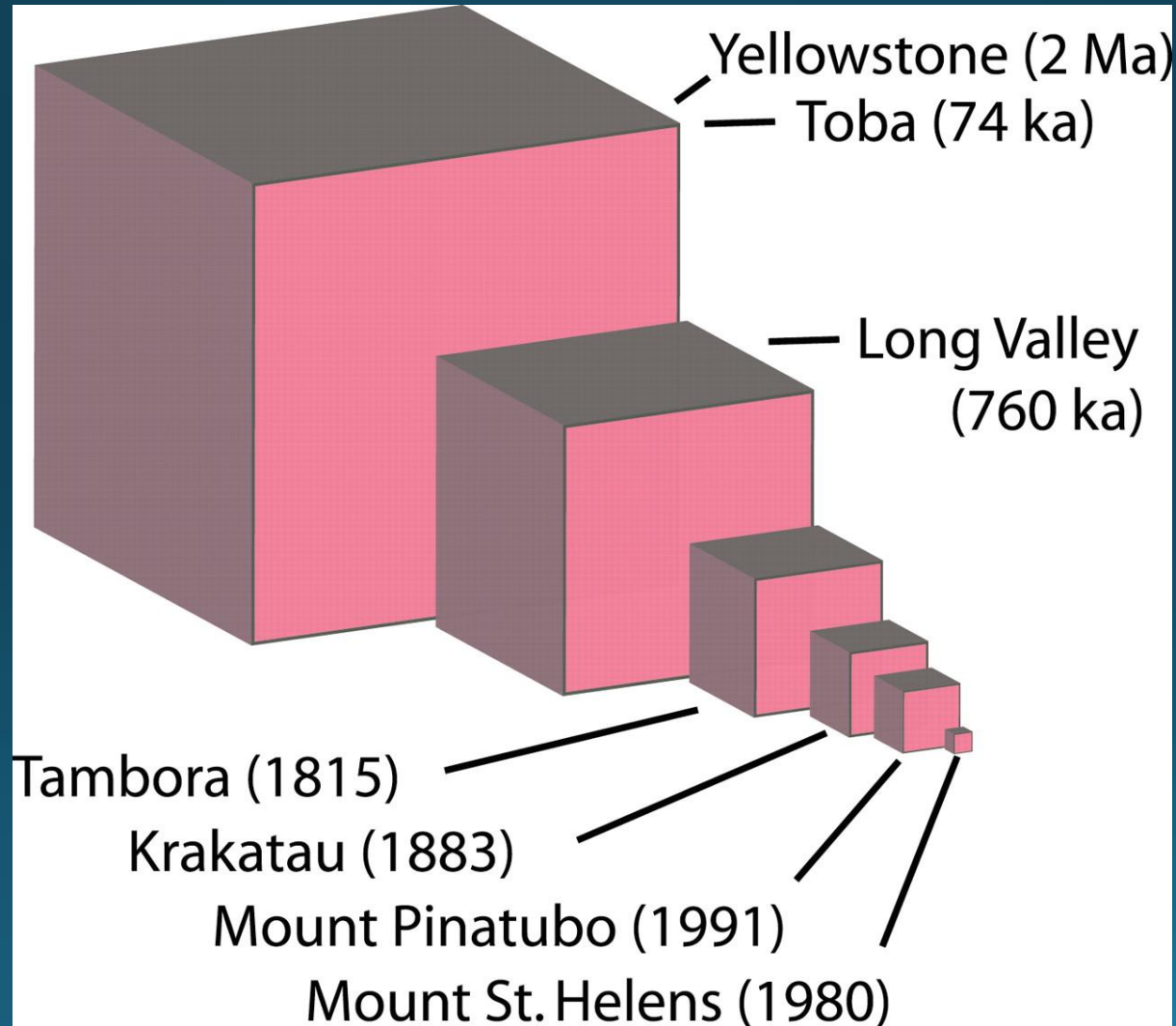
Yellowstone – How?



What if?

<https://www.youtube.com/watch?v=d3cTKvfL4NA>

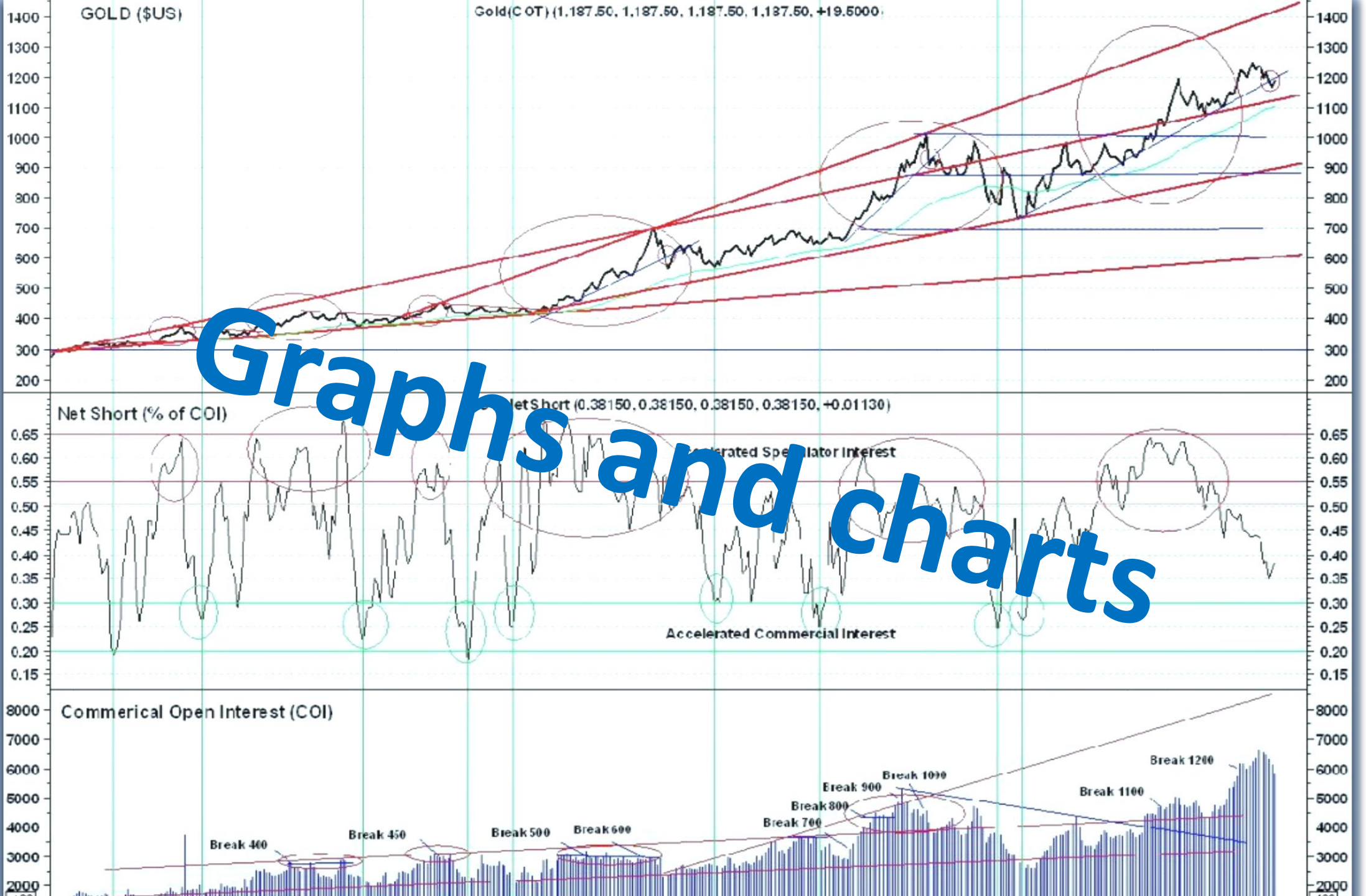
How big you say?



Mt. St. Helens

<https://www.youtube.com/watch?v=UK--hvgP2uY&t=10s>

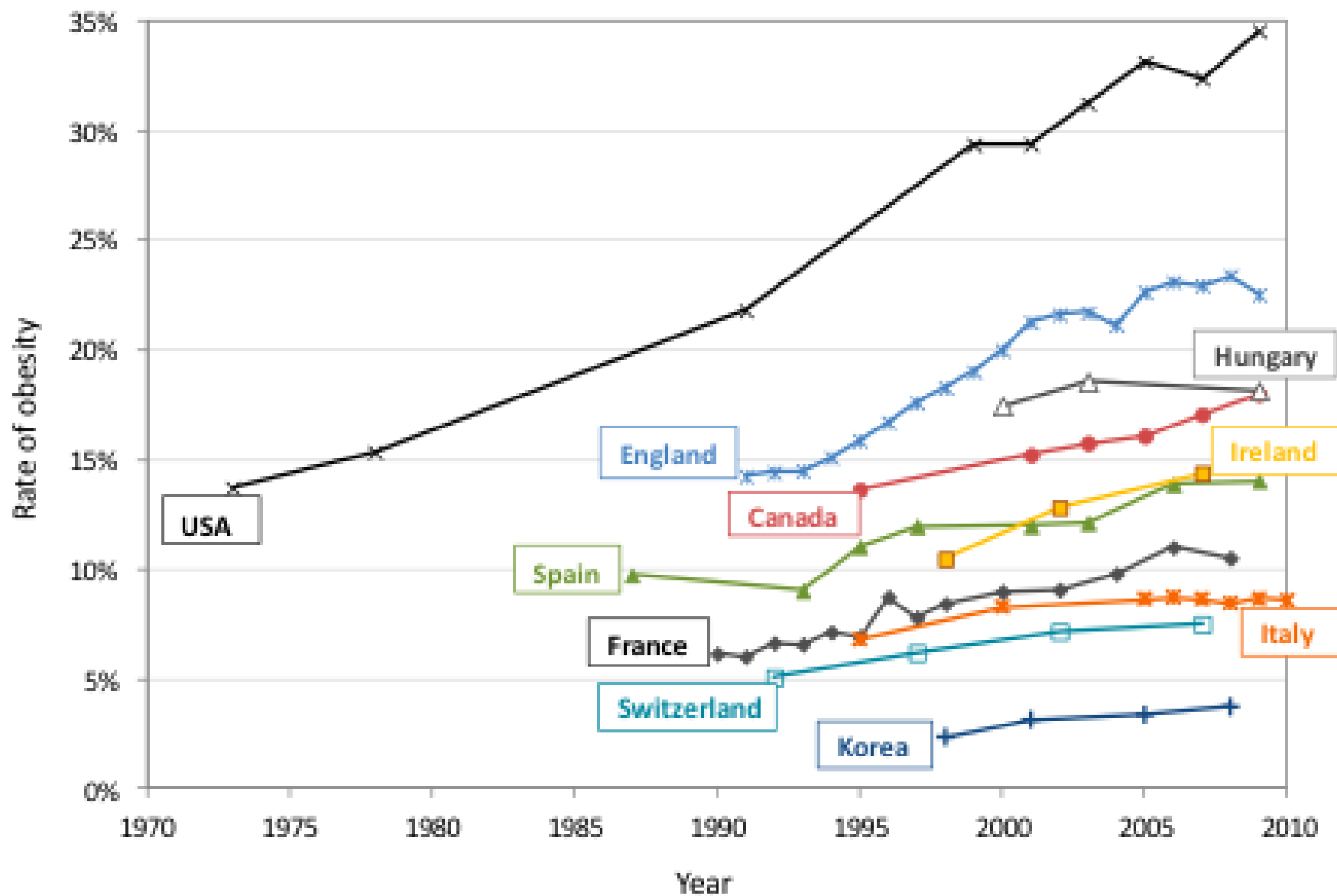
Graphs and charts

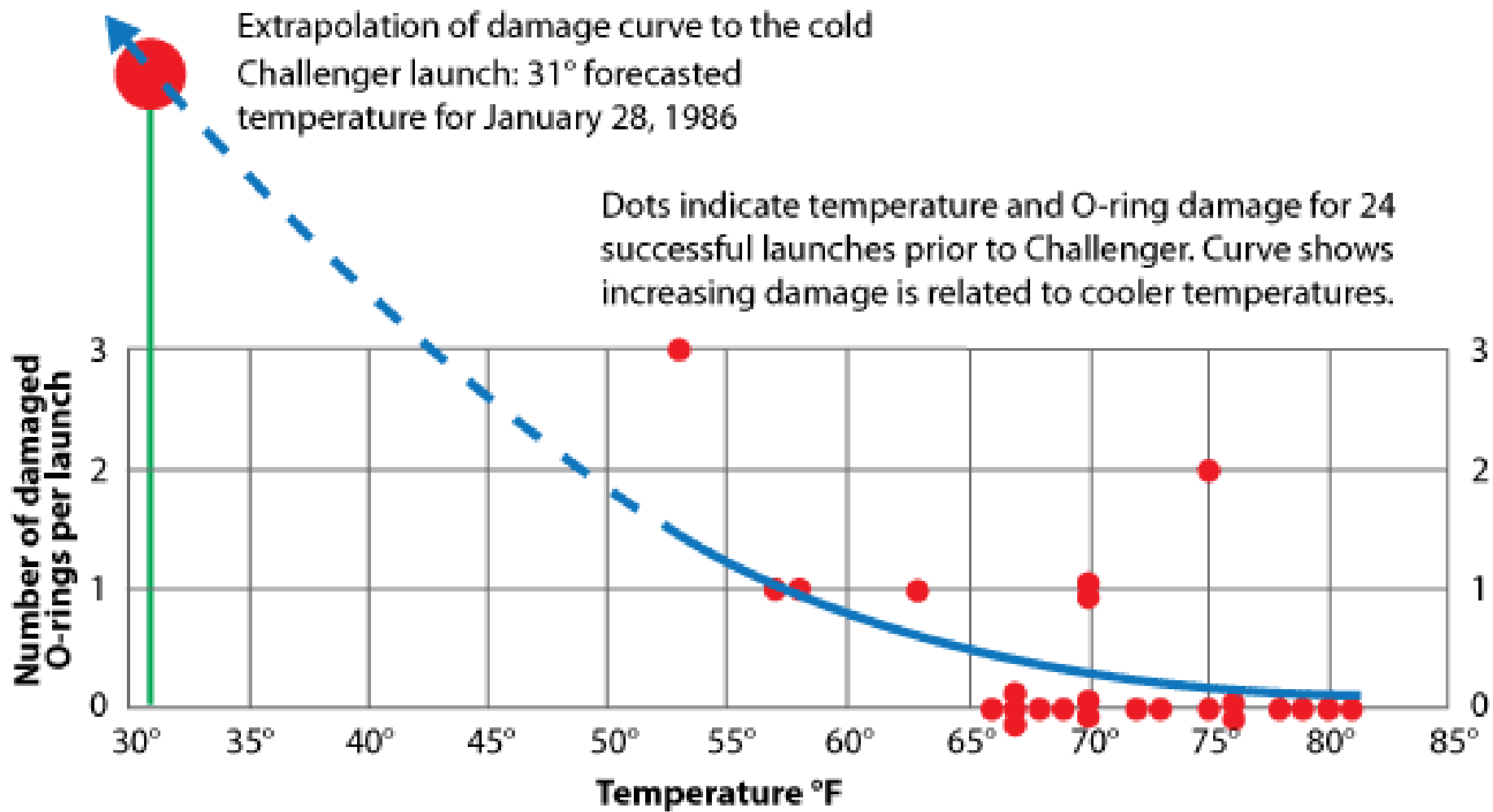


Why we use them

- Pictures help us visualize what's going on better.
- Graphs are a type of picture that help us see patterns we might miss otherwise.
- Pretty.
- Organize information into usable forms.

Figure 1. Obesity rates

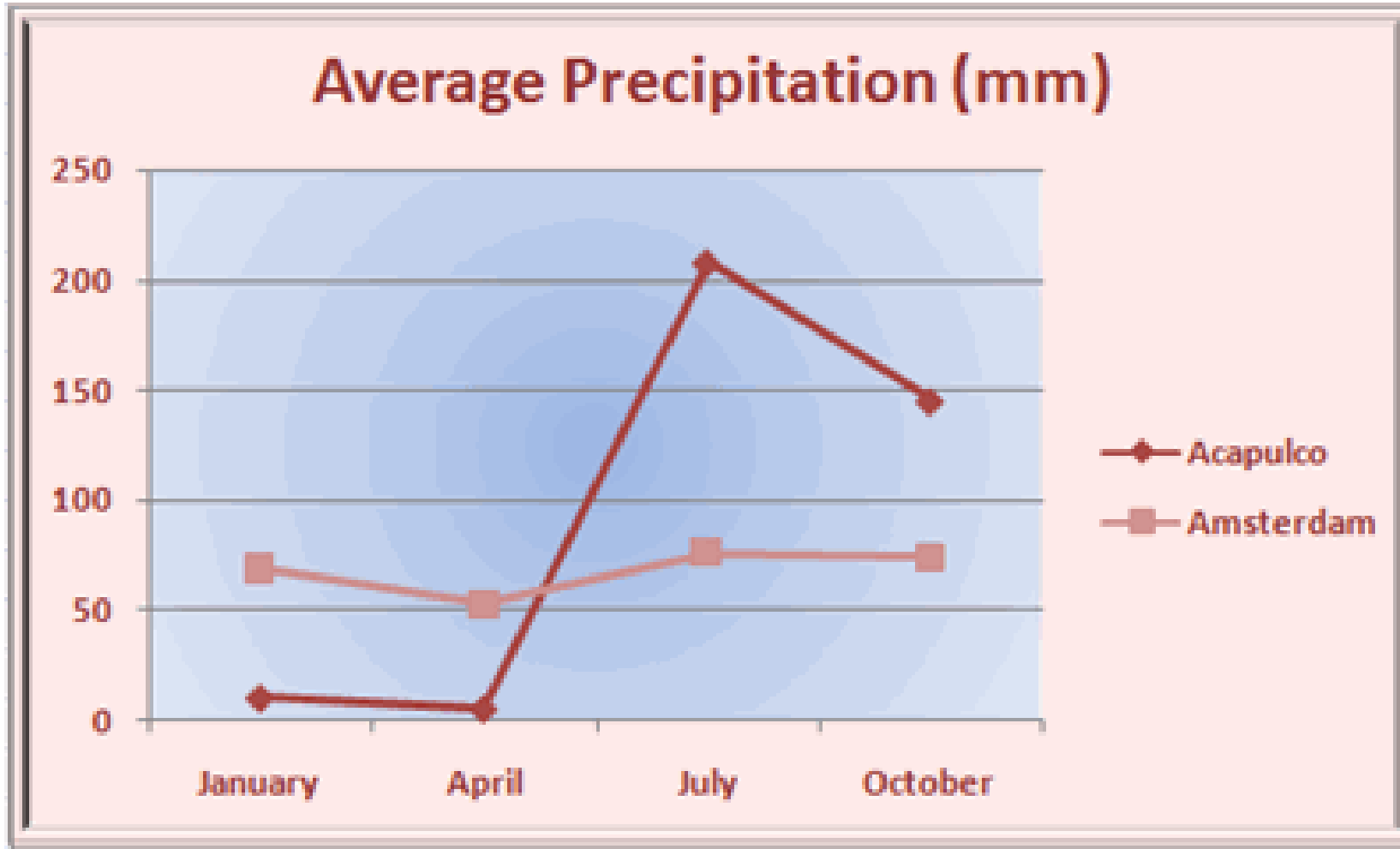




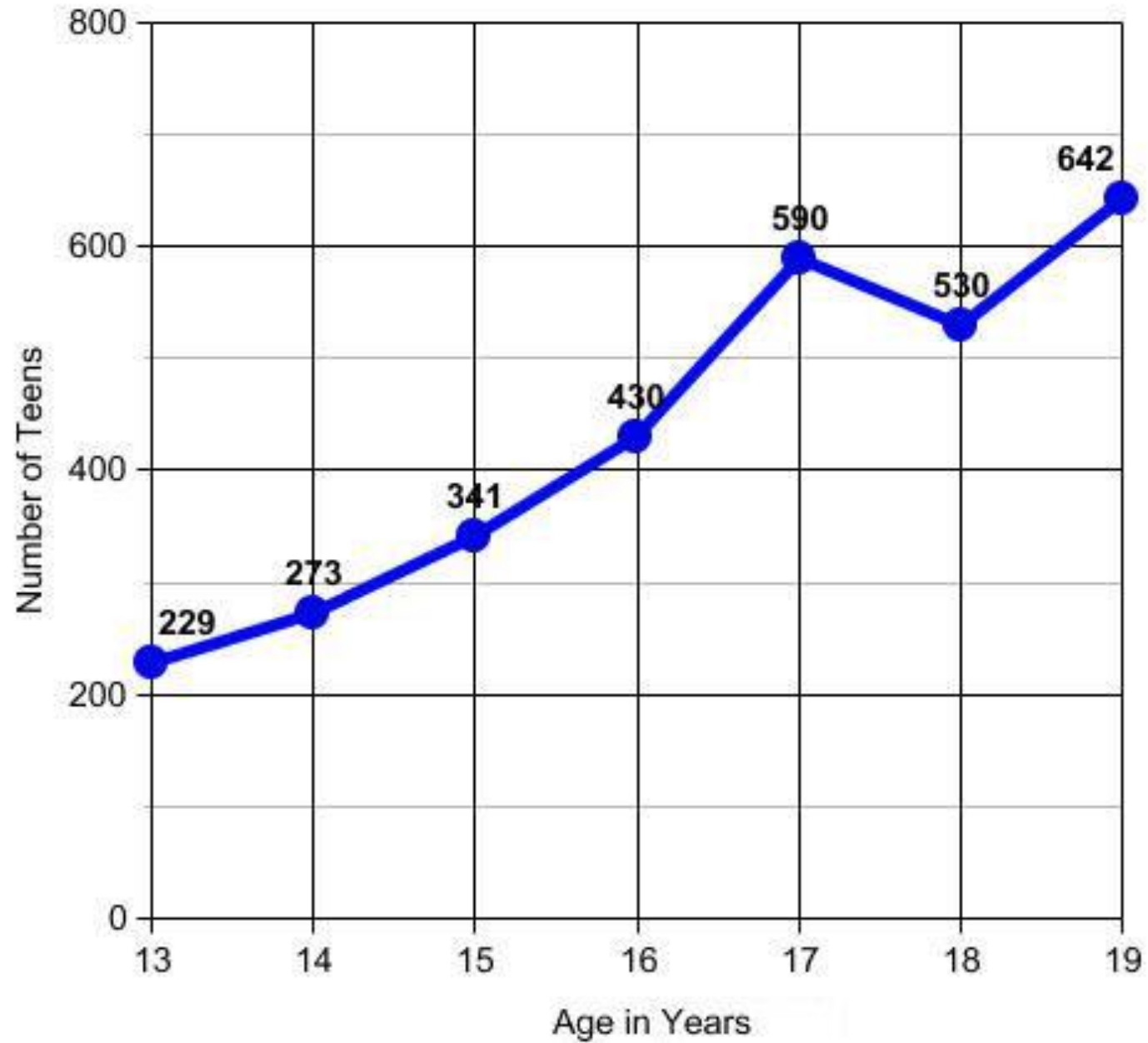
Independent and Dependent Variables

- Independent variable: You pick this. The thing you want to learn more about.
- Dependent Variable: Is what changes.
- The independent variable usually goes on the bottom of the graph. The dependent variable goes on the side of the graph

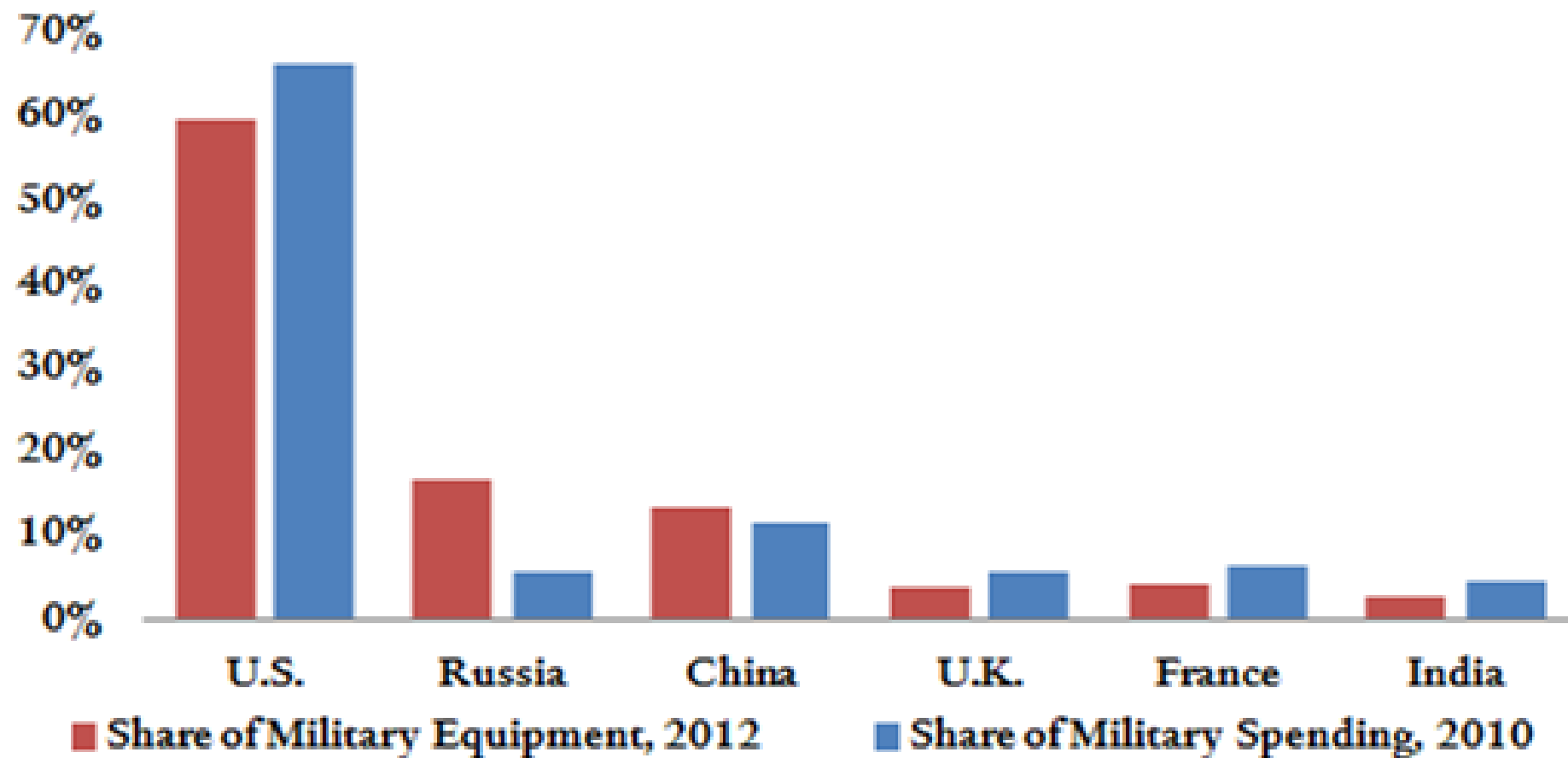
Which one do you pick?



Smalltown Teens With Cells Phones



Military Equipment and Spending



Data source: SIPRI, IISS

cfr.org/cgs

Draw a graph

- The Length of dinosaurs

| Dinosaur | Length |
|-------------------|--------|
| Spinosaurus | 15 m |
| Ceratosaurus | 6 m |
| Utahraptor | 6 m |
| Allosaurus | 9 m |
| Tyrannosaurus Rex | 13 m |
| Brachiosaurus | 26 m |
| Supersaurus | 34 m |

Collect Data on a chart, then graph it

- How many siblings do you have?
- How many people watched the eclipse?
- Etc.
- Just one group.
- Now the whole class.
- Graph
- Why is it important to have the largest pool of data possible?