Quick Facts About Our Solar System

Sun:
- One million Earths could fit inside the Sun
- The temp inside the Sun can reach 15 million degrees
- It’s a yellow dwarf star
- Eventually the Sun will consume the Earth as its dying, then become the size of Earth once dead (no longer fusing H into He)
- Light from the Sun takes 8 minutes to get to the Earth

Mercury:
- A day on Mercury is longer than a year on Mercury (88 day revolution and 176 day rotation)
- You would weigh a third of your weight on Mercury
- Most heavily cratered planet in the solar system
- Mercury is the second hottest planet despite being the closest to the sun (due to its ultra-thin atmosphere)
- Temps range from -275 to 800 °F

Venus:
- Temps can reach 880 °F (hot enough to melt lead)
- Second brightest object in the night sky behind the moon
- Atmospheric pressure is 92 times greater than the Earth’s
- Sometimes called Earth’s sister planet due to its similarity in size
- More than 1,000 volcanoes taller than 12.5 miles have been recorded on Venus
- Can only record data from the planet from the outside the atmosphere using radio waves

Mars:
- Second smallest planet in our solar system
- Home to the largest mountain in our solar system: Olympus Mons, which stands 2.5X the height of Mt. Everest, and approximately the size of Arizona
- On Mars, the Sun appears half the size in the sky as it does from Earth
- In the next 20-40 million years, Mars’ moon Phobos will be torn apart by gravitational forces leading to the creation of a ring around Mars
- The red color of the planet is due to iron oxide in the soil (rust)
- The atmosphere is 98% Carbon Dioxide, which means the polar ice caps are made out of dry ice
**Jupiter**
- 2.5X more massive than all the other planets combined
- Shortest day of all the planets: 9 hr, 55 min
- 3 Earths could fit inside the “Great Red Spot”, a massive storm, that has raged for 350 years
- Jupiter has at least 67 moons, the most in our solar system
- One of Jupiter’s moons, Ganymede, is larger than the planet Mercury

**Saturn**
- Flattest of all the planets in our solar system due to low density and fast rotation (10 hr 34 min)
- Made mostly of Hydrogen gas that gets denser farther into the planet. Deep inside, the hydrogen becomes metallic
- The rings are made mostly of chunks of ice and small amounts of dust that stretch 75,000 mi from the planet but are only 20 meters thick
- One of its moons, Titan, is made mostly of water ice and rock, but the atmosphere is so Nitrogen thick, that the ice and rock is covered in liquid and solid nitrogen at -321°F

**Uranus**
- Uranus’ rotation is retrograde (it moves opposite as the other planets in a clockwise direction on its axis)
- Hits the coldest temps of all the planets at -371°F
- Uranus rotates on its side like a bowling ball
- Uranus is the least dense planet and could float in water
- Uranus has two sets of very thin dark colored rings - 11 inner and 2 outer rings - and probably formed when one of its moons were broken up in an impact

**Neptune**
- Neptune is made of H and He, with some Methane. The methane absorbs red light, which makes the planet appear blue
- One spacecraft has flown by Neptune – Voyager 2 – which is now 9.5 billion miles away
- It takes light over 4 hours to get to Neptune
- The fastest winds ever recorded on a planet were on Neptune – at 1,342 mph