SOLAR SYSTEM WEARABLES

A planetary system, like our **Solar System**, is a group of planets that **orbit** around a central star. For an object to be called a planet, it must meet certain criteria: it needs to **orbit a star**, have enough **gravity** to form a **round shape**, and its gravity must be strong enough to **clear other objects out of its path**.

Gravity is a key force that holds our Solar System together. It is the "**invisible glue**" that keeps the planets in orbit around the **Sun**. Each planet stays on its path around the Sun because the Sun's gravity pulls on it like a **magnet**.

The **distance** of each planet from the Sun greatly affects its environment and helps us classify the planets into three types: **terrestrial planets**, **gas giants**, and **ice giants**. Planets closer to the Sun, like Mercury, Venus, Earth, and Mars, are known as **terrestrial planets**. They are smaller, have solid, rocky surfaces, and are hotter because they receive more direct sunlight.

Farther from the Sun are the **gas giants**, Jupiter and Saturn. These planets are much larger than the terrestrial planets and do not have solid surfaces. Instead, they are made up mostly of hydrogen and helium gases. Because they are farther from the Sun, they are much colder than the terrestrial planets. Even farther out are the **ice giants**, Uranus and Neptune. These planets are also large but have a different composition than the gas giants. They have icy surfaces made up of water, ammonia, and methane ice. Being the farthest from the Sun, they are the coldest planets in our Solar System. This distance also affects how long it takes for each planet to complete one orbit around the Sun; for example, while **Earth takes one year to orbit the Sun**, **Neptune takes about 165 Earth years** to complete a single orbit.

The eight planets in our Solar System in order are are: **Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune** (see solar system wearables chart). It can be hard to keep track of so many planets, so we have a way to remember. We can use the sentence **"My Very Excellent Mother Just Served Us Nachos".** We can use the first letter of each word to help us remember the planets in order from the closest to the sun to the farthest from the sun.

MATERIALS

- Set of Solar System Beads
- Buckle Clasp
- String
- Scissors
- Solar System Wearables Chart

INSTRUCTIONS

1. Look at the "Solar System Wearables" Chart.
2. Tie one end of the string to the loop on one piece of the ring clasp with three tight knots.
3. Add the appropriate Solar System Beads and spacer beads in the correct order, starting with the Sun and ending with Neptune. Use the image of the planets in the chart as a reminder of what the planets look like.
4. Double check that the correct number of spacer beads have been added.
5. Finally, knot the other piece of the buckle clasp to the other end of the string, with a minimum of three tight knots. Check that the wearable is secure before wearing.

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