THE \_\_\_\_\_\_ OF A COMET

Comets go around the Sun in a highly \_\_\_\_\_\_\_\_\_orbit. They can spend hundreds and thousands of years out in the depths of the solar system before they return towards the sun. While a comet is at a great distance from the Sun, it exists only as a dirty snowball several \_\_\_\_\_\_\_\_ across. But as it comes closer to the Sun, the warming of its surface causes its materials to melt and \_\_\_\_\_\_\_\_\_producing the comet's characteristic tail. The closer the comet is to the sun, the longer the tail because \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Comet tails can be as long as the distance between the Earth and the Sun.

*The image below shows the motion of a comet around the Sun. The red circle represents the orbit of one of the planets. As can be seen, the path of the comet is much more elliptical.* *The tail of the comet always point away from the Sun, so after a comet has passed the Sun it actually travels tail first.*

Word Bank-

An **orbit** is the curved path in space that is followed by an object going round and round a planet, moon, or star

Something that is **elliptical** has the shape of an oval.

**Vaporize** is when something changes from a liquid or solid into a gas

**Kilometer** is a unit of distance equal to 1000 meters.

