

## Life on Another Planet?

Scientists have found a new planet, and the exciting news is that they think this new planet might be one that could support life! The planet is called Kepler-186f. It was named after the Kepler space telescope that first found and took photographs of the planet itself.

Kepler-186f is slightly larger than Earth. It orbits a star at a perfect distance that scientists sometimes call the 'Goldilocks Zone.' This refers to the fact that Kepler-186f, just like Earth, orbits the sun at a perfect distance that allows for liquid water to exist on the planet and remain in its liquid form. The ability to support **liquid** water is vitally important because this is one of the ingredients scientists believe is necessary for supporting life.

If a planet is too close to a star, the heat from the star causes liquid water to evaporate and become a gas. If the planet is too far from the star, water on the planet would be found in its solid, ice form. All kinds of known life need **liquid** water for basic processes in order to live. If a planet is found in the 'Goldilocks Zone' scientists become excited because they know it is possible that liquid water might be found on that planet. Because there might be liquid water, it is possible that the planet is habitable and that life might be found on that planet.

So far, it looks as if Kepler 186f **IS** orbiting its star within the Goldilocks Zone. However, Kepler 186f is also so far away that it is going to be difficult to prove that life might be found on this planet. Even the fastest spacecraft would take about 15 million years to make a trip to visit Kepler 186f.