**Problem:**

It seems that everyone at some time has wondered “Is there life out there? Can there be life out there in the future?” Through observations and what we know about what sustains life, we know that many of the planets in our solar system do not currently sustain life, but has that always been the case? Could some planets with the proper technology sustain life in the future?

**Steps:**

**Brainstorm**: 1. What is needed for life?

 2. What factors influence if a planet can sustain life?

**Research:** Collect detailed information on all of the planets; meanwhile thinking is it possible that life existed on this planet. Use your planet matrix for collecting information.

Research if there are certain life forms that can live in more extreme conditions. What planets could these life forms be found on?

Once you are assigned a planet, research a little more in depth about that particular planet. Research how long it would take to get to that planet from Earth. What would a human’s weight be on that planet? Does that planet have an atmosphere? What technology would have to be used to assure that that planet could sustain life?

**Create:** Be innovative and create a technology that would sustain life on your planet. Base your design as much on factual information as possible. You will use your imagination, but make sure you have considered the facts. Create a model or a detailed design with a written explanation of how your planet could potentially sustain life.