

Science Summer Assignment, 2010

We live in a city where our contact with nature is often obscured by the facts that humans have changed it. Our feet walk on concrete, our ears are filled with the sound of honking cars, the air we breathe is filled with exhaust and heat from the machines, and lights from buildings illuminate up the sky making it hard to observe the stars. In the summer reading books, nature has a much more immediate presence in the lives of the characters, and we encourage you to put yourselves in the shoes of the characters and imagine nature in a new way.

For Science, you should purchase the book *Life as We Knew It* by Susan Beth Pfeffer. You will be reading this book in the fall in Science class.

Observation of a Cycle

Choose a cycle in nature that you are interested in observing this summer. (Examples: the moon going through its phases, clouds in different weather systems, rising and falling tides, the movement of the sun from morning to evening, a flower garden that blooms and fades, etc.)

Choose a strategic time frame for your observations.

You will need to observe changes in the cycle. These observations can be brief (even 5 minutes should be enough). You will need to make 5-10 observations that capture the full course of the cycle you've chosen. (If you are observing the moon, space your observations out over the course of a month. If you are observing the tides, you may make observations each day throughout the course of about a week.)

Task #1: Complete a Data Log

Complete the attached log to record changes in the cycle that you are observing. You will be asked to find a way to measure the changes you observe. (Be inventive. For the moon, you could trace the changing shape of the moon on tracing paper as you observe it through a window each night. For tides, you could place a stick in the sand and notice when the water level reaches a certain height.)

Task #2: Create 3 artistic pieces that capture "snapshots" of 3 distinct stages in your chosen cycle.

Choose 1 **medium** for all of the pieces. (For example, as a way of showing the movement of the sun from morning to evening, you may choose to create 3 landscape watercolor paintings at the beach showing change in light and shadows in the morning, at noon, and at sunset.)

- **Chosen medium:** Media to consider are watercolors, pencil, charcoal, clay, fabric, photography, collage, etc.

Please choose one that you will enjoy working with, and have fun! Please take care with these to showcase your best work! Ms. Cortes, Ms. Dwyer and Mr. Skinner will be collecting these to get to know you as artists and scientists.