Jerry Clay Academy
Subject Unit Overview

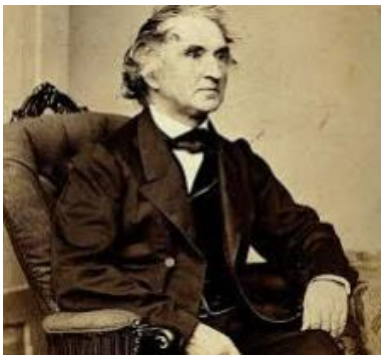
Subject: Science (Light) Year Group: 3 Term: Spring 2

Core Learning of This Unit:

- To recognise that we need light in order to see and that dark is the absence of light
- To investigate the movement and importance of light
- To know that light travels in a straight line
- To name sources of light
- To recognise that shadows are formed when an opaque object blocks the light source
- To notice that light is reflected of surfaces
- To recognise that light from the sun can be dangerous
- To inform others about dangers of light from the sun

Prior Learning:

From Key stage 1: Some properties of materials including glass; mirrors are made from shiny materials. Children also know that shadows are dark and are similar in shape to the object forming them.



National Curriculum Statements:

Pupils should be taught to:

- recognise that they need light in order to see things and that dark is the absence of light
- notice that light is reflected from surfaces
- recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- recognise that shadows are formed when the light from a light source is blocked by an opaque object
- find patterns in the way that the size of shadows change

Key Vocabulary:

- **light-**a form of energy that travels in a wave from a source.
- **light source**-an object that makes its own light
- **ray**-waves of light. Can also be called beams.
- **dark**-dark is the absence of light.
- **reflect**-to bounce off.
- **reflective**-something which reflects light well.
- **reflection**-where light hits a surface of an object and bounces back into our eyes.
- **shadow**-an area of darkness where light has been blocked.
- **transparent -**objects that let light through easily.
- **translucent-**objects that let some light through but scatters the light.
- **opaque-**objects that do not let any light pass through.

Significant People

- Justus von Liebig (a German chemist) developed a process for applying a thin layer of metallic silver to one side of a pane of clear glass. This technique was soon adapted and improved upon, allowing for the mass production of mirrors