Jerry Clay Academy
Subject Knowledge Organiser
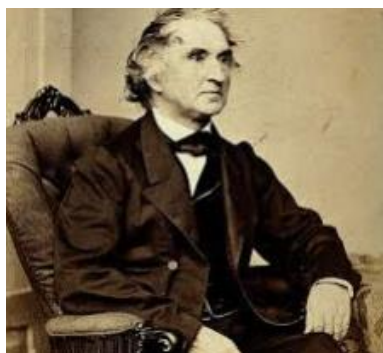
Subject: Science (Light) Year Group: 3 Term: Spring 1

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:
- Dull: a surface that scatters light and does not look shiny.
- Shiny: surfaces that reflect lots of light.
- Reflect: to change the direction of light using a shiny surface.
- Mirror: a shiny polished surface.
- Light source: the place where light originates from.
- Shadow: darkness caused by light being blocked.
- Transparent: letting most or all light through.
- Translucent: letting some light through.
- Opaque: not letting 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