



Year Groups: Years 3 and 4 (KS2) Date: Monday 4th May 2020

Subject: Science - Light



LO: I am able to recognise that shadows are formed when the light from a light source is blocked by a solid object

I am able to find patterns in the way that the size of shadows change

Key Facts:

- Light is reflected from surfaces.
- Light travels in straight lines.
- Shadows are formed when the light from a light source is blocked by a solid object.
- The Sun rises in the East and sets in the West.

Activity 1: Investigate - How does the distance between the puppet and the light source affect the size of the shadow created?

Using the puppet made from last lesson and with your help, show how to set up a 'fair test' investigation; i.e. the light source must remain the same and static, and the screen must remain stationary. As support and guidance, use and complete the activity on **Purple Mash - 2do - Fair Test**.

Activity 2: Record

Children complete a table of results and a bar chart to show the results of their investigation: sizes of the shadows the further back from the light source ones travels. Complete this activity on **Purple Mash - 2do - 2Calculate - Sheet** (children have already used this in school).

Activity 3: Exploration - Making different lengths of shadows
Challenge children to model what happens to the length of shadow of a person as they approach a street lamp, walk under it and then walk further away. They can do this with a shoe box, by shining their torch (the street light) through a hole in the lid. A plasticene person could pass through the box; going under the 'lamp'.