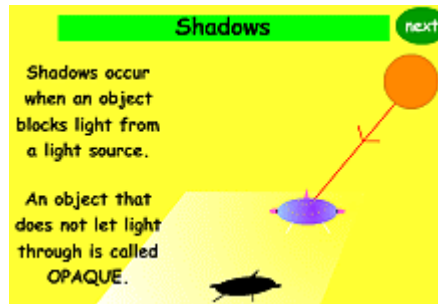


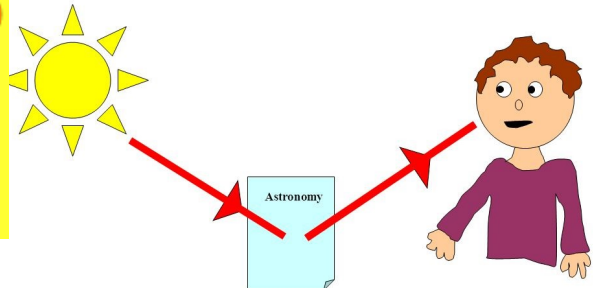
Y3/4 Science LIGHT AND SHADOW – KNOWLEDGE ORGANISER

KEY VOCAB

Reflection,
shadows, trans-
parent, opaque,
translucent,
light source.



- We see things because they reflect light into our eyes:



Things everyone needs to know

A reflection is when light bounces off a surface.

Shadows are formed when an object blocks out the light. The object must be opaque or translucent to make a shadow.

A transparent material allows light to pass through so you can see objects clearly.

An opaque material does not allow light to pass through so you are not able to see through it.

A translucent material allows some light through but you can't see clear shapes.

Something that makes its own light is a light source. Examples: the sun, the stars, flames, electric lights. Some objects reflect light from other sources so are bright but are not light sources themselves. Examples: the moon, a mirror, shiny metals.

Light bounces off some objects better than others.

Links to building the kingdom

Options for the poor and vulnerable.

Feed the hungry, give drink to the thirsty

Virtues - compassionate and loving, faith-filled and hopeful

RRS articles - I have a right to be safe and healthy, with good quality care and nutritious food and clean water

Key skills -

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