Activity one
Look at the PowerPoint and complete the activities.

Activity two
Complete the worksheet provided.

Activity three
An object which produces its own light is called a **primary light sources**.
Fire, light bulbs, the sun, stars and electricity are all common examples of primary light sources.
Look around your home for examples of primary light sources. Draw an example of each of these items and label them clearly. Finally, write next to each item whether you think it is a natural or man made light source.

Activity four
An object that reflects light from a primary light source is called a **secondary light source**. Secondary light sources reflect light from other objects, but they do not produce their own light.
The moon, mirrors, glass, motorway signs, metal and water are all secondary light sources.
Investigate if the following items are secondary light sources or not—record your results in a table like below:

<table>
<thead>
<tr>
<th>Object</th>
<th>Water</th>
<th>Paper towel</th>
<th>Metal spoon</th>
<th>Wooden spoon</th>
<th>Chalk</th>
<th>Mirror</th>
<th>Fabric</th>
<th>Plastic tub</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflects light</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not reflect light</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Light and shadows

Activity five
You will need: a torch, different shaped objects from around your house.
1. First of all, work out which of the objects that you have collected are opaque.
2. Remove any transparent objects as these will not cast good shadows for this experiment.
3. Next, switch on the torch and place it behind each of the objects, one at a time. Watch as the shadows appear.
4. Try moving the torch from left to right and up and down. See how the shadows move.
5. On a sunny day, face away from the sun when you are outside. Check your shadow at different times of the day and record how it changes.

WARNING!

NEVER LOOK AT THE SUN DIRECTLY WITH YOUR EYES, THROUGH BINOCULARS OR THROUGH A TELESCOPE.

Activity six
Complete the spooky shadow puppets activity.

Activity seven
Complete a shadow drawing of your choice.