Solution: Chapter 2: Light and colour

The difference between object (e.g. watercolours) and light colour

<table>
<thead>
<tr>
<th>a. We mix object colours</th>
<th>b. We mix light colours</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Object Colours" /></td>
<td><img src="image2" alt="Light Colours" /></td>
</tr>
</tbody>
</table>

**Rule 1:**
The more object colours are added together the darker the colour gets.
(*subtractive colour mixture*)

**Rule 2:**
The more light colours are mixed together the lighter the mixture gets.
(*additive colour mixture*)

2. What happens after using coloured foil?

![Coloured Foil Experiment](image3)

**Rule 3:**
There are three possible outcomes when looking at objects through a coloured foil:

1. The colour stays the same or seems more intensive (stronger).
2. The colour changes.
3. No colour is visible anymore, the object seems nearly black.

3. We look at white light

![White Light](image4)

**Rule 4:**
When white light (sunlight) is broken the individual colours become visible. In the rainbow we can see 6 (or 7) colours:
*Red, orange, yellow, green, blue, (+indigo), violet*

Exercise: Cut out the pictures and glue them to the right rule box.