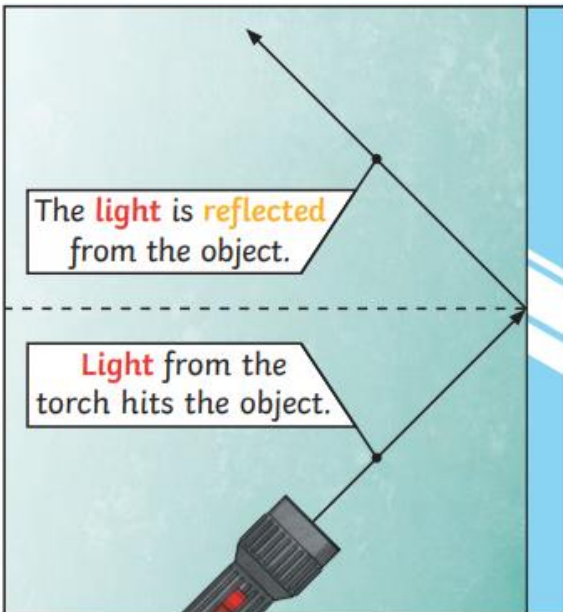



Key Vocabulary	
<b>light</b>	A form of energy that travels in a wave from a source.
<b>light source</b>	An object that makes its own <b>light</b> .
<b>dark</b>	<b>Dark</b> is the absence of <b>light</b> .
<b>reflection</b>	The process where <b>light</b> hits the surface of an object and bounces back into our eyes.
<b>reflect</b>	To bounce off.
<b>reflective</b>	A word to describe something which <b>reflects light</b> well.
<b>ray</b>	Waves of <b>light</b> are called <b>light rays</b> . They can also be called beams.


**Key Knowledge**

We need **light** to be able to see things. **Light** travels in a straight line. When **light** hits an object, it is **reflected** (bounces off). If the **reflected light** hits our eyes, we can see the object. Some surfaces and materials **reflect light** well. Other materials do not **reflect light** well. **Reflective** surfaces and materials can be very useful...

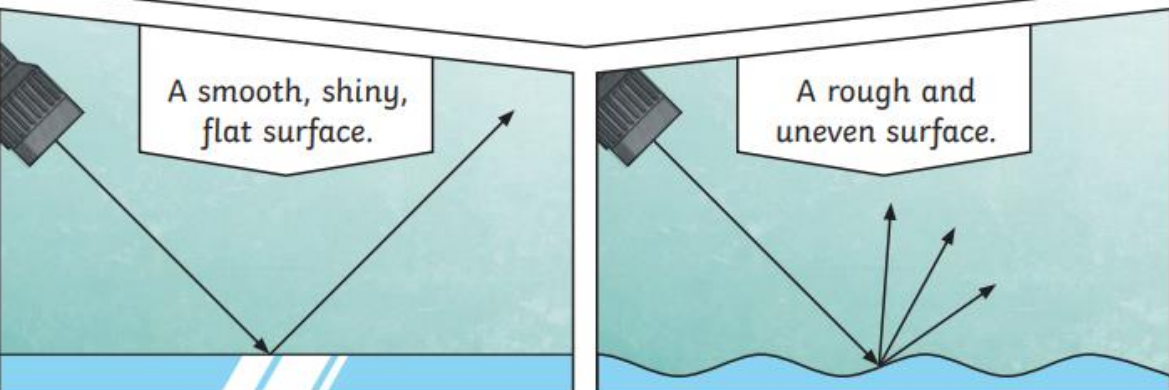



hi-vis jacket      cat's eyes

Mirrors **reflect light** very well, so they create a clear image. An image in a mirror appears to be reversed. For example, if you look in a mirror and raise your right hand, the mirror image appears to raise its left hand.



The surfaces that reflect **light** best are smooth, shiny and flat.

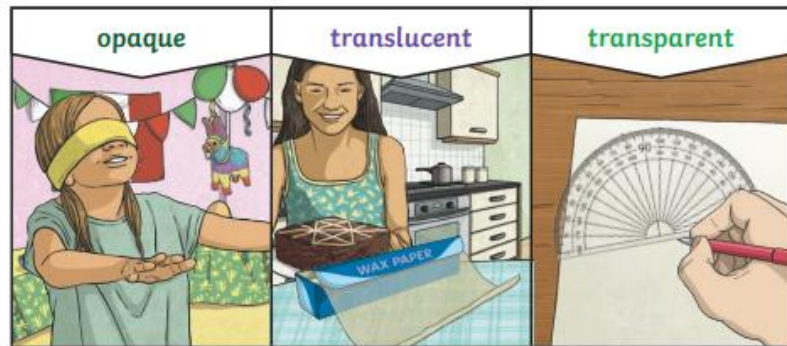


A smooth, shiny, flat surface.

A rough and uneven surface.

To look at all the planning resources linked to the Light unit, [click here](#)

Key Vocabulary	
<b>pupil</b>	The black part of the eye which lets <b>light</b> in.
<b>retina</b>	A layer at the very back of the eye. The <b>retina</b> takes the <b>light</b> the eye receives. It then changes it into nerve signals to send to the brain.
<b>shadow</b>	An area of darkness where <b>light</b> has been blocked.
<b>opaque</b>	Describes objects that do not let any <b>light</b> pass through them.
<b>translucent</b>	Describes objects that let some <b>light</b> through, but scatter the <b>light</b> so we can't see through them properly.
<b>transparent</b>	Describes objects that let <b>light</b> travel through them easily, meaning that you can see through the object.



**Key Knowledge**

The **pupils** control the amount of **light** entering the eyes. If too much **light** enters, then it can damage the **retina**. To help protect the eyes, you can wear a hat with a wide brim and sunglasses with a UV rating.

A **shadow** is caused when **light** is blocked by an **opaque** object. A **shadow** is larger when an object is closer to the **light** source. This is because it blocks more of the **light**.

When the **light** source is directly above the object, the **shadow** will be directly underneath.

middy

When a **light** source is to one side of an object, the **shadow** will appear on the opposite side. The **shadow** will also be longer.

sunset

**Key Vocabulary**

<b>agriculture</b>	Another word for farming. The growing and harvesting of crops and/or breeding animals.
<b>counties</b>	Areas that countries or states are divided into.
<b>recreation</b>	An activity done for pleasure e.g. playing golf, hiking.
<b>retail</b>	Shops where people can buy items.
<b>rural</b>	Countryside or farmland.
<b>symbol</b>	Pictures or icons.
<b>urban</b>	Towns and cities.

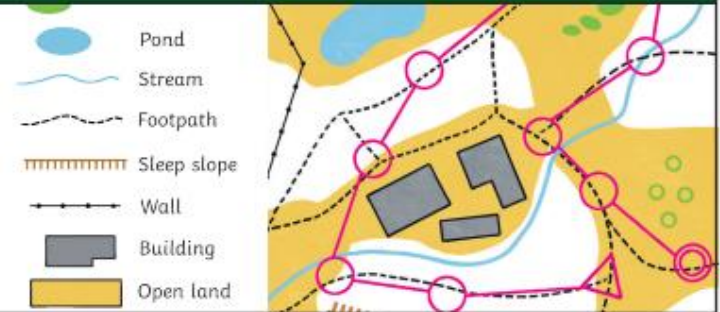
**Sketch Map**

- Title
- Labels/annotations
- Simple lines
- Enough detail to give a rough idea
- A 'not to scale' note
- A north arrow



**Key**

- Maps often use **symbols** to represent things.
- The key explains what the **symbol** shows.



**Cartographer**

- A cartographer is someone who draws or produces maps.
- James Cook (1728 – 1779) was a British explorer and cartographer.
- Today, technology helps to produce maps using photographs and videos of the area.

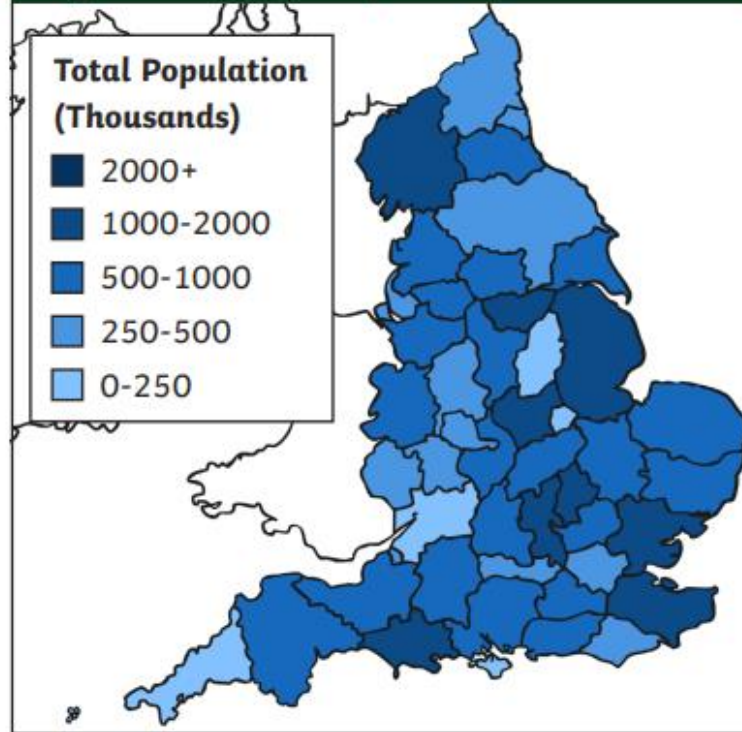


### Topographical Map

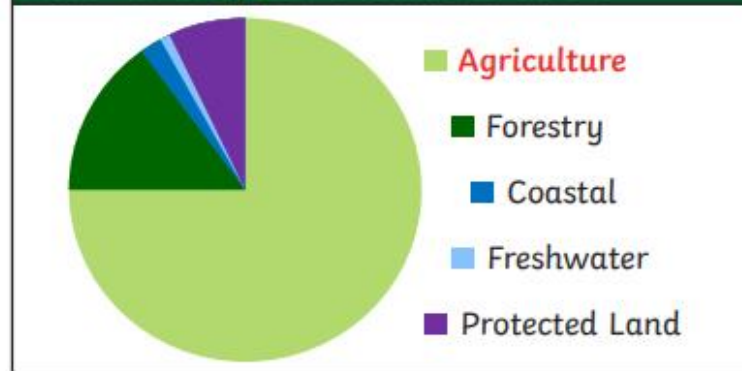
A topographical map shows the shape and features of the land including mountains, rivers, lakes and valleys.



### England Counties Population



### How Rural Space Is Used in the UK



### Large Urban Areas in England

- London
- Birmingham
- Manchester
- Liverpool
- Leeds
- Newcastle

### Farming

- Growing grains
- Growing fruit and vegetables
- Growing flowers
- Growing grass
- Breeding animals for meat and other produce e.g. milk and eggs

### How is Land Used?

90% of land in the UK is <b>rural</b> .	10% of the UK is <b>urban</b> .
<ul style="list-style-type: none"> <li>• Housing</li> <li>• Factories</li> <li>• Education</li> <li>• <b>Recreation</b></li> <li>• Business</li> <li>• Farming</li> </ul>	<ul style="list-style-type: none"> <li>• Housing</li> <li>• Factories</li> <li>• Education</li> <li>• <b>Recreation</b></li> <li>• Business</li> <li>• Healthcare</li> <li>• Transport</li> <li>• <b>Retail</b></li> </ul>