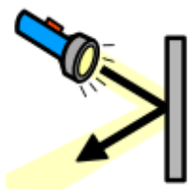
Light
Knowledge Organiser

Year 3

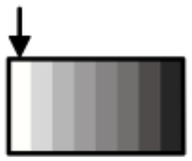
Light
Year 3

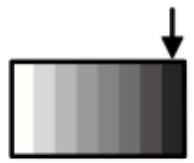
Vocabulary

Lesson 1


Reflective


Light source


Light


Dark

Lesson 2


Shadow

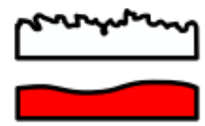

Opaque


Translucent


Transparent

Lesson 3


Reflective


Smooth


Shiny


Flat

Lesson 4


Sun


Protect


UV light


Retina

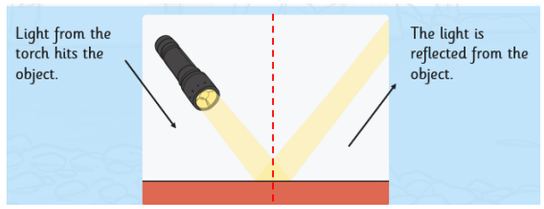
Light- Year 3

I Now Know...

INK

Light travels in a straight line. When light hits an object, it is reflected. If the reflected light hits our eyes, we can see the object.

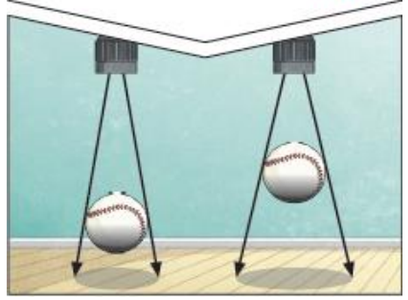
1



INK

2

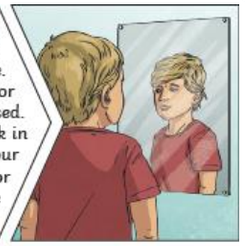
A **shadow** is caused when **light** is blocked by an **opaque** object. A **shadow** is larger when an object is closer to the **light** source. This is because it blocks more of the **light**.

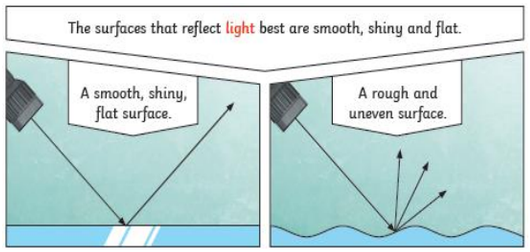


INK

3

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.

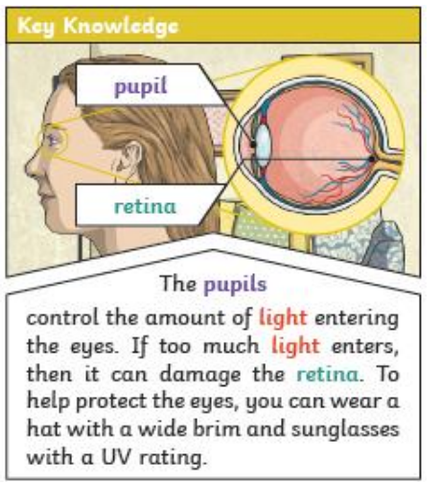




INK

The sun is a ball of fire.

4

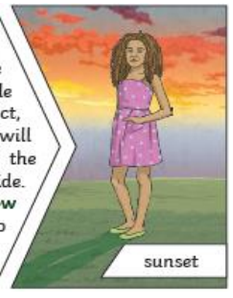


INK

5

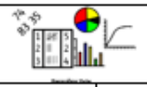
When the **light** source is directly above the object, the **shadow** will be directly underneath.

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.

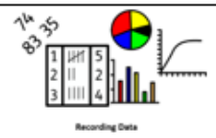


Light – Year 3

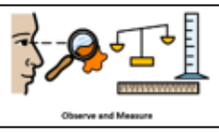
LOs

LO: I can recognise that light is needed to see things.	
• I can describe why if there is light, I can see.	
• I can explain what will happen if there is no light	
• I can prove that if there is more light, I can see better	

LO: I am investigating how shadows are formed when the light source is blocked by an opaque object.	
• I can demonstrate how a shadow is formed by an object blocking the light source.	
• I can investigate opaque materials that cause a shadow.	
• Challenge: Can translucent objects cause a shadow?	

LO: I am investigating what surfaces are reflective.	 
• I can give examples of objects can reflect and those that can't.	
• I can give reasons why smooth, shiny and flat surfaces reflect the best.	
• I can use a diagram to show how a mirror works.	

LO: I can understand how the sun can be dangerous and how I can protect my eyes.	
• I know that the sun is a ball of fire	
• I can explain what will happen to my eyes if I look at the sun	
• I can consider ways to protect my eyes	

LO: I can investigate why the sizes of shadows change.	
• I know that a shadow is caused when light is blocked by an opaque object.	
• I can investigate how the distance the object is from the light source changes the size of the shadow	
• I can explain why when the light source is directly above the object, the shadow will be directly underneath	

Light
Year 3

Post Assessment

How does a light source allow us to see?

How are shadows formed?

Why do shadows change size?

Why do we need to protect ourselves from the sun?

How can we protect ourselves from the sun?

Match the meanings of the words:

Opaque	Completely see through, light can pass
Translucent	You can't see through it, light is blocked
Transparent	You can slightly see through it, some light is passed

Why do some surfaces reflect better than others?

Why do our shadows change shape and size through the day?