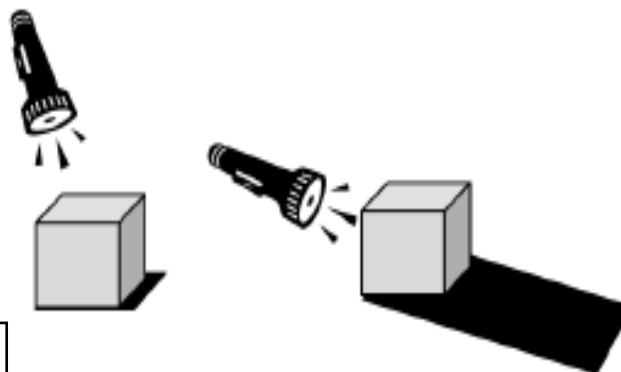




Science Knowledge Organiser – Light

Year 3/4

Types of Shadows



As the light source moves higher, the shadow gets shorter. As the light source moves lower, the shadow gets longer.

LARGE SHADOW
when the toy is **close** to the light.









SMALLER SHADOW
when the toy is **further** from the light.

TINY SHADOW
when the toy is a **long way** from the light.



Planning an Experiment Vocabulary

Vocabulary	Definition
Conclusion	What we have learned from our experiment.
Equipment	Items used to conduct an experiment.
Fair Test	Keeping everything but one variable the same.
Method	The steps we take to conduct our experiment.
Prediction	What we think our experiment will tell us.
Results	The data obtained by the experiment.
Variables	The things that are changed in the experiment.

Topic Specific Vocabulary

Vocabulary	Information
Light sources	<ul style="list-style-type: none"> Something that produces its own light e.g. the sun/fire. Light travels in straight lines. 
Darkness	<ul style="list-style-type: none"> Darkness is the absence of light. Without a light source, there is darkness. 
Reflective Light	<ul style="list-style-type: none"> When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object. 
Reflective Surfaces	<ul style="list-style-type: none"> Light reflects differently on different surfaces. Smooth, flat, shiny surfaces reflect light the best. When light rays hit a rough surface, they scatter in different directions, so doesn't reflect well. 
Opaque	<ul style="list-style-type: none"> An object which doesn't allow light to pass through it. 
Translucent	<ul style="list-style-type: none"> An object which allows some light to pass through it. 
Transparent	<ul style="list-style-type: none"> An object which allows light to pass through it so that objects behind it can be easily seen. 
Shadow	<ul style="list-style-type: none"> Shadows are formed when the light from a light source is blocked by a solid object. 

Types of Light

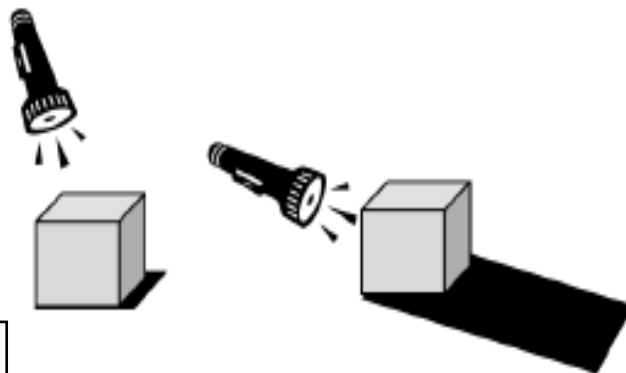
Visible Spectrum	Ultraviolet (UV) Light
<ul style="list-style-type: none"> The name for the light that we can see. The sun gives out rays of light, but we cannot see all light that comes from the sun. The visible spectrum is made up of the colours of the rainbow. 	<ul style="list-style-type: none"> UV light is invisible to the human eye. UV light is stronger in the summer and at midday. UV light is stronger near water, sand and snow as they reflect UV light. UV light can be dangerous, causing things like sunburn. It can also damage your eyes, which is why we should wear sunglasses. 



Science Knowledge Organiser – Light

Year 3/4

Types of Shadows



As the light source moves higher, the shadow gets _____. As the light source moves lower, the shadow gets _____.

_____ **SHADOW** when the toy is _____ to the light.

_____ **SMALLER SHADOW** when the toy is _____ from the light.

_____ **SHADOW** when the toy is a _____ from the light.

Topic Specific Vocabulary

Vocabulary	Information
_____	<ul style="list-style-type: none"> Something that produces its own light e.g. the sun/fire. Light travels in straight lines.
_____	<ul style="list-style-type: none"> The absence of light.
Reflective Light	<ul style="list-style-type: none"> When light hits an object, it is reflected (bounces off). If the reflected light hits our nose/ears/eyes/mouth, we can see the object.
Reflective Surfaces	<ul style="list-style-type: none"> Light reflects differently on different surfaces. Which surfaces reflect light the best? <p>_____</p>
_____	<ul style="list-style-type: none"> An object which doesn't allow light to pass through it.
_____	<ul style="list-style-type: none"> An object which allows some light to pass through it.
_____	<ul style="list-style-type: none"> An object which allows light to pass through it so that objects behind it can be easily seen.
Shadow	When are shadows formed: _____

Planning an Experiment Vocabulary

Vocabulary	Definition
_____	What we have learned from our experiment.
_____	Items used to conduct an experiment.
_____	Keeping everything but one variable the same.
_____	The steps we take to conduct our experiment.
_____	What we think our experiment will tell us.
_____	The date obtained by the experiment.
_____	The things that are changed in the experiment.

Vocab Key

- Prediction
- Variables
- Method
- Fair test
- Equipment
- Results
- Conclusion

Types of Light

_____ Spectrum	Ultraviolet (UV) Light
<ul style="list-style-type: none"> The name for the light that we can see. The sun gives out rays of light, but we cannot see all light that comes from the sun. The visible spectrum is made up of the _____. 	<ul style="list-style-type: none"> UV light is _____ to the human eye. UV light is stronger in the _____ and at _____. UV light is stronger near _____, _____ and _____ as they reflect UV light. UV light can be dangerous, causing things like _____. It can also damage your eyes, which is why we should wear _____.