

# Year 3 Science Knowledge Organiser



A light source is needed in order to see things. Darkness is the absence of light.



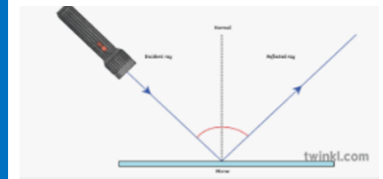
**Shorter** shadows form when the **light source** is directly **over head**, longer shadows are formed when the light source is **low** and a **larger** shadow is formed when the **light source** is closer.



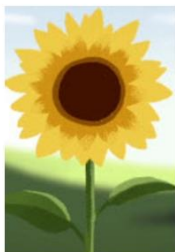
**Shadows** are formed when light is blocked by an **opaque** object.



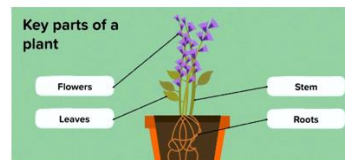
Light that is **bright** and from the sun can be **harmful** to our eyes. We can wear sunglasses and a hat to keep us safe.



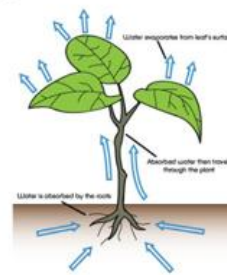
Light **reflects** from **surfaces** by bouncing off an object and not being absorbed.



A plant grows best if it has the right amount of **light**, **water**, **air**, **nutrients** and room.



**Flowers** – needed for reproduction.  
**Leaves** – needed for nutrition.  
**Stem** – needed for support and nutrition.  
**Roots** – needed for support and nutrition.



Water is **transported** around the plant by **transpiration**.



**Wind**, **animals** and **explosion** are types of seed dispersal.

# Year 3 Science Key Vocabulary

<b>light source</b>	A source of light makes light.
<b>absence of light</b>	When there is no light and it is dark.
<b>reflect</b>	When a ray of light bounces off a smooth, polished surface.
<b>surface</b>	The outside part or uppermost layer of something.
<b>harmful</b>	Causing or likely to cause harm.
<b>shadow</b>	A dark area or shape produced by a body coming between rays of light and a surface.
<b>opaque</b>	Not able to be seen through; not transparent.
<b>shorter</b>	Measuring a small distance from end to end.
<b>larger</b>	Of considerable or relatively great size, extent, or capacity.
<b>flower</b>	The seed-bearing part of a plant, consisting of reproductive organs (stamens and carpels) that are typically surrounded by a brightly coloured corolla (petals) and a green calyx (sepals).
<b>reproduction</b>	Plant reproduction is the production of new offspring in plants
<b>leaves</b>	A flattened structure of a higher plant, typically green and blade-like, that is attached to a stem directly or via a stalk. Leaves are the main organs of photosynthesis and transpiration.
<b>nutrition</b>	Food or nourishment.
<b>stem</b>	The main body or stalk of a plant or shrub, typically rising above ground but occasionally subterranean.

<b>support</b>	Bear all or part of the weight of; hold up.
<b>roots</b>	The part of a plant which attaches it to the ground or to a support, typically underground, conveying water and nourishment to the rest of the plant via numerous branches and fibres.
<b>light</b>	The natural object that allows sight and makes things visible.
<b>water</b>	A colourless, transparent, odourless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms.
<b>air</b>	The invisible gaseous substance surrounding the earth, a mixture mainly of oxygen and nitrogen.
<b>transported</b>	Take or carry (people or goods) from one place to another
<b>transpiration</b>	(of a plant or leaf) the exhalation of water vapour
<b>carpel</b>	A carpel is composed of an ovary, a style, and a stigma.
<b>stigma</b>	Found in the centre of a flower and helps collect pollen.
<b>ovary</b>	The hollow base of the carpel of a flower, containing one or more ovules.
<b>stamen</b>	The male organ of a flower that contains the anther and filament.
<b>anthers</b>	The part of a stamen that contains the pollen.
<b>filaments</b>	Stalk-like structure that attaches to the base of the flower and supports the anther
<b>wind</b>	The natural movement of the air
<b>animals</b>	A living thing that feed on organic matter, have sense organs and a nervous system
<b>explosion</b>	When a plant lets its seeds go.