Knowledge Organiser

Year Group	Subject	Topic
3	Science	Light

The Big Picture

Light helps us to see the world around us. Some objects produce their own light, while others reflect light. We need light to see objects. The Sun is our main natural source of light and provides heat and light for life on Earth. Shadows are formed when light is blocked by an opaque object. Different materials allow different amounts of light to pass through them.

Enquiry Question

How does light help us to see and how are shadows formed?

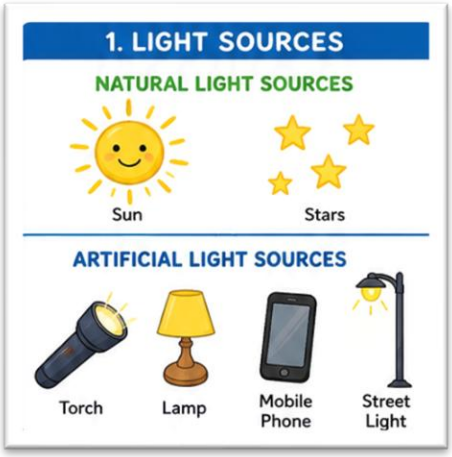
By the end of this unit, I can:

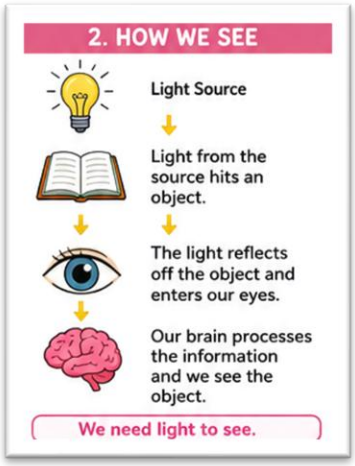
- **Identify different sources of light.**
- **Explain the difference between natural and artificial light sources.**
- **Understand how the Sun helps us and how to stay safe in sunlight.**
- **Explain that we need light to see.**
- **Describe how light reflects from surfaces into our eyes.**
- **Explain how shadows are formed.**
- **Identify transparent, translucent and opaque materials.**
- **Investigate how the distance between a light source and an object affects the size of a shadow.**

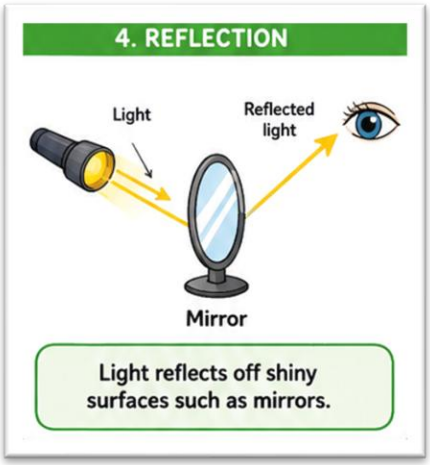
Key Vocabulary

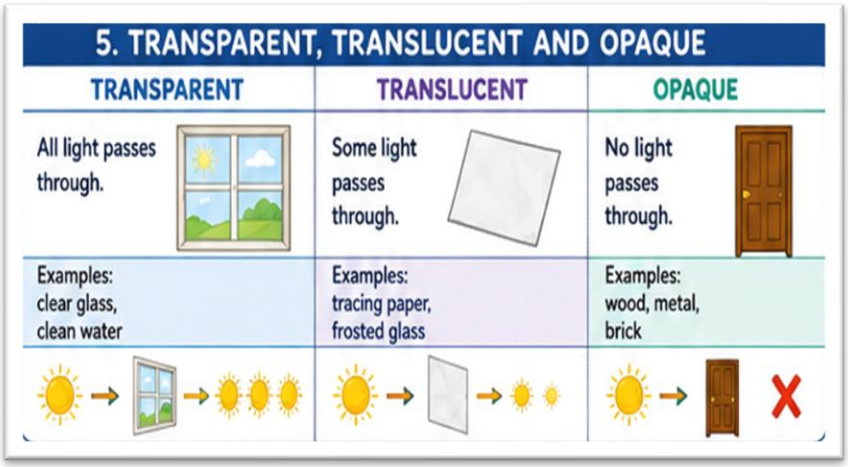
Word	Definition
Light	A form of energy that allows us to see.
Light Source	An object that produces its own light.
Natural Light Source	A light source found in nature, such as the Sun or stars.
Artificial Light Source	A light source made by humans, such as a torch or lamp.
Sun	Our nearest star that provides heat and light.
Reflect	When light bounces off a surface.
Reflection	The bouncing of light from a surface.
Mirror	A smooth surface that reflects light well.
Shadow	A dark area formed when light is blocked.
Opaque	Does not allow light to pass through.
Transparent	Allows all light to pass through.
Translucent	Allows some light to pass through.
Distance	How far apart two objects are.
Conclusion	What we found out from an investigation.
Protect	To keep something safe from harm.
Sunglasses	Glasses that protect our eyes from bright sunlight.

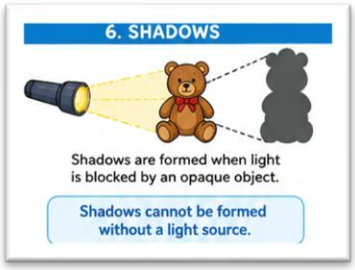
Core Knowledge

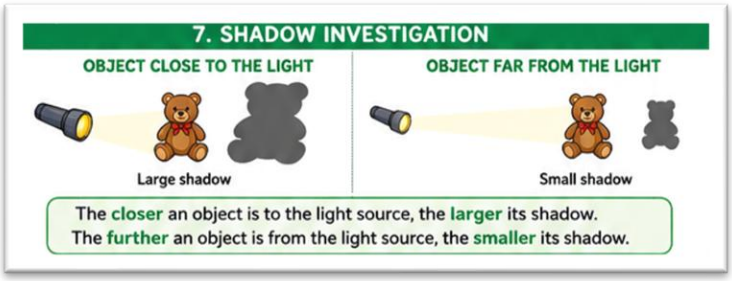












Key Facts to Remember

- ⭐ **The Sun is our main natural source of light.**
- ⭐ **We need light to see objects.**
- ⭐ **Light reflects from objects into our eyes.**
- ⭐ **Shadows form when light is blocked by an opaque object.**
- ⭐ **Transparent materials let all light through.**
- ⭐ **Translucent materials let some light through.**
- ⭐ **Opaque materials do not let light through.**
- ⭐ **Moving an object closer to a light source makes its shadow larger.**