

Tombs, Torches and Timekeepers : Science : Year 3

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To recognise that we need light in order to see.	Children will start by considering why an archaeologist cannot see anything in a newly-discovered ancient Egyptian tomb. They will go on to learn that darkness is the absence of light, and that without light we cannot see. They will then identify, describe and sort a variety of light sources, including those that would and would not have been available to the ancient Egyptians.	<ul style="list-style-type: none"> Do children know that we need light in order to see things? Do children know that dark is the absence of light? Can children identify a variety of light sources? 	<ul style="list-style-type: none"> Slides Worksheet 1A/1B/1C/1D Picture Cards (FSD? activity only)
Lesson 2	To explore how light is reflected from surfaces.	Children will learn that some surfaces reflect more light than others and that we can only see items because light is reflected from them. They may then either identify and describe a range of reflective surfaces, or conduct a reflection investigation using mirrors.	<ul style="list-style-type: none"> Do children know that light travels in a straight line? Do children know that we need light in order to see? Do children know that we see when light is reflected from a surface? 	<ul style="list-style-type: none"> Slides Worksheet 2A/2B/2C/2D Mirrors Challenge Card (FSD? activity only)
Lesson 3	To explore the Sun as a light source and identify the difference between night and day.	Children will find out about ancient Egyptians beliefs that the Sun was a god called Ra. They will then compare these beliefs with modern explanations of what the Sun is. They will learn about some differences between night and day, including starting to understand how the Sun rises and sets.	<ul style="list-style-type: none"> Can children define the difference between night and day? Do children know why the Sun rises and sets each day? Do children know that we need light to see and that darkness is the absence of light? 	<ul style="list-style-type: none"> Slides Worksheet 3A/3B/3C/3D Information Sheet Challenge Card (FSD? activity only)
Lesson 4	To investigate what shadows are and why they are formed.	Children will look at a variety of photos to see where the shadows are and suggest reasons for why they are there. They will go on to learn how shadows are formed and have some time to explore shadows for themselves, including the differences between shadows cast by opaque, transparent and translucent objects.	<ul style="list-style-type: none"> Do children know that shadows are formed when light is blocked? Do children know the difference between objects that are transparent, translucent and opaque? Can children explore shadows using torches and express their findings? 	<ul style="list-style-type: none"> Slides Worksheet 4A/4B/4C Variety of opaque, transparent and translucent objects Torches Cardboard boxes, card, sticks, greaseproof paper (FSD? activity only) Help Sheet (FSD? activity only) Challenge Cards (FSD? activity only)
Lesson 5	To investigate how the size of shadows changes throughout the day.	Children will discover what obelisks are and how the ancient Egyptians used these as sundials by looking at the shadows cast by them throughout the day. They will discuss and predict what will happen to a shadow cast by a mini obelisk in sunlight throughout the day. They may then conduct a shadow investigation and present their findings using bar graphs, or complete diagrams and order pictures to show an obelisk's shadow throughout the day.	<ul style="list-style-type: none"> Can children explain why shadows created by the Sun change position during the course of a day? Can children plan and carry out an investigation? Can children find patterns in the way the size of shadows change? 	<ul style="list-style-type: none"> Slides Worksheet 5A/5B/5C/5D Shadow stick, ruler and chalk Blank Picture Cards (FSD? activity only) Complete Picture Cards (FSD? activity only) Large sheets of paper (FSD? activity only) End of Unit Quiz