

OBJECTIVE	MILESTONE INDICATORS	BASIC ACTIVITIES	ADVANCED ACTIVITIES	DEEP ACTIVITIES	RESOURCES
Define what light is	Physics Milestone 1 To understand light & seeing: Observe & name a variety of sources of light, including electric lights, flames & the Sun, explaining that we see things because light travels from them to our eyes.	Y2: I can identify light sources. Y3: I can identify & compare light sources.	Y2: I can compare light sources. Y3: I can compare things that are light sources & things that only reflect light.	Y2: I can draw & label how light travels to our eyes. Y3: I can describe & explain the dark box.	IW clips & games, globe, boxes, torches, translucent material, wkshts
Explore reflection	Milestone 2 To understand light & seeing: Recognise that they need light in order to see things & that dark is the absence of light.	Y2: I can draw different reflective clothing. Y3: I explain why people should wear reflective clothing.	Y2: I explain why people should wear reflective clothing. Y3: I can explain how light is reflected.	Y2: I can use mirror reflections to draw shapes. Y3: I can use mirror reflections to draw shapes.	IW clips & games, torches, mirrors, selection of materials, card, wkshts
Explore the power of the Sun	Notice that light is reflected from surfaces. Recognise that light from the Sun can be dangerous & that there are ways to protect their eyes. Recognise that shadows are formed when the light from a	Y2: I can name ways how the Sun is dangerous. Y3: I can explain why the Sun is dangerous.	Y2: I can explain why the Sun is dangerous. Y3: I can compare how the Sun is dangerous, but also vital.	Y2: I can design a sunhat for a baby or toddler. Y3: I can research facts about the Sun.	IW clips & games, Sun fact sheet
Explain what shadows are		Y2: I can take pictures of	Y2: I can show how shadows can	Y2: I can demonstrate how	IW clips & pictures, torches,

<p>Investigate light travelling through materials</p>	<p>light source is blocked by a solid object. Find patterns in the way that the size of shadows change.</p>	<p>shadows. Y3: I can explain how shadows are made. Y2: I can test & list materials light travels through. Y3: I can identify & label opaque, translucent & transparent materials.</p>	<p>change length. Y3: I can demonstrate how shadows change during the day. Y2: I can identify & label opaque, translucent & transparent materials. Y3: I can sort opaque, translucent & transparent materials.</p>	<p>shadows change during the day. Y2: I can explain how a sundial works. Y2: I can investigate the shadows of different coloured translucent materials. Y3: I can investigate combining different coloured translucent materials.</p>	<p>sundial templates, compasses, iPad IW pictures, pictures & materials, wkshts, puppet templates, bamboo sticks, wkshts</p>
<p>Investigate blindness</p>	<p>A class topic exploring how it feels to be blind, using Braille, animals with little or no sight; and focusing on Guide Dogs for the Blind - using the resources from their website.</p>				

Prompts for when planning activities

Basic- Name, describe, follow instructions or methods, complete tasks, recall information, ask basic questions, use, match, report, measure, list, illustrate, label, recognise, tell, repeat, arrange, define, memorise.

Advanced- Apply skills to solve problems, explain methods, classify, infer, categorise, identify patterns, organise, modify, predict, interpret, summarise, make observations, estimate, compare.

Deep- Solve non-routine problems, appraise, explain concepts, hypothesise, investigate, cite evidence, design, create, prove.