



Wordsworth Science Curriculum

| KS2 Light | | | |
|---|--------|--------|---|
| Year 3 Spring 1 | Year 4 | Year 5 | Year 6 Spring 1 |
| Skills | | | |
| <ul style="list-style-type: none">• Set up practical enquiries and comparative tests e.g. look for patterns in what happens to shadows when the light source moves or the distance between the light source and the object changes | | | <ul style="list-style-type: none">• Plan a scientific enquiry to answer a question including recognising and controlling variables |
| <ul style="list-style-type: none">• Make systematic and careful observations | | | <ul style="list-style-type: none">• Make systematic and accurate observations |
| <ul style="list-style-type: none">• Take simple measurements to give more precise explanations and conclusions | | | <ul style="list-style-type: none">• Take measurements with accuracy and precision using a range of scientific equipment |
| <ul style="list-style-type: none">• Report findings in an oral presentation (e.g. linked to puppet show) | | | <ul style="list-style-type: none">• Report and present findings including conclusions and causal relationships |
| <ul style="list-style-type: none">• Identify similarities, differences and changes based on materials used | | | <ul style="list-style-type: none">• Identify scientific evidence that has been used to support or refute ideas or arguments (e.g. analysing historic scientific thought) |
| <ul style="list-style-type: none">• Use straightforward scientific evidence to answer questions | | | <ul style="list-style-type: none">• Apply knowledge in a variety of ways e.g. deciding where to place rear-view mirrors on cars; designing and making a periscope and using the idea that light appears to travel in straight lines to explain how it works |
| Knowledge | | | |
| <ul style="list-style-type: none">• Recognise that they need light in order to see things and that dark is the absence of light• Understand that light is reflected from surfaces• Recognise that light from the sun can be dangerous and that there are ways to protect their eyes• Recognise that shadows are formed when the light from a light source is blocked by an opaque object – outdoors – identifying which objects cause shadows investigate)• Know why size of shadows change. – outdoors (e.g. chair experiment – over the course of the day) | | | <ul style="list-style-type: none">• Recognise that light appears to travel in straight lines• Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye• Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes• Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. |