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| **Sound** | **Working Scientifically** | | |
| * Can they describe a range of sounds and explain how they are made? * Can they associate some sounds with something vibrating? * Can they compare sources of sound and explain how the sounds differ? * Can they explain how to change a sound (louder/softer)? * Can they recognise how vibrations from sound travel through a medium to a ear? * Can they find patterns between the pitch of a sound and features of the object that produce it? * Can they find patterns between the volume of the sound and the strength of the vibrations that produced it? * Can they recognise that sounds get fainter as the distance from the sound source increases? * Can they explain how you could change the pitch of a sound? * Can they investigate how different materials can affect the pitch and volume of sounds? | **Planning** | **Obtaining and presenting evidence** | **Considering evidence and evaluating** |
| * Can they use different ideas and suggest how to find something out? * Can they make and record a prediction before testing? * Can they plan a fair test and explain why it was fair? * Can they set up a simple fair test to make comparisons? * Can they explain why they need to collect information to answer a question? | * Can they record their observations in different ways? <labelled diagrams, charts etc> * Can they describe what they have found using scientific language? | * Can they explain what they have found out and use their measurements to say whether it helps to answer their question? * Can they use a range of equipment (including a data-logger) in a simple test? |
| **Challenge** | | | |
| * Can they explain why sound gets fainter or louder according to the distance? * Can they explain how pitch and volume can be changed in a variety of ways? * Can they work out which materials give the best insulation for sound? | * Can they record and present what they have found using scientific language, drawings, labelled diagrams, bar charts and tables? | * Can they explain their findings in different ways (display, presentation, writing)? * Can they use their findings to draw a simple conclusion? |  |