Science Year 4

POS	Learning objectives	Activities	Assessment	Resources
Sc1 1b – test ideas Sc1 2l – use their scientific knowledge to explain observations. Sc 4 3e – sounds are made when objects vibrate.	Identify different sounds and understand how sound travels.	Discuss different sounds we hear in everyday life and identify how the sounds are made. Understand how sound travels and investigate vibration using a range of instruments. Demonstrate that if you knock stones together over a candle, sound makes the light flicker. Link string and cups to show sound travelling. 2 lessons	Children are able to define how sound travels.	1. Board, pens, worksheets, counters and a range of different instruments. 2. Candle, sand, stones, string and cups.
Sc1 2l - use scientific knowledge to explain observations. Sc 4 3e – sounds are made when objects vibrate.	To understand that we hear sound with our ears	Talk about how sound travels through the air. Identify the anatomy of the ear and construct ear from worksheet.	Children should be able to define how we hear.	Board, pens, ear poster, worksheets, glue and scissors.
Sc1 2c – thinking about what will happen, using equipment and material to test ideas Sc4 3g – vibration from sounds require a medium to travel.	Investigate how different sizes of ears affect how we hear.	Make different shaped ears to increase and decrease sounds. Locate where sounds are coming from with eyes closed – deceptive as we hear with both ears.	Development of investigation skills, planning and carrying it out.	Board, pens, card, boxes, glue and scissors.
Sc1 2l – using scientific knowledge to explain observations. Sc4 3f – pitch and loudness can be changed	Understand that pitch and loudness are different and can be altered.	Distinguish high and low notes from different instruments. Investigate pitch with different levels of water in bottles.	Children can differentiate pitch from loudness.	Board, pens, instruments, bottles and water
Sc1 2c – using equipment and material to test ideas. Sc1 2g – check obs. And measurements by repeating a test. Sc4 3g – vibrations require a medium to travel through the ear.	Sounds become quieter with distance.	Investigate how far away you can hear a sound, explore with tape measure and blindfolded person. Repeat test to check measurements. Record results in table using ICT and conclude.	Children can record measurements from an investigation.	Board, pens, tape measure and blindfold.
Sc1 2m – review their own and others work and describe its significance and limitations Sc4 3g – vibrations require a medium to travel through the ear.	Mediums are required in order us to hear sounds.	Investigate how different materials can make sounds quieter. Sound proof a stop-clock.	Children should be able to plan an investigation, carry it out and conclude.	Board, pens, materials, glue and scissors.