## Year 4

## Focus: Sound

## Age related scientific vocabulary

| vibrations | Sound is made when something vibrates. This causes the particles around <br> it to vibrate which causes more particles nearby to vibrate, which sends a <br> vibrating ripple away from the sound source. |
| :--- | :--- |
| volume | How loud or quiet something is. A sound becomes quieter as it travels <br> away from its source. |
| pitch | How high or low a sound is. The size and shape of sound waves determine <br> the type of sound we hear - whether it has high pitch or low pitch. |



## Key Knowledge

- Sound travels from its source in all directions and we hear it when it travels to our ears.
- Changing the shape, size and material of an object will change the sound it produces.
- Sound is produced when an object vibrates.
- Sound moves through all materials by making them vibrate.
- Changing the way an object vibrates changes its sound
- Bigger vibrations produce louder sounds and smaller vibrations produce quieter sounds.
- Faster vibrations (higher frequencies) produce higher pitched sounds

| Carlton Assessment Grid |  |  |  |
| :---: | :---: | :---: | :---: |
| Success Criteria | Pupil Reflection |  | Teacher Assessment |
| I know that sounds are made when an object vibrates | Before $\square$ | After $\square$ |  |
| I understand that we hear sounds when the vibrations travel from a source through a medium to our ears | Before $\square$ | After $\square$ |  |
| I understand that sounds get fainter as the distance from sound source increases-I can suggest questions that can be tested | Before $\square$ | After $\square$ |  |
| I can find patterns between the volume of a sound and the strength of vibrations that produce it | Before $\square$ | After $\square$ |  |
| I can find patterns between the pitch of a sound and features of the object that produced it | Before $\square$ | After $\square$ |  |
| I can investigate sound-proofing materials - I can put forward ideas about testing and make predictions | Before $\square$ | After $\square$ |  |

