## Year 4: Sound Knowledge Mat

| Subject Specific Vocabulary |  | Interesting Book   | Sticky Knowledge   |
|-----------------------------|--|--|--|
| vibrating                   | Sound is caused by the vibration of a medium (usually air) and it travels in waves.  | Important facts to know by the end of the sound topic:   | about Sound  Sound travels with a speed of   |
| pitch                       | A high sound has a high pitch and a low sound has a low pitch. A tight drum skin   |  | 767 miles per hour but it cannot travel through a vacuum.  |
|                             | gives a higher pitched sound than a loose drum skin.   |  | ☐ Sound comes from vibrations.  These vibrations create sound waves which move through mediums such as air and water before reaching our ears. |
| volume                      | Volume is the perception of loudness from the intensity of a sound wave. The higher the intensity of a sound, the louder it is perceived in our ears, and the higher |  |  |
| insulation                  | volume it has.  Protecting something by surrounding it with material that reduces or prevents the  |  | Dogs can hear sounds at a<br>higher frequency than humans.   |
| _                           | transmission of sound.   |  | Our ear drums vibrate in a similar way to the original source of the vibration, allowing us to hear many different sounds.                     |
| sound                       | Vibrations that travel through the air or other medium and can be heard when they reach a human or animal's ear.   |  |  |
|                             |  | <ul> <li>Know how sound is made.</li> <li>Know how sound travels from the source to the ears.</li> <li>Know to associate sound with vibration.</li> <li>Know the correlation between pitch and the object producing a sound.</li> <li>Know the correlation between the volume of a sound and the strength of the vibrations that produced it.</li> <li>Know what happens to a sound as it travels away from its source.</li> </ul> | ☐ When traveling through water, sound moves four times faster than when it travels through air.  |
| source                      | A place, person or thing from which something originates or can be obtained.   |  |  |
| travel                      | The movement of something from one place to another.   |  | Sound is used by many animals to detect danger, warning them of possible attacks before they happen.   |
| faint                       | A sound with very little strength or intensity.  |  | ☐ The loud noise you create by cracking a whip occurs because the tip is moving so fast it breaks the speed of sound!                          |
| loud                        | A sound which makes a strongly audible sound and is easily heard.  |  |  |

