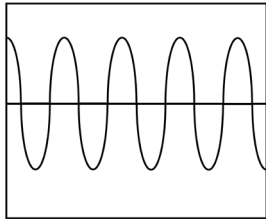
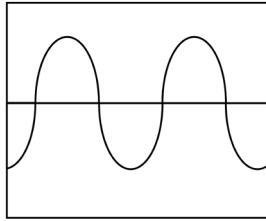


# Year 4 Sound Revision Mat

Here are two diagrams of sound waves. Label one diagram high pitch and one diagram low pitch.



Fill in the gaps.

Sound travels much \_\_\_\_\_ than light. This means you will \_\_\_\_\_ something before you \_\_\_\_\_ it.

Explain why sound travels faster through solids and liquids than gases.

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Match the instrument with its pitch. (Clue: compare their sizes.)



double bass

high



cello

low



violin

medium

Which of these sentences is true? Tick the right one.

Sound travels faster in water than in air.

Sound travels faster in air than in water.

Sound travels at the same speed in water as it does in air.

Give two reasons why sounds get quieter over distance.

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# Year 4 Sound Revision Mat

Fill in the missing words:

Sound is made when air molecules \_\_\_\_\_ . The vibrations reach your \_\_\_\_\_. The vibrations are changed to \_\_\_\_\_ and sent to your \_\_\_\_\_ .

How can you make the pitch of a guitar note higher?

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Which of these statements is true?

- A. Sound doesn't travel in space.
- B. Sound travels more slowly in space.
- C. Sound travels more quickly in space.

Explain your answer.

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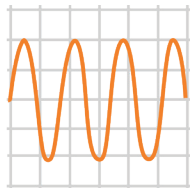
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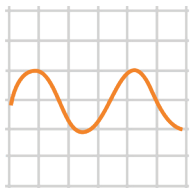
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\_\_\_\_\_ is the measure of how loud or quiet a sound is.

Here are two diagrams of sound waves. Label one diagram quiet and one diagram loud.

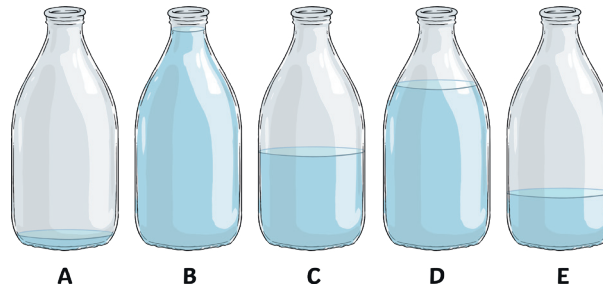


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Put these in order of pitch from highest to lowest when blown across the top.



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Write true or false next to each sentence.

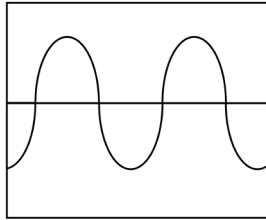
The bigger the vibration, the louder the sound. \_\_\_\_\_

The faster the vibration, the lower the pitch. \_\_\_\_\_

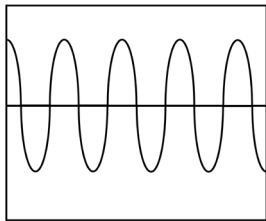
High and low sounds are the same as loud and quiet sounds. \_\_\_\_\_

# Year 4 Sound Revision Mat - Answers

Here are two diagrams of sound waves. Label one diagram high pitch and one diagram low pitch.



low pitch



high pitch

Fill in the gaps.

Sound travels much **slower** than light. This means you will **see** something before you **hear** it.

Explain why sound travels faster through solids and liquids than gas.

**Answers should refer to the fact that molecules in solids and liquids are closer to each other, so the vibrations travel more quickly and easily.**

Match the instrument with its pitch. (Clue: compare their sizes.)



double bass



cello



violin

high

low

medium

Which of these sentences is true? Tick the right one.

Sound travels faster in water than in air.

Sound travels faster in air than in water.

Sound travels at the same speed in water as it does in air.

Give two reasons why sounds get quieter over distance.

**Example answer: The further the vibrations travel, the more they spread out. As they spread out through more and more particles, the vibrations become smaller and smaller. This causes the sound to get quieter and quieter. Sounds also get quieter over distance because some of the vibrations are absorbed by obstacles they meet.**

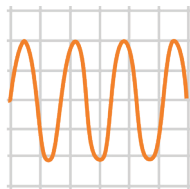
# Year 4 Sound Revision Mat - Answers

Fill in the missing words:

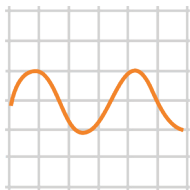
Sound is made when air molecules **vibrate**. The vibrations reach your **ear**. The vibrations are changed to **electrical signals** and sent to your **brain**.

**Amplitude** is the measure of how loud or quiet a sound is.

Here are two diagrams of sound waves. Label one diagram quiet and one diagram loud.



**loud**

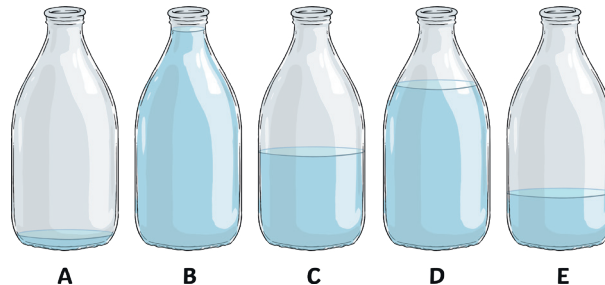


**quiet**

How can you make the pitch of a guitar note higher?

**Answers could refer to making the string more taut and making the string shorter by pressing down on the fret.**

Put these in order of pitch from highest to lowest when blown across the top.



**B, D, C, E, A**

Which of these statements is true?

- A. Sound doesn't travel in space. ✓
- B. Sound travels more slowly in space.
- C. Sound travels more quickly in space.

Explain your answer.

**Answers should refer to there being no air particles in space so there are no molecules to vibrate.**

Write true or false next to each sentence.

The bigger the vibration, the louder the sound. **True**

The faster the vibration, the lower the pitch. **False**

High and low sounds are the same as loud and quiet sounds. **False**