

1. This question is about sound.

Decide if these statements are **true** or **false**.

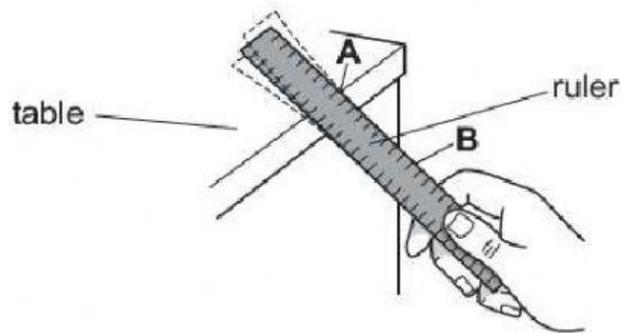
Tick (✓) the correct box next to each statement.

	<b>true</b>	<b>false</b>
Sound can travel through air.	<input type="checkbox"/>	<input type="checkbox"/>
Sound travels as vibrations.	<input type="checkbox"/>	<input type="checkbox"/>
Sound travels at the same speed in all materials.	<input type="checkbox"/>	<input type="checkbox"/>
We hear sounds when vibrating air hits our eardrums.	<input type="checkbox"/>	<input type="checkbox"/>

2. Chen investigates sound.

Investigation 1

Look at the picture.

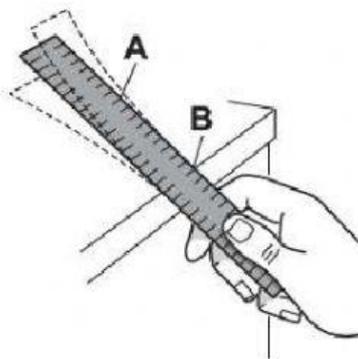


Chen hits his ruler on a table at point A.

He leaves the ruler on the table and listens to the sound it makes.

Investigation 2

Look at the new picture.



Chen hits the ruler on the table at point B.

He leaves the ruler on the table and listens to the sound it makes.

(a) Complete the sentence.

The ruler makes a sound because it .....

**(b) What happens to the **pitch** of the sound?**

Tick (✓) the correct answer.

pitch is higher in investigation 1

pitch is lower in investigation 1

pitch is the same in both investigations

**(c) Chen hits the ruler on the table with more force.**

**What happens to the **loudness** of the sound?**

Tick (✓) the correct answer.

decreases

increases

stays the same

3. Angelique shakes a bell to make a sound.



(a) Complete the sentence.

The bell makes a sound because it ..... [1]

(b) Angelique shakes a smaller bell with the same force.

It makes a different sound to the larger bell.

Describe how the sound of the **smaller** bell is different.

.....

(c) Angelique shakes the smaller bell with less force.

It makes a different sound.

Describe how the sound made with **less force** is different.

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