Q1. (2018)

0 2 . 2 What type of wave is a sound wave?

[1 mark]

Tick **one** box.

- electromagnetic ☐
- longitudinal ☐
- transverse ☐

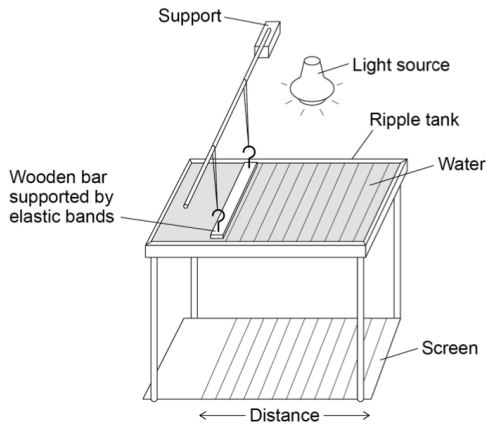
Q2. (2019)

0 7 **Figure 11** shows the equipment a teacher used to determine the speed of a water wave.

The equipment includes:

- a ripple tank filled with water
- a wooden bar that creates ripples on the surface of the water
- a light source which causes a shadow of the ripples on the screen.

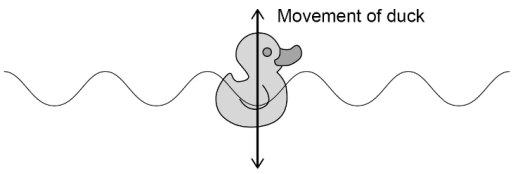
Figure 11



The teacher put a plastic duck in the ripple tank as shown in **Figure 12**.

The plastic duck moved up and down as the waves in the water passed.

Figure 12



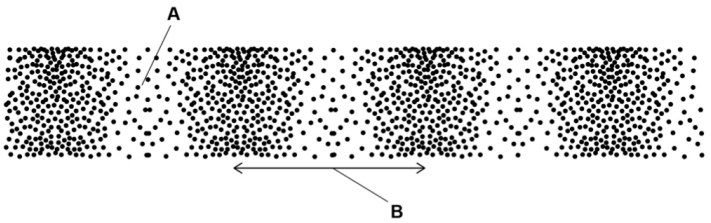
0 7 . 2 How does the movement of the plastic duck in **Figure 12** demonstrate that water waves are transverse?

[1 mark]

Q3. (2022)

0 6 **Figure 8** shows a longitudinal wave.

Figure 8



0 6 . 1 What do the labels **A** and **B** on **Figure 8** represent?

Choose answers from the box.

[2 marks]

amplitude	**frequency**	**rarefaction**	**reflection**	**wavelength**

A _____

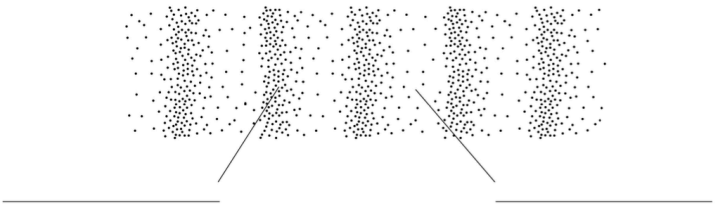
B _____

Q4. (2023)

0 4 Sound waves are longitudinal waves.

0 4 . 1 **Figure 9** shows a sound wave.

Figure 9



Complete the labels on **Figure 9**.

Choose answers from the box.

[2 marks]

compression	**extension**	**rarefaction**
reflection		**resistance**

Q5. (2023)

0 4 . 2 Which of the following is true for longitudinal waves?

[1 mark]

Tick (✓) **one** box.

Longitudinal waves transfer charge. ☐

Longitudinal waves transfer energy. ☐

Longitudinal waves transfer matter. ☐

Q6. (2024)

0 3 . 6 Sound waves in air are longitudinal waves.

Complete the sentence to describe a sound wave.

Choose answers from the box.

[2 marks]

compression	**deflection**	**diffraction**	**rarefaction**	**reflection**

When sound waves travel through air they create areas

of _____ and _____.