| Form/Class | |
|---|---|
| Name | |

# Worksheet 1: Waves

This exercise is about waves. You will be able to accurately label parts of a wave and describe some of the properties and behaviour of waves.

**1** This is a diagram of a transverse wave.

Label the following:

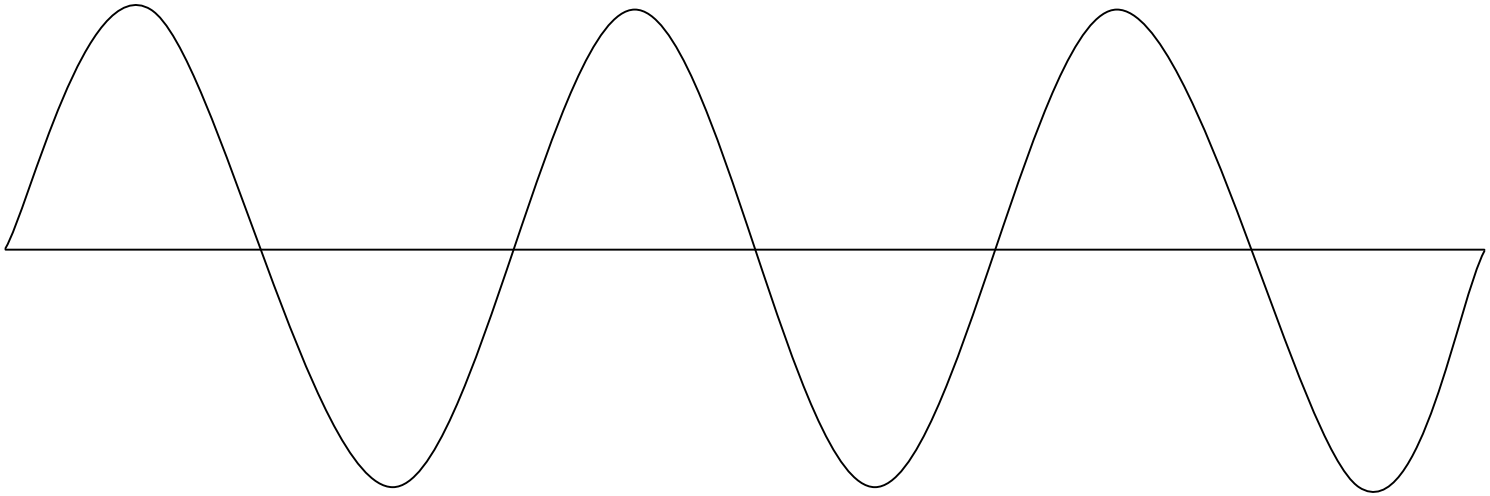
a) Amplitude

b) Crest

c) Trough

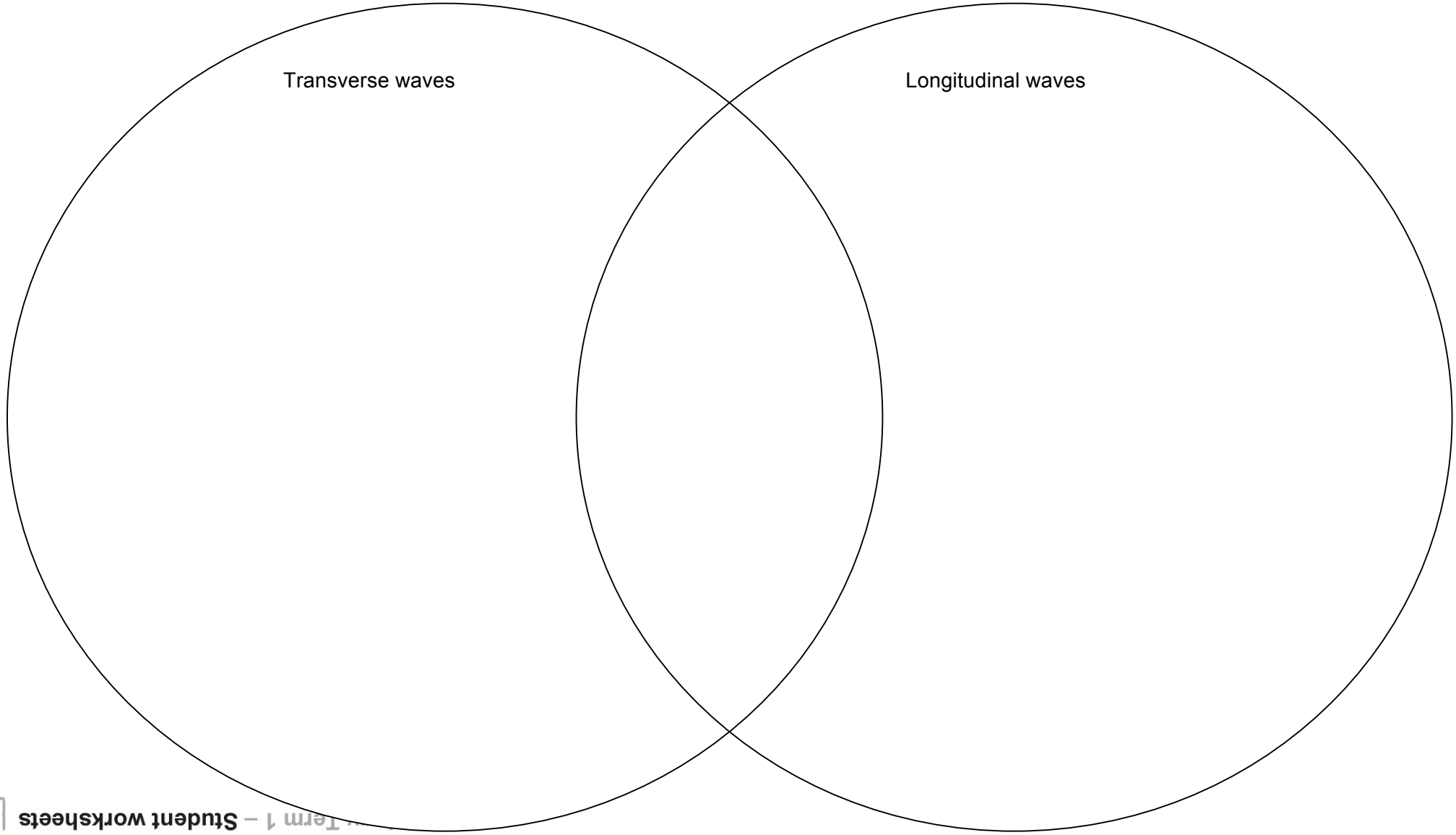
d) Three *different* examples of wavelengths

e) Direction the wave travels



**2** Complete the Venn diagram to compare and contrast transverse and longitudinal waves. Anything the two wave types have in common should be written in the intersecting area.

You could include examples of each type, their properties and how they travel, along with anything else you have learned. Try and use correct terminology as much as possible.



**3** Describe what happens to the amplitude of a wave as it moves away from its source and why this occurs.

……

……

**4** A group of children are in a rubber dinghy in the sea. They paddle close to a cliff and notice that the waves there seem much bigger than further out to sea. Explain why this may happen, using ideas about properties of waves and wave behaviour.

……

……

……

……

**5** Crowds at sports events often make a 'Mexican wave'. State whether this is a transverse or longitudinal wave and justify your answer.

……

……

**6** Put a tick next to the statements that are true. If they are false, write a true statement next to the question.

a. Waves can carry matter

b. Frequency means the number of oscillations per second

c. Waves that are in step will add together to make a bigger wave

d. All waves have the same shape as we draw in diagrams

e. An echo is a reflection of a sound wave