

Mark schemes

1

(a) (i) any **one** from

- weight
accept 'gravity'
- gravitational force

1 (L4)

(ii) the rope **or** elastic

- accept 'bungee'*
- do **not** accept 'air resistance'*
- accept 'upward force'*
- do **not** accept 'upthrust'*
- accept 'tension'*

1 (L3)

(b) less than

1 (L3)

(c) (i) any **one** from

- light travels faster than sound
accept 'light travels faster'
'light is fast' is insufficient
- sound travels slower than light
accept 'sound travels slower'
'sound is slow' is insufficient
accept 'light is faster than sound'
'light travels before sound' is insufficient

1 (L4)

(ii) louder

1 (L3)

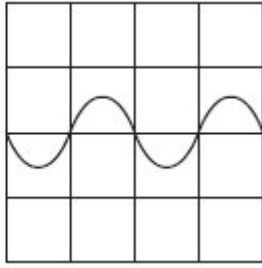
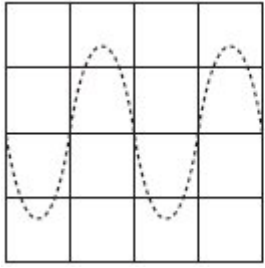
(iii) eardrum

- accept 'drum'*
- accept 'hammer' or 'anvil' or 'stirrup'*
- accept 'small bones'*
- accept 'ossicles'*

1 (L3)

[6]

(ii)



award one mark for a wave with a smaller amplitude

award one mark for a wave with the same frequency

award the marks for a wave with the correct amplitude and frequency but which is not centred

on the middle line of the grid or which is not in phase with the drawn wave

the marks may be awarded for a wave drawn on Sylvia's grid

2 (L7)

[5]