

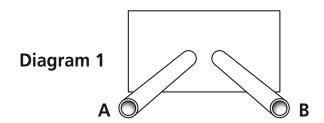
Name:	Form:

Based on pages 12 and 13 of Changing sounds

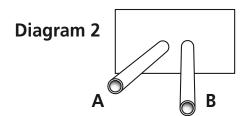
## Investigating the reflection of sound

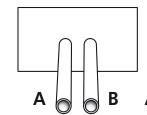
## Try this...

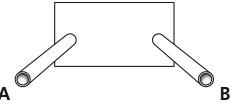
**1.** Set up a sheet of card and two long cardboard tubes as shown in Diagram 1. Put a loud ticking clock in front of tube B. Then put your ear close to the end of tube A and listen for the sound of the clock.



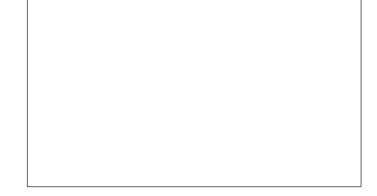
**2.** Move the tubes to different positions, such as those shown in Diagram 2. Keep the clock in front of tube B.







- **3.** After you have set up the pair of tubes in a certain position, put your ear to tube A and listen to the sound.
- **4.** Change the position of the tubes and listen again.
- **5.** Keep repeating step 4 until you find the position of the tube which makes the ticking clock sound loudest.
- **6.** Draw the arrangement of the tubes which made the clock sound loudest.



- **7.** Go to a wall which has a large open space next to it.
- **8.** Stand one metre from the wall, clap your hands and listen for an echo.
- **9.** Step back one metre, clap your hands again and listen for an echo.
- **10.** Repeat step 9 until you hear an echo. How far are you from the wall when you hear an echo?

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