



Are Two Ears Better Than One?

We know how our ears work, but would our ability to hear be changed if we only had one ear? Carry out this experiment to discover the answer!



Prediction:

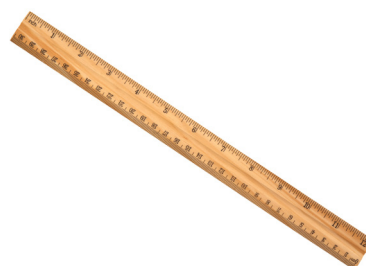
I predict that

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Equipment:

- A blindfold
- 4 objects for testing:
 - Ruler
 - Pencil
 - Ball of plasticine
 - Shoe





Method:

1. In pairs, label yourselves Partner 1 and Partner 2.
2. Find a quiet environment to work with no background noise.
3. Blindfold Partner 1. Agree that the experiment is about to start. No more talking.
4. Partner 2: find a space up to 4 metres away from Partner 1. From this point, drop your first object onto the floor from shoulder height.
5. Partner 1: point to where you think the object was dropped based on what you heard.
6. Partner 2: repeat the dropping of this object from the same position three times to make it a fair test. Note down on your results table whether Partner 1's answer was either:

accurate close to far away couldn't hear it at all

7. Repeat with a second object at another place in the room that's about 4 metres away from Partner 1.
8. When you have completed the process with all four objects, repeat the whole experiment again, but change one important thing – this time Partner 1 covers up their left ear. Make sure you test objects on Partner 1's left and right side.

What do you predict will happen to your results this time?

9. Record all the results and compare your findings.
10. If there is time, swap partner roles and find out if your investigations lead to the same results.



Results

Fill in each response box with one of the following results

accurate close to far away couldn't hear it at all

Object dropped	2 ears	1 ear
Ruler		
Pencil		
Ball of plasticine		
Shoe		

Conclusion:

My results show that

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What questions do you have about how your ears work?

How could you investigate this further?

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