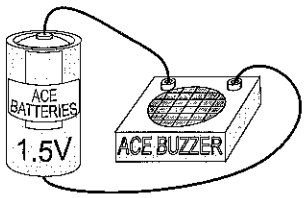
Changing the Volume of a Buzzer

You can change the volume of a buzzer just like you change the brightness of a bulb — change the number of cells, the voltage of the cells or the number of components in the circuit.

1. Look at the circuit on the right. Fill in the gaps in the sentences about the circuit by using one of the words given in the brackets.



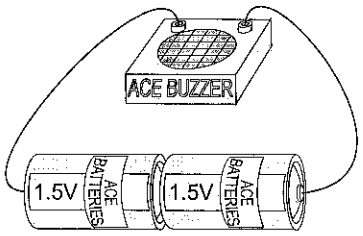
Changing the cell in the circuit for a cell with a

higher ..... (**volume** / **voltage**) will

..... (**increase** / **decrease**) the volume of the buzzer. Adding extra

..... (**buzzers** / **cells**) will affect the volume in the same way.

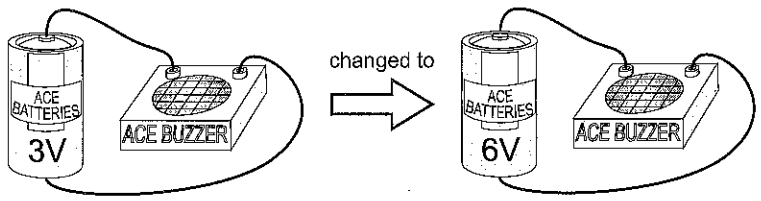
2. Look at the list of changes that could be made to the circuit shown below.
Put a tick (✔) next to any changes that would **decrease the volume** of the buzzer.



- ☐ Swap one of the cells for a 1.2V one.
- ☐ Add a 1.5V cell.
- ☐ Swap one of the cells for a 4.5V one.
- ☐ Remove one of the cells.

3. The two circuits below have been changed.
Explain the effect that each change would have on the **volume** of the buzzer.

a)



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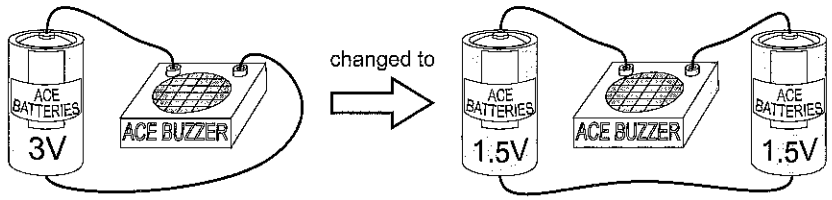
b)



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INVESTIGATE

Buzzers are used in all sorts of circuits. Can you think of some places where buzzers are used? If you're struggling, think about all the appliances that make beeping sounds.