Temperature Dissolving Investigation

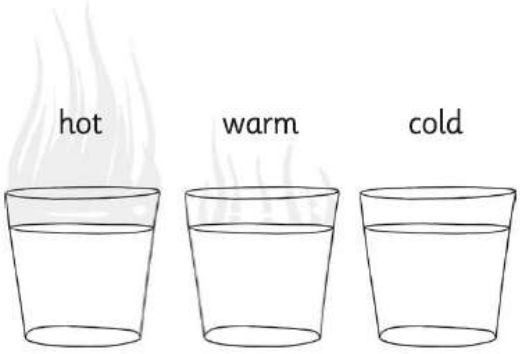
Put the spoonfuls of sugar in a jar of cold / warm / hot water and time how long it takes to dissolve. Carry out 3 tests, one for each temperature and time how long it takes for the sugar to dissolve.

Complete this table:

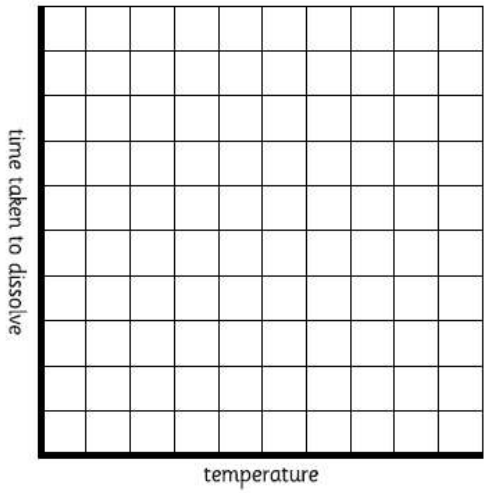
independent variable	dependent variable	controlled variable	question

Which temperature water do you think will dissolve the sugar fastest?

_____



Draw a bar chart of your results:



Find the average time for each temperature.

cold water ___ °C	warm water ___ °C	hot water ___ °C

Conclusion:

How does the temperature of the water affect the time it takes the sugar to dissolve?

_____

_____

Stirring Dissolving Investigation

Put the spoonfuls of sugar in a jar of either cold or warm water. Whatever you choose make sure it's the same or a similar temperature each time. Carry out 3 tests, increasing the number of stirring, e.g. no stirring, stirring for a minute and stirring for 2 minutes. Measure the time taken for the sugar to dissolve.

Complete this table:

independent variable	dependent variable	controlled variable	question

Which will dissolve faster, no stirring, some stirring or lots of stirring, why?

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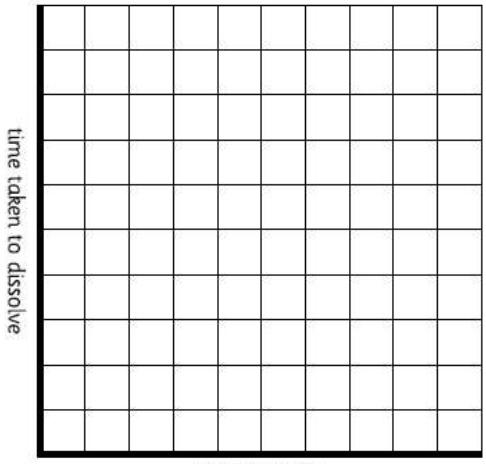
Draw a bar chart of your results:



Amount of stirring.

Find the average time for each temperature.

no stirring	Some stirring	Lots of stirring

Conclusion:

How does the amount of stirring affect the time it takes the sugar to dissolve?

_____

_____