**Hypothesis writing practice questions**  
  
A hypothesis is a statement that could be tested in an experiment to see if it is supported or not.

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| **Three things that must be in every hypothesis:**   1. The independent variable *(so you know what to change)* 2. The dependent variable *(so you know what to measure)* 3. And a guess at how one changes the other *(so you can say if it was supported or not after getting results)* |

**Hypothesis or Aim?**

A hypothesis is different from an aim which is a very general problem or question. A hypothesis is very specific. A hypothesis is written after the aim (problem) is known.

For example, an experiment may have the following aim:

**Aim:** How does the weather affect how much people drink?

Many different experiments could be designed to help answer this aim. One hypothesis to help answer this aim might be:

**Hypothesis**: The larger the temperature on the day is, the more water people will drink.

Does this hypothesis have all three things that a hypothesis needs? Check!

**Questions**

Have a go at writing a hypothesis for the following problems:

1. How does a ball’s bounce height change when the way the ball is bounced changes?

*Hint: figure out the independent and dependent variables first.*

Independent variable is:

Dependent variable is:

A hypothesis is:

Repeat for the remaining problems:

1. How does the height of a person affect how long their arm span is?
2. Does visiting museums affect the school results of students?
3. What is the best month in the year to add fertiliser to lawn to make it grow?
4. Do songs that get played on the radio a lot affect how many downloads they get from iTunes?

The answers are on the next page. Be sure to attempt all questions before sneaking a look!



All of these hypotheses are just a couple of possibilities which will depend on your choice of variables. If you are unsure, ask your teacher if yours is just as good.

1. The higher a ball is dropped from, the higher the bounce height will be.

The faster a ball is thrown down, the higher the bounce height will be.

1. Taller people will have larger arm spans.

As the height of a person increases, the length of their arm span also increases.

1. The more museums a student visits, the higher their test scores are.

As the student spends more time at museums, their test scores improve.

1. When fertilizer is added in February, grass will grow higher compared to other months.

Adding fertilizer in winter produces faster growing grass than if fertiliser is added in summer.

1. As the number of times a radio station plays a song in a day increases, the number of downloads on iTunes per day also increases.

A song played on a radio station has more downloads than songs that do not get played on the radio.