

Name: _____

Date: _____

Asking Questions Tool - Experimental Questions

Part A

1. What is the original question you want to investigate?

Scientists develop experimental questions to identify what they want to test or change in an experiment (independent variable). They also include what they are going to observe or measure (dependent variable).

For example:

How does the amount of light a plant gets in a day affect how tall the plant grows?
(independent variable) (dependent variable)

Example question frames for experimental questions:

How does _____ affect _____?
(independent variable) (dependent variable)

What is the effect of _____ on _____?
(independent variable) (dependent variable)

2. Look at your original question. What do you think _____
will cause an effect? This is the variable you will
change in your experiment (independent variable).

3. What will you measure to see if the change you _____
made has an effect? This is the variable you will
observe or measure (dependent variable).

4. Revise your question to include the variable you are changing (independent variable) and the variable you are measuring (dependent variable). Use the question frames shown above to help you revise your question.

5. If you collect this evidence in an experiment, what new thing about the phenomenon will it help you explain?

Part B

Peer or Teacher Feedback

Name: _____

Name of person giving feedback: _____

Provide feedback using the table below.

Criteria	Yes or no?	Feedback and/or suggested revision
Does the question include an independent and dependent variable?		
Is the question specific enough that you can design an investigation to answer it?		
Does the question help you figure out something new about the phenomenon?		