Broad or Narrow?

Asking Scientific Questions



Asking The Right Questions

People learn about the world by being curious and asking questions. Scientists may ask a broad question which may be broken down into a series of more specific questions.

Scientific questions have an answer that can be measured or observed through experimentation. The answers are not based on opinions.



A Broad Question:

Why does mold grow on food?

There are too many variables to consider. A single experiment will not give you the answer to this question.

To find out more about how mold grows on food you need to ask more specific questions that can be tested.

Narrow it down:

Ask more specific, testable questions.

Does mold grow faster on dry bread or moist bread?

Does mold grow faster on bread that is exposed to sunlight?

These questions can be answered by conducting an experiment. Factors that lead to mold growth will be observable.

Results of experimentation may lead to further questions

Examples:

What types of food allow mold to grow the fastest?

How effective is refrigeration at preventing the growth of mold?

Which storage containers are better at preventing the growth of mold?

Avoid questions that are answered with opinions.

Which is the ugliest looking mold?

Opinions cannot be tested. One person may think mold looks ugly. Another person may see colours or patterns in the mold that look beautiful. Opinions cannot be right or wrong!







What questions do you have about mold?

