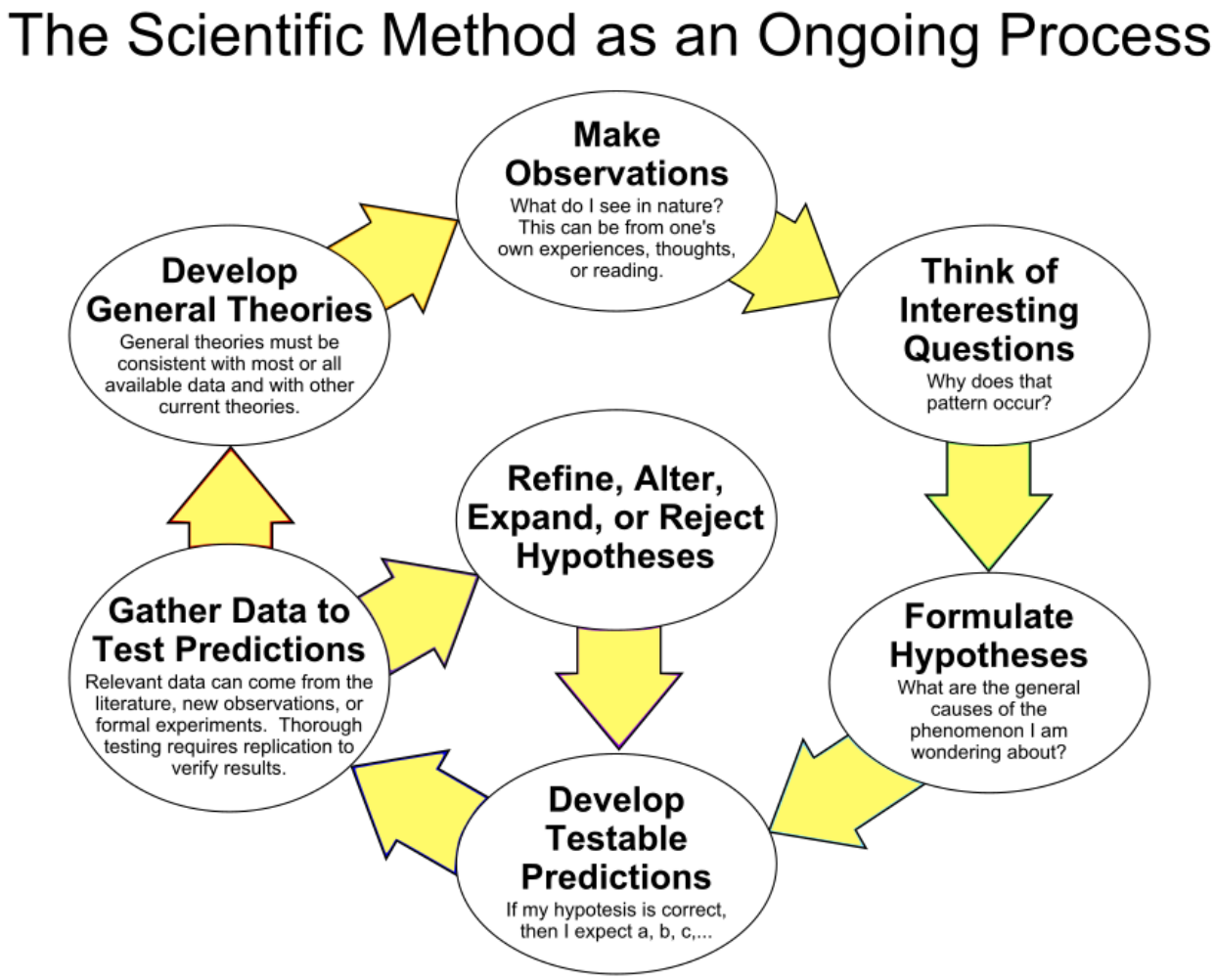
Get your idea and do some research - Video 1



How to Ask Scientific and Engineering Questions About the World Around You

When scientists and engineers look at the world, they often ask different questions to help them understand or improve things. Scientists are curious about why things happen the way they do. For example, they might ask, "Why do plants grow better in some places than others?" or "What is the best way to recover after exercise?" Engineers, on the other hand, focus on how to make things better, faster, or more efficient. They might wonder, "How can I improve the design of a car to make it go faster?" or "Can I invent a robot to shoot basketballs perfectly every time?" Both types of questions are important for discovery and innovation. By observing the world, asking questions, and being curious, anyone can start thinking like a scientist or an engineer. Watch the video and see what you can learn.

Fill in the Blank: Fill in the blank with the correct words.

1. Scientists often ask _____ about why things happen.
2. Engineers focus on making things _____ or more efficient.
3. When looking at a picture, Arby noticed the airplane, the car, and the _____.
4. Serena wondered about how _____ grow and what they need.
5. Both scientists and engineers start by asking _____ about what they observe.

Multiple Choice Questions: Choose the correct answer from the choices for each question.

1. What kind of question does a scientist usually ask?
    - a) How can I make this better?
    - b) Why does this happen?
    - c) Who invented this?
    - d) Where is it located?

2. Which of these is an example of an engineering question?
    - a) What conditions help plants grow?
    - b) How can I make a car go faster?
    - c) Why do cats sleep so much?
    - d) What is the weather like?

3. When observing the world, what do both scientists and engineers do first?
    - a) Build a model
    - b) Ask questions
    - c) Write a report
    - d) Make a video

4. What did Serena notice growing out of the drain?
    - a) A cat
    - b) A plant
    - c) A basketball
    - d) A window

5. Why did Arby think about building a robot?
    - a) To clean the house
    - b) To make every basketball shot
    - c) To fly the airplane
    - d) To grow plants

Open-Ended Questions: Answer the following questions in complete sentences.

1. Give an example of a science question you could ask by looking around your classroom.

2. Describe one way an engineer might try to improve something you use every day.

3. Why is it important to ask questions when you observe the world?

ANSWER KEY

If the worksheet involves math questions, always review AI generated math answers for accuracy.

Fill in the Blank Answers:

1. why
2. faster
3. basketball hoop
4. plants
5. questions

Multiple Choice Answers:

1. b) Why does this happen?
2. b) How can I make a car go faster?
3. b) Ask questions
4. b) A plant
5. b) To make every basketball shot

Open-Ended Example Responses:

1. Why do some plants in our classroom grow taller than others?
2. An engineer might try to make cell phones charge faster or last longer by improving the battery.
3. It is important to ask questions because it helps us learn more and find solutions to problems.