

Science Question Stems

Knowledge/Remember

To remember facts and information:

- Define.
- Describe what happens when ____.
- How would you define ____?
- Identify the steps ____.
- Label the parts of/on the ____.
- List the ____ in order.
- List what you know about ____.
- Name ____.
- What did you notice when ____?
- What do you remember about?
- What is the title of your investigation?
- What is/are ____?
- What materials will you use for this project?

Application/Apply

The ability to apply understanding to new situations and solve problems.

- Can you demonstrate how you will perform this investigation/
- Demonstrate how you might ____.
- Experiment with ____ to determine ____.
- Give an example of ____.
- How will you present ____?
- How would you solve ____?
- Illustrate a step-by-step plan for ____.
- Predict what you think will happen when ____.
- Use a flow chart to demonstrate the cycle ____.
- What are two questions you could ask about the investigation you are observing?
- What can you use to demonstrate the concept of ____?
- What charts can you use to illustrate your investigation?
- What examples can you find that ____?
- What illustration can you draw to make ____ more meaningful?
- What safety issues may arise?
- Why does ____ work?

Comprehension/Understand

The ability to explain, interpret and extrapolate ideas, concepts, and information.

- Describe what ____ looks like.
- Describe what happens when ____.
- Elaborate on ____.
- Explain the difference between ____.
- Explain the ____ cycle.
- Identify the result of ____.
- Follow the directions to ____.
- How would you generalize ____?
- How would you differentiate between ____?
- Summarize what ____ means.
- Summarize what is happening ____.
- Tell how a ____ causes ____.
- Tell how the model works.
- Use your own words to explain.
- What did you observe ____?
- What is the purpose of this investigation?
- Why do ____ need ____?
- Why is it necessary to observe things closely?
- Will you restate ____?

Analysis/Analyze

The ability to break facts, ideas and concepts into parts, to examine relationships among parts, to compare and contrast, and to create categories.

- Compare ____ to others of this geographical area.
- Create a ____ to show ____.
- Design a new way to ____.
- Develop a plan and time line for completing this project.
- Develop your own ____.
- How can we find the answers to our questions about ____?
- How can you classify ____?
- How can you compare the different parts ____?
- How could this investigation help us ____?
- How does ____ affect ____?
- How does the way you worked that problem compare to the way it is illustrated by another student?
- How is ____ different from other ____? ____ similar to other ____?
- How will you present your findings and who will be the audience?
- Select and highlight the main ideas in this article. Rewrite them in bulleted statements.
- Use the data and determine if your hypothesis was correct.
- What are the relationships between ____?
- What characteristics do ____ have in common?
- What did you discover?
- What inference ____?
- What is an advantage or disadvantage of this model?
- What is not an example of ____?
- What is the effect of ____?
- What is the problem with ____?
- Which variable in the investigation ____?

Science Questions Stems

Synthesis/Create

To create a new whole, see a new pattern of relationships, or develop a new and unusual approach.

- Design a fair test or an investigation ____.
- Develop a theory to explain ____.
- How could you test your prediction?
- What idea would you suggest to make ____?
- What is your plan for safety during this ____?
- What method will you use to investigate this topic?
- What might you do to change your investigation?
- What plan can you create to help people be more responsible for our environment?
- What plan do you have to work more efficiently with your partner?
- What is the difference between ____ and ____?
- What is the pattern to the problems you are missing?
- What is your hypothesis for ____?
- What title will you give your investigation?
- What would happen if you skipped a step in this experiment?
- Why did this ____ than ____?
- Why do ____ behave differently than others?
- Why do some ____ need to be ____?
- Why does ____?

Evaluation/Evaluate

To establish criteria and make judgments and decisions.

- How might you improve this investigation if you tried it a second time?
- Was the project successful? Why or Why not?
- Was this a worthwhile project? Explain why you feel this way.
- What benefits will our school enjoy because of this investigation?
- What conclusion did you reach? Is it what you predicted? What should you do next?
- What is the major conclusion that you can draw?
- What is the most difficult part about the scientific process?
- What is the result of this investigation?
- What is the most important idea from this article on ____? Explain.
- What is the most important reason to take care of our environment?
- What is the simplest way to show ____?
- What rating/grade would you give your investigation? Why?
- What is the most interesting part of the investigation?
- Which ____ is most dangerous? Why?
- Which ____ is most beneficial? Why?
- Whose project was the most interesting? Why?
- Why did ____ turn out better than ____?