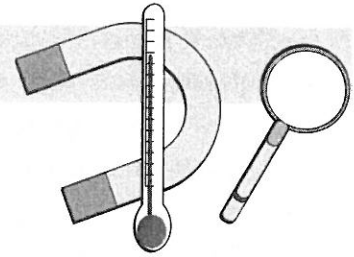


SCIENCE: TIERED THINKING PROMPTS—TIER 1



KNOWLEDGE

1. What do you see?
2. Find the word that is _____.
3. List two characteristics.
4. Which is true or false?
5. Identify the _____.

COMPREHENSION

1. Write a sentence explaining the concept we discussed.
2. What happened first in our experiment?
3. Explain what is happening.
4. Tell me in your own words _____.
5. Use this science term in a sentence.
6. Which sense are you using to determine _____?
7. Name an example of _____.
8. Identify three items that fit this category.

APPLICATION

1. How would you use _____?
2. What examples can you find?
3. Make a chart to show _____.
4. Organize these by _____.
5. Use all of your senses to explain _____.
6. Use this information to build a different _____.
7. What multiple uses do we have for these objects?
8. Collect samples of _____.
9. Demonstrate the first step of the experiment.
10. Make a graph of _____.
11. Make a model to illustrate the process.
12. Describe how science is used in cooking.
13. What scientific principle is being demonstrated by this experiment?

ANALYSIS

1. Explain what scientific information can and cannot be learned through observation.
2. List three factors that might influence _____.
3. Compare the differences and similarities of mammals, fish, and crustaceans.

4. What is the most important thing you learned from the experiment?
5. Analyze each step of the process.
6. How many ways can you organize or classify _____?
7. Analyze the pattern _____.
8. What is the function of _____?
9. Prepare a chart that categorizes _____.
10. Illustrate three attributes that enable _____ to be classified as _____.
11. How many different ways can you classify _____?
12. Prepare a flow chart that contrasts _____ and _____.
13. What else would you need to know to solve this?
14. How many science concepts can you identify and explain that are demonstrated by activities on the playground?
15. _____ is like _____ because _____.
16. Figure out this analogy and create an additional science-related analogy: *A mosquito is to a pond as a spider is to a _____.*

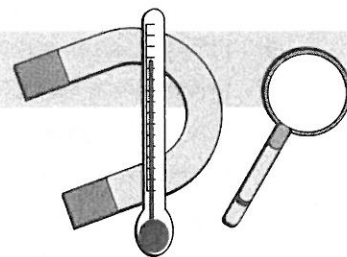
SYNTHESIS

1. Use a simple machine to demonstrate gravity.
2. Predict the outcome if _____.
3. If you could control the use of natural resources, how would you deal with the issues related to this biome?
4. Form a hypothesis _____.
5. How would you adapt _____ to create a different _____?
6. Invent _____.
7. Describe an observation process that does not disturb the natural habits of _____.
8. What changes would you make to _____.
9. Create a presentation for the class about a related science concept.
10. Use manipulatives to explain _____ to a younger child.

EVALUATION

1. What in the experiment validated your hypothesis?
2. How would you prioritize _____?
3. What would you recommend? Defend your ideas.
4. Rate five life forms by order of their importance.
5. Support your statements with evidence from your reading.
6. Discuss the ethics involved in this discovery or procedure.
7. Validate the best solution.
8. Defend why observation is vital in science.
9. Debate how everyone benefits from learning science.

SCIENCE: TIERED THINKING PROMPTS—TIER 2



KNOWLEDGE

1. What is the definition of _____?
2. What can you learn from observation?
3. List three attributes.
4. List the steps _____.
5. Label the parts of _____.

COMPREHENSION

1. Write a paragraph explaining the concept we just read.
2. What caused this to happen?
3. Explain the meaning of _____.
4. Use these two science terms together in a sentence.
5. Distinguish between _____ and _____.
6. Name items that will _____.
7. When did _____ happen?

APPLICATION

1. Discuss another time this has happened or might happen.
2. How would you organize this to show _____?
3. Construct a model that demonstrates how it works.
4. Collect and graph samples of _____.
5. Demonstrate how to use this science experiment.
6. Graph your results.
7. Describe how science is used in art.
8. What science principles are involved?
9. Write a brief outline of the concept and examples.
10. What element would you choose to change?
11. What questions would you ask that scientist?
12. Using what you have learned, how would you _____?

ANALYSIS

1. List multiple factors that might influence _____.
2. Compare the differences and similarities of _____ and _____.
3. What is the most important thing you learned from the experiment?
4. What conclusions can you draw?
5. What is the relationship between _____?

6. Analyze each step of the cycle.
7. What evidence can you find to support _____?
8. What attributes does this have that are superfluous to its classification?
9. Determine three different ways to classify _____.
10. Prepare a flow chart that illustrates the critical stages.
11. What else would you need to know to solve this?
12. How many scientific principles can you identify and explain that are demonstrated by the rides and attractions at an amusement park?
13. Figure out how to graphically represent these relationships.
14. Complete this analogy and create three additional science-related analogies that demonstrate the principle of _____. For example, *Tsunami is to wave as _____ is to wind.*

SYNTHESIS

1. Construct a complex machine that demonstrates _____.
2. Forecast the situation in 10 years.
3. Form a hypothesis _____.
4. Specify attribute changes and design a more efficient or effective _____.
5. Write a worst-case scenario for _____.
6. Create a prototype using _____.
7. Develop a procedure or graphic to explain this principle to a younger student.
8. Create a presentation for the class about a related science concept.
9. Construct a model to demonstrate the relationship between the principles of _____ and _____.
10. Develop a proposal to call attention to solving this world health issue.

EVALUATION

1. Support the reasoning behind your facts or hypothesis.
2. Develop two ways to test your hypothesis and determine which is better.
3. Discuss the ethics involved in this discovery or procedure.
4. Validate the best solution.
5. Defend why consistent standards are important for the valid results of an experiment.
6. Defend your conclusions to a board of scientists.
7. Justify your opinion on _____.
8. List five scientific principles. Rate them according to difficulty.
9. Debate DNA research from the perspectives of a scientist and a political leader.
10. Debate which area of science will be most valuable or vital in the future.
11. Debate the use of animals in scientific research.
12. Determine and defend what you consider the most significant scientific discovery or invention of modern time.