

Costa's Levels of Questioning: Science

LEVEL 1

What information is given?

What are you being asked to find?

What formula would you use in this problem?

What does _____ mean?

What is the formula for...?

List the...

Name the...

Where did...?

What is...?

When did...?

Describe in your own words what _____ means.

What science concepts does this problem connect to?

Draw a diagram of...

Illustrate how _____ works.

LEVEL 2

What additional information is needed to solve this problem?

Can you see other relationships that will help you find this information?

How can you put your data in graphic form?

How would you change your procedures to get better results?

What method would you use to...?

Compare and contrast _____ to _____.

Which errors most affected your results?

What were some sources of variability?

How do your conclusions support your hypothesis?

What prior research/formulas support your conclusions?

How else could you account for...?

Explain the concept of...

Give me an example of...

LEVEL 3

Design a lab to show...

Predict what will happen to _____ as _____ is changed.

Using a science principle, how can we find...?

Describe the events that might occur if...

Design a scenario for...

Pretend you are...

What would the world be like if...?

What would happen to _____ if _____ (variable) were increased/decreased?

How would repeated trials affect your data?

What significance is this experiment to the subject you're learning?

What type of evidence is most compelling to you?

Do you feel _____ (experiment) is ethical?

Are your results biased?