Costa's Levels of Thinking and 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?