

## Costa's Levels of Thinking and Questioning: Science

LEVEL 1	LEVEL 2	LEVEL 3
<ul style="list-style-type: none"> <li>• What information is given?</li> <li>• What are you being asked to find?</li> <li>• What formula would you use in this problem?</li> <li>• What does _____ mean?</li> <li>• What is the formula for...?</li> <li>• List the...</li> <li>• Name the...</li> <li>• Where did...?</li> <li>• What is...?</li> <li>• When did...?</li> <li>• Describe in your own words what _____ means.</li> <li>• What science concepts does this problem connect to?</li> <li>• Draw a diagram of...</li> <li>• Illustrate how _____ works.</li> </ul>	<ul style="list-style-type: none"> <li>• What additional information is needed to solve this problem?</li> <li>• Can you see other relationships that will help you find this information?</li> <li>• How can you put your data in graphic form?</li> <li>• How would you change your procedures to get better results?</li> <li>• What method would you use to...?</li> <li>• Compare and contrast _____ to _____.</li> <li>• Which errors most affected your results?</li> <li>• What were some sources of variability?</li> <li>• How do your conclusions support your hypothesis?</li> <li>• What prior research/formulas support your conclusions?</li> <li>• How else could you account for...?</li> <li>• Explain the concept of...</li> <li>• Give me an example of...</li> </ul>	<ul style="list-style-type: none"> <li>• Design a lab to show...</li> <li>• Predict what will happen to _____ as _____ is changed.</li> <li>• Using a science principle, how can we find...</li> <li>• Describe the events that might occur if...</li> <li>• Design a scenario for...</li> <li>• Pretend you are...</li> <li>• What would the world be like if...?</li> <li>• What would happen to _____ if _____ (variable) were increased/decreased?</li> <li>• How would repeated trials affect your data?</li> <li>• What significance is this experiment to the subject you're learning?</li> <li>• What type of evidence is most compelling to you?</li> <li>• Do you feel _____ experiment is ethical?</li> <li>• Are your results biased?</li> </ul>