Costa's Levels of Questioning

To better understand the content being presented in their core subject areas, it is essential for students to learn to think critically and to ask higher levels of questions. By asking higher levels of questions, students deepen their knowledge and create connections to the material being presented, which in turn prepares them for the inquiry that occurs in tutorials. Students need to be familiar with Costa's (and/or Bloom's) levels of questioning to assist them in formulating and identifying higher levels of questions.

Directions: Read the poem below and review the "Three House Story" on the next page. Both set the stage for Costa's Levels of Questioning.

One-Two-Three Story Intellect Poem

There are one-story intellects,
two-story intellects,
and three-story intellects with skylights.
All fact collectors who have
no aim beyond their facts
are one-story people.
Two-story people compare, reason,
generalize, using the labor of
fact collectors as their own.
Three-story people idealize,
imagine, predict—their best illumination
comes through the skylight.

Adapted from a quotation by Oliver Wendell Holmes

The Three-Story House

Level 1 (the lowest level) requires one to gather information.
Level 2 (the middle level) requires one to process the information.
Level 3 (the highest level) requires one to apply the information.

3—Applying
Evaluate Generalize Imagine
Judge Predict Speculate
If/Then Hypothesize Forecast

2—Processing
Compare Contrast Classify
Sort Distinguish Explain (Why?)
Infer Analyze

1—Gathering
Complete Define Describe
Identify List Observe
Recite Select

Vocabulary: Costa's Levels of Thinking and Questioning

LEVEL 1

Remember Define

Repeat	State	Memorize	Identify
Name	Describe	Label	Record
List	Recall	Match	

Show Understanding

Give examples	Rewrite	Review	Tell
Restate	Recognize	Locate	Extend
Discuss	Explain	Find	Summarize
Express	Report	Paraphrase	Generalize

LEVEL 2

Use Understanding

Dramatize	Use	Translate	Interpret
Practice	Compute	Change	Prepare
Operate	Schedule	Pretend	Demonstrate
Imply	Relate	Discover	Infer
Apply	Illustrate	Solve	

Examine

Diagram	Question	Analyze	Criticize
Distinguish	Inventory	Differentiate	Experiment
Compare	Categorize	Select	Break down
Contrast	Outline	Separate	Discriminate
Divide	Debate	Point out	

Create

Compose	Draw	Plan	Modify
Design	Arrange	Compile	Assemble
Propose	Suppose	Revise	Prepare
Combine	Formulate	Write	Generate
Construct	Organize	Devise	

LEVEL 3

Decide

Judge	Rate	Choose	Conclude
Value	Justify	Assess	Summarize
Predict	Decide	Select	
Evaluate	Measure	Estimate	

Supportive Evidence

Prove your answer.	Give reasons for your answer.	Why or why not?
Support your answer.	Explain your answer.	Why do you feel that way?

Costa's Levels of Questioning: English

LEVEL 1	LEVEL 2	LEVEL 3
What information is given?	What would happen to you if...	Design a _____ to show...
Locate in the story where...	Would you have done the same thing as...?	Predict what will happen to _____ as _____ is changed.
When did the event take place?	What occurs when...?	Write a new ending to the story (event)...
Point to the...	Compare and contrast _____ to _____ .	Describe the events that might occur if...
List the...	What other ways could ____ be interpreted?	Add something new on your own that was not in the story...
Name the...	What is the main idea of the story (event)?	Pretend you are...
Where did...?	What information supports your explanation?	What would the world be like if...?
What is...?	What was the message in this piece (event)?	Pretend you are a character in the story. Rewrite the episode from your point of view.
Who was/were...?	Give me an example of...	What do you think will happen to_____? Why?
Illustrate the part of the story that...	Describe in your own words what_____ means.	What is most compelling to you in this _____? Why?
Make a map of...	What does _____ suggest about _____'s character?	Could this story have really happened? Why or why not? If you were there, would you...?
What is the origin of the word _____?	What lines of the poem express the poet's feelings about _____?	How would you solve this problem in your life?
What events led to _____?	What is the author trying to prove? What evidence does he present?	

Costa's Levels of Questioning: Math

LEVEL 1	LEVEL 2	LEVEL 3
What information is given?	What additional information is needed to solve this problem?	Predict what will happen to _____as_____is changed.
What are you being asked to find?	Can you see other relationships that will help you find this information?	Using a math principle, how can we find…?
What formula would you use in this problem?	How can you put your data in graphic form?	Describe the events that might occur if…
What does ____ mean?	What occurs when…?	Design a scenario for…
What is the formula for ….?	Does it make sense to…?	Pretend you are…
List the ….	Compare and contrast_____ to _____.	What would the world be like if…?
Name the ….	What is important about…?	How can you tell if your answer is reasonable?
Where did…?	What prior research/formulas support your conclusions?	What would happen to_____if ____(variable) were increased/decreased?
What is….?	How else could you account for…?	How would repeated trials affect your data?
When did….?	Explain how you calculate…	What significance is this formula to the subject you are learning?
Explain the concept of…	What equation can you write to solve the world problem?	What type of evidence is most compelling to you?
Give me an example of…		
Describe in your own words what _____means.		
What mathematical concepts does this problem connect to?		
Draw a diagram of…		
Illustrate how____ works.		

Costa's Levels of Questioning: Science

LEVEL 1	LEVEL 2	LEVEL 3
What information is given?	What additional information is needed to solve this problem?	Design a lab to show…
What are you being asked to find?	Can you see other relationships that will help you find this information?	Predict what will happen to _____as_____is changed.
What formula would you use in this problem?	How can you put your data in graphic form?	Using a science principle, how can we find…?
What does ____ mean?	How would you change your procedures to get better results?	Describe the events that might occur if…
What is the formula for ….?	What method would you use to …?	Design a scenario for…
List the ….	Compare and contrast_____ to _____.	Pretend you are…
Name the ….	Which errors most affected your results?	What would the world be like if…?
Where did…?	What were some sources of variability?	What would happen to _____ if _____ (variable) were increased/decreased?
What is….?	How do your conclusions support your hypothesis?	How would repeated trials affect your data?
When did….?	What prior research/formulas support your conclusions?	What significance is this experiment to the subject you are learning?
Describe in your own words what _____means.	How else could you account for…?	What type of evidence is most compelling to you?
What science concepts does this problem connect to?	Explain the concept of…	Do you feel ____ (experiment) is ethical?
Draw a diagram of…	Give me an example of…	Are your results biased?
Illustrate how____ works.		