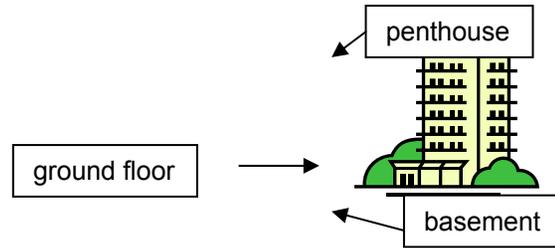


A Three Story Intellect!



BLOOM'S TAXONOMY *and Costa's Levels of Questioning*

The Student will...

Knowledge (Remembering) Learn specific facts, ideas, vocabulary; remembering/recalling information or specific facts.	Comprehension (Understanding) Ability to grasp the meaning of material; communicate knowledge; understanding information without relating it to other material.	Application (Applying) Ability to use learned material in new and concrete situations; use learned knowledge and interpret previous situations.	Analysis (Analyzing) Ability to break down material into its component parts and perceive interrelationships.	Synthesis (Creating) Ability to put parts together to form a new whole; use elements in new patterns and relationships.	Evaluation (Evaluating) Ability to judge the value of material (statement, novel, poem, report, etc.) for a given purpose; judgment is based on given criteria.
<i>Introduction of knowledge</i> Level One—the basement		<i>Practice knowledge learned</i> Level Two—the ground floor		<i>Demonstrates mastery of knowledge learned</i> Level Three—the penthouse	
<i>By doing the following...</i>		<i>By doing the following...</i>		<i>By doing the following...</i>	
collect, copy, define, describe, examine, find, group, identify, indicate, label, list, locate, match, name, omit, observe, point, provide, quote, read, recall, recite, recognize, repeat, reproduce, say, select, sort, spell, state, tabulate, tell, touch, underline, who, when, where, what	alter, associate, calculate, categorize, change, communicate, convert, distinguish, expand, explain, inform, name alternatives, outline, paraphrase, rearrange, reconstruct, relate, restate (own words), summarize, tell the meaning of, translate, understand, verbalize, write	acquire, adopt, apply, assemble, capitalize, construct, consume, demonstrate, develop, discuss, experiment, formulate, manipulate, organize, relate, report, search, show, solve novel problems, tell consequences, try, utilize	analyze, arrange, break down, categorize, classify, compare, contrast, deduce, determine, diagram, differentiate, discuss causes, dissect, distinguish, give reasons, order, separate, sequence, survey, take apart, test for, why	alter, build, combine, compose, construct, create, develop, estimate, form a new..., generate, hypothesize, imagine, improve, infer, invent, modify, plan, predict, produce, propose, reorganize, rewrite, revise, simplify, synthesize	appraise, argue, assess, challenge, choose, conclude, criticize, critique, debate, decide, defend, discriminate, discuss, document, draw conclusions, editorialize, evaluate, grade, interpret, judge, justify, prioritize, rank, rate, recommend, reject, support, validate, weigh

Knowledge—Level 1A (Remembering)	Comprehension—Level 1B (Understanding)	Application—Level 2A (Applying)	Analysis—Level 2B (Analyzing)	Synthesis—Level 3A (Creating)	Evaluation—Level 3B (Evaluating)
<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Observation and recall of information • Knowledge of dates, events, places • Knowledge of major ideas • Master of subject matter 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Understanding information • Grasp meaning • Translate knowledge into new context • Interpret facts, compare, contrast • Order, group, infer causes • Predict consequences 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Use information • Use methods, concepts, theories in new situations • Solve problems using required skills or knowledge 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Seeing patterns • Organization of parts • Recognition of hidden meanings • Identification of components 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Use old ideas to create new ones • Generalize from given facts • Relate knowledge from several areas • Predict, draw conclusions 	<p>Skills Demonstrated:</p> <ul style="list-style-type: none"> • Compare and discriminate between ideas • Assess value of theories, presentations • Make choices based on reasoned argument
<p>What is...? How is...? Where is...? When did ____ happen? How did _____? Why did...? How would you describe...? When did...? Can you recall...? How would you show...? Can you select...? Who were the main...? Can you list three...? Which one...? Who was...?</p>	<p>How would you classify the type of...? How would you compare/contrast...? Will you state or interpret in your own words...? How would you rephrase the meaning...? What facts or ideas show...? What is the main idea of...? Which statements support...? Can you explain what is happening...what is meant...? What can you say about...? Which is the best answer...? How would you summarize...?</p>	<p>How would you use...? What examples can you find to...? How would you solve _____ using what you have learned...? How would you organize _____ to show...? How would you show your understanding...? What approach would you use to...? How would you apply what you learned to develop...? What other way would you plan to...? What would result if...? Can you make use of the facts to...? What elements would you choose to change...? What facts would you select to show...? What questions would you ask in an interview with...?</p>	<p>What are the parts of...? How is _____ related to...? Why do you think...? What is the theme...? What motive is there...? Can you list the parts...? What inference can you make...? What conclusions can you draw...? How would you classify...? How would you categorize...? Can you identify the different parts...? What evidence can you find...? What is the relationship between...? Can you make a distinction between...? What is the function of ...? What ideas justify...? How would you estimate the results for...? What facts can you compile...? Can you construct a model that would change...? Can you think of an original way for the...?</p>	<p>Do you agree with the actions...? with the outcomes...? What is your opinion of...? How would you prove...? Disprove...? Can you assess the value or importance of...? Would it be better if ...? Why did they (the character) choose...? What would you recommend...? How would you rate the ...? What would you cite to defend the actions...? How would you evaluate...? How could you determine...? What choice would you have?</p>	<p>Do you agree with the actions...? With the outcomes...? What is your opinion of...? How would you prove...? Disprove...? Can you assess the value or importance of...? Would it be better if ...? Why did they (the character) choose...? What would you recommend...? How would you evaluate...? How could you determine...? What choice would you have made...? What would you select...? How would you prioritize...? What judgment would you make about...? Based on what you know, how would you explain...? What information would you use to support the view...? How would you justify...? What data was used to make the conclusion...? Why was it better that...? How would you prioritize the facts...? How would you compare the ideas...?</p>

TITLE: Teaching Levels of Questioning

OBJECTIVES:

- Students will learn the concept of Higher Order Thinking
- Students will practice formulating questions of increasing complexity
- Students will reflect on how questioning skills can help them learn

Time in minutes/ Materials	ACTIVITY
<u>Start - 10</u> Cut Pictures	<u>Group students with cut pictures</u> <ul style="list-style-type: none">• Give each person a piece of a picture, instruct him or her to find the people with the rest of the picture and form a new group.
<u>11 – 15</u>	<u>Explain the Purpose of Improving Inquiry Skills</u> <ul style="list-style-type: none">• Good questioning techniques are very important in learning. Effective learners use questioning to help motivate themselves to pay more attention in class and to remember information better.• Questioning can be used to help us to reason through problems and to put pieces of information together in new ways—like we just did with our pictures....• All levels of questions are important, necessary, and serve a purpose depending on the situation. Sometimes, we need low levels of questions to gain information, but, being able to define a word or remember a fact isn't an end in itself. It's how we use that information that helps us truly learn, and it's how we apply that information that is most important. All levels of questions work together to help us learn—no one level is "better" than another—they're all needed for learning, and our ultimate goal is to get to the top levels.• Levels of Questioning are part of the way we communicate with each other. It helps you not only to read, but to understand and relate to what you're reading. There's a difference between asking and answering questions. It takes real understanding of a topic to ask a good question...a question that really makes someone consider and THINK.

<p>11 - 20</p> <ul style="list-style-type: none"> • Blooms/Costa's Handout 	<p><u>Levels of Questions Instruction</u></p> <ul style="list-style-type: none"> • Distribute handout • I like to begin with a metaphor of a building. There's the basement, the ground floors, and the penthouse. All are necessary. The basement helps you store important things for later. You can enter on the ground floor. And the penthouse, that's the icing on the cake—you've arrived! • Review each of the different levels of questioning: <ul style="list-style-type: none"> ❖ <u>Level 1</u> is like the basement—important information you need to have. These would be definitions, numbers, formulas. ❖ <u>Level 2</u> is where you take those definitions, numbers and formulas and put them to use. It's where you enter the building of thinking. You use the formulas, you translate the words, you back up ideas, you compare and contrast. ❖ <u>Level 3</u> is the big time. You're "moving on up to that deluxe apartment in the sky," to quote the Jeffersons. This is where you make the information your own. Here is where you synthesize, judge, create, • Be sure to give some examples of questions from each level. You can use the handout. It combines Costa's levels and Blooms Taxonomy, it explains what each level means, skills used, and provides question starters.
<p>21- 40</p> <ul style="list-style-type: none"> • One picture for each group (the one they put together) 	<p><u>Practice Generating Questions</u></p> <ul style="list-style-type: none"> • Have each group use a picture to create one question from each of Costa's three levels • Read questions aloud and evaluate to level as a class
<p>41-55</p>	<p><u>Reflection/Debrief</u></p> <ul style="list-style-type: none"> • Discuss as a group how this concept of levels of questions could be used in all their other classes (i.e., they can identify which type of tasks they are being assigned, they can create questions of their own, they can evaluate benchmark or other exam questions for complexity)
<p><u>Alternative Ways to present this information</u></p>	<ul style="list-style-type: none"> • Some teachers like to read a fairy tale to their class and have them make questions about the fairy tale rather than off a picture, as is suggested in this lesson. This gets fun when you get questions such as "How is the first little pig different than the third little pig (level 2)", or "What would happen if Hansel and Gretel did not push the witch into the oven (Level 3)?"

<p><u>Extensions</u></p>	<p>Each day, have students practice identifying levels by finding where on Bloom's or Costa's the tasks you assign them fall</p> <ul style="list-style-type: none">• Teach one (Costa) or two (Bloom's) level(s) per day, review the definitions of signal words, practice each level before moving to the next by creating questions with homework and/or notes.• When reading for information or watching a video for information, have students create questions from each level and answer them. This could be extended further into a Socratic seminar (this strategy to come later!)• When reviewing for a test, have students create their own test made up of 5 level 1 questions, 3 level 2 questions, and one level 3 question. Have them discuss and defend why each question is of that level. Then, they can use those questions as study guides.• Make a poster of the handout to hang in your classroom.
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Adapted from: www.scoe.org/docs/avid/inquiry_script.doc

Mon.	Tue.	Wed.	Thur.	Fri.	Sat./Sun.

Noelle Combs – Site Coordinator East Bakersfield High School

Region 8 Kern County