

## QMATRIX CELL ARRANGEMENT

The cells in **The Question Matrix** are arranged simply in a hierarchy that considers Bloom's Taxonomy, but eliminates the confusion.

To use the matrix simply identify the level of thinking you wish your questions to elicit and select word pairs from the appropriate cells to match your instructional objectives.

"Knowledge" word pairs are located in the upper left portion of the matrix and "Evaluation" are located in the lower right portion of the matrix. As you move in any direction from the "What is?" cell in the upper left hand corner, you are moving toward questions which require a greater range of intellectual function and creativity.

Using word pairs to generate your own questions at any level of thinking is straight forward and simple. Choose any word pair and either use that pair as the first two words in your question followed by appropriate content or embed each of the words from the word pair into a more complex question.

For example, the "Which Might?" word pair works as a beginning as in "*Which might* be the best way to solve this problem?" and as embedded words which add depth and complexity as in "Of all the solutions we've discussed, *which* do you feel *might* provide the greatest economy of motion?"

The word pairs work with any academic content and at all grade levels. Word pairs which imply value judgments such as "Who Should?" or "Who Ought?" do not appear in the **Question Matrix**.

## Exercise #1

**Step #1.** Study the matrix for a few minutes. Notice how the word pairs change to more complex thinking cues as you move out in any direction from the upper left-hand corner of the matrix.

**Step #2.** Find the “What is?” word-pair cell in the upper left hand corner of the matrix.

**Step #3.** Ask yourself a “What Is?” question. Examples are “What is the color of this page?” or “What are the colors of fall leaves?” Notice that *is* and *are* are interchangeable, one being the plural form of the other. As you use the matrix yourself, and later, as you introduce it to students you will find that it is second nature to substitute *verb tenses* such as *does* for *did*. This in no way changes the level of thinking required to respond to the question. This simply allows the question to fit the circumstances. Questions which ask for analysis and judgment such as, “What is the significance of the First Amendment?” are not considered “*What Is*” type questions for purposes of categorizing questions within the Q-Matrix. That question would be more accurately framed as “*What Might* be the significance of the First Amendment?”

**Step #4.** As you form an answer to your “*What is?*” question write down the kinds of thinking in which you are engaged.

**Step #5.** Now, ask yourself a “*What Might?*” question. Examples are: “What *might* happen if trees never lost their leaves?” or “What *might happen* to our planet in the year 2300 if global warming continues at the present rate?”

**Step #6.** Again, check your thinking as you form your answers. Notice that the “*What Might*” question encourages multiple answers and requires divergent thinking.

**Step #7.** Also notice that the “*What Might?*” word pair is related to the “*What Would?*” word pair. The former requires speculation and the consideration of probability, the latter asks for more certainty. “*What would happen if?*” are **FOUR VERY POWERFUL WORDS** which cue critical and creative thought.

**Step 6.** Compare the answers on all four of your 3x5 cards. Notice that your answers vary from card to card. Since **Quadrant-Card A** asks mostly recall questions, your answers will be brief and uncomplicated. **Quadrant-Card B** asks for comparisons, explanations, and examples. The answer will tend to be longer and more complex. **Quadrant-Card C** asks for predictions and possibilities. The answer will involve elaboration. **Quadrant-Card D** asks for speculation, probabilities, and evaluation. Answers will tend to be elaborate and thoughtful.

### **Q-Strips**

There are twelve Q-Strips. The six vertical Q-strips address Events, Situations, Alternatives, People, Reasons, and Means. Six other Q-strips represent the horizontal rows of the Question Matrix. They address the Present, the Past, Possibilities, Probabilities, Predictions, and the Imagination. The twelve Q-Strips contain all of the 36 word pairs on the Question Matrix. Q-Strips are used when you want students to focus on particular attributes of an assignment. For example, if students are to generate questions which address the events of a story they would select their question prompts from the Events Q-Strip. On the other hand, if you want students to generate questions about a problem in science, you might have them use the Reasons Q-Strips or the Means Q-Strips. Q-Strips may be used in place of Quadrant Cards when you want to more narrowly focus students questions in a particular way, such as possibilities only or reasons only. In the Q-Materials you will find color coded Q-Strips for each team. Students cut the individual Q-Strips from the card stock to create durable sets of Q-Strips.