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Inspired by: Tofade T, Elsner J & Haines S T. Best Practice Strategies for Effective Use of Questions as a Teaching Tool. *Am. J. Pharm. Educ.* 77(7):155; 2013. Shraw G & Sperling Dennison R. Assessing Metacognitive Awareness. *Contemporary Educational Psychology* 19:460-475; 1994; Moll L.C. L.S. Vygotsky & Education. Routledge:NY; 2013.

Identify Purpose	Determine Target Knowledge Dimension	Select Question Type
<p>Frame the question for the student:</p> <ul style="list-style-type: none"> Situate the question in the relevant context. For example, indicate the setting, situation, or other relevant facts. <p>Educator Frame:</p> <ul style="list-style-type: none"> Lay foundation. The purpose is to establish student's: <ul style="list-style-type: none"> Knowledge base - <i>What can student do <u>without</u> assistance?</i> Appropriate level of challenge - <i>What student can do <u>with</u> strategic guidance?</i> Deep-dive. The purpose is to ask student to engage in higher-order thinking (e.g., in-depth analysis.) 	<p>The Target Knowledge Dimension refers to the kind of thinking in which you want the student to engage. Once you know that, you can choose how to phrase your questions. Ask yourself, <i>do you want the student to demonstrate:</i></p> <ul style="list-style-type: none"> Knowledge/Recall Comprehension Application of Knowledge Conceptual Knowledge <ul style="list-style-type: none"> Metacognition or reflection Analysis Synthesis Evaluation Conditional Knowledge (knowledge that depends on circumstances) Creative\Innovative thinking 	<ul style="list-style-type: none"> Convergent – Asks student to choose from among finite possibilities, such as single correct/best answer, yes/no. Divergent (Open-ended) – Narrative response; requires application of knowledge, analysis or other higher order thinking. Complex\Compound [Question Circles] – Answer depends upon critical analysis of multiple factors and relationship among these Conceptual – Questions that ask students to explain concepts or articulate reasoning (Analysis, Synthesis, Evaluation) Procedural – Questions that ask students to explain how something functions, or to describe causal connections. Conditional – Ask the student to predict what might happen under various conditions or circumstances (What if questions). Reflective\Metacognitive – questions that promote reflection past, present or future action, process or self Question Posing – Ask students to formulate questions or to lead the inquiry