# Depth of Knowledge (DOK) Overview Chart

<table>
<thead>
<tr>
<th><strong>Level of Complexity</strong> (measures a student’s Depth of Knowledge)</th>
<th><strong>Key Verbs That May Clue Level</strong></th>
<th><strong>Evidence of Depth of Knowledge</strong></th>
</tr>
</thead>
</table>
| **Level 1**  
**Recall/Reproduction**  
Recall a fact, information, or procedure. Process information on a low level.  
**Bloom Know/Remember**  
“The recall of specifics and universals, involving little more than bringing to mind the appropriate material.”  
**Comprehend/Understand**  
“Ability to process knowledge on a low level such that the knowledge can be reproduced or communicated without a verbatim repetition.” | **Arrange**  
**Calculate**  
**Cite**  
**Define**  
**Describe**  
**Draw**  
**Explain**  
**Give examples**  
**Identify**  
**Illustrate**  
**Label**  
**Locate**  
**List**  
**Match**  
**Measure**  
**Name**  
**Perform**  
**Quote**  
**Recall**  
**Recite**  
**Record**  
**Repeat**  
**Report**  
**Select**  
**State**  
**Summarize**  
**Tabulate** | • Explain simple concepts or routine procedures  
• Recall elements and details  
• Recall a fact, term or property  
• Conduct basic calculations  
• Order rational numbers  
• Identify a standard scientific representation for simple phenomenon  
• Label locations  
• Describe the features of a place or people  
• Identify figurative language in a reading passage |
| **Level 2**  
**Skill/Concept**  
Use information or conceptual knowledge, two or more steps  
**Bloom Apply**  
“Uses information in another familiar situation.”  
(Executes - Carries out a procedures in a familiar task)  
(Implements - Uses a procedure in an unfamiliar task) | **Apply**  
**Calculate**  
**Categorize**  
**Classify**  
**Compare**  
**Compute**  
**Construct**  
**Convert**  
**Describe**  
**Determine**  
**Distinguish**  
**Estimate**  
**Explain**  
**Extend**  
**Extrapolate**  
**Find**  
**Formulate**  
**Generalize**  
**Graph**  
**Identify patterns**  
**Infer**  
**Interpolate**  
**Interpret**  
**Modify**  
**Organize**  
**Predict**  
**Relate**  
**Represent**  
**Show**  
**Simplify**  
**Solve**  
**Sort**  
**Use** | • Solve routine multiple-step problems  
• Describe non-trivial patterns  
• Interpret information from a simple graph  
• Formulate a routine problem, given data and conditions  
• Sort objects  
• Show relationships  
• Apply a concept  
• Organize, represent and interpret data  
• Use context clues to identify the meaning of unfamiliar words  
• Describe the cause/effect of a particular event.  
• Predict a logical outcome  
• Identify patterns in events or behavior |
<table>
<thead>
<tr>
<th>Level of Complexity (measures a student’s Depth of Knowledge)</th>
<th>Key Verbs That May Clue Level</th>
<th>Evidence of Depth of Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 3</strong> &lt;br&gt; <strong>Strategic Thinking</strong>&lt;br&gt;Requires reasoning, developing a plan or a sequence of steps, some complexity&lt;br&gt;Bloom&lt;br&gt;<strong>Analyze</strong>&lt;br&gt;“Breaking information into parts to explore understanding and relationship.”&lt;br&gt;<strong>Evaluate</strong>&lt;br&gt;“Checks/Critiques – makes judgments based on criteria and standards.”</td>
<td>Appraise&lt;br&gt;Assess&lt;br&gt;Cite evidence&lt;br&gt;Check&lt;br&gt;Compare&lt;br&gt;Compile&lt;br&gt;Conclude&lt;br&gt;Critique&lt;br&gt;Decide&lt;br&gt;Defend&lt;br&gt;Describe&lt;br&gt;Develop&lt;br&gt;Distinguish&lt;br&gt;Examine&lt;br&gt;Explain how&lt;br&gt;Formulate&lt;br&gt;Hypothesize&lt;br&gt;Identify&lt;br&gt;Infer&lt;br&gt;Interpret&lt;br&gt;Investigate&lt;br&gt;Judge&lt;br&gt;Justify&lt;br&gt;Reorganize&lt;br&gt;Solve&lt;br&gt;Support</td>
<td>• Solve non-routine problems&lt;br&gt;• Interpret information from a complex graph&lt;br&gt;• Explain phenomena in terms of concepts&lt;br&gt;• Support ideas with details and examples&lt;br&gt;• Develop a scientific model for a complex situation&lt;br&gt;• Formulate conclusions from experimental data&lt;br&gt;• Compile information from multiple sources to address a specific topic&lt;br&gt;• Develop a logical argument&lt;br&gt;• Identify and then justify a solution&lt;br&gt;• Identify the author’s purpose and explain how it affects the interpretation of a reading selection</td>
</tr>
<tr>
<td><strong>Level 4</strong> &lt;br&gt;<strong>Extended Thinking</strong>&lt;br&gt;Requires an investigation, time to think and process multiple conditions of the problem. Most on-demand assessments will not include Level 4 activities.&lt;br&gt;Bloom&lt;br&gt;<strong>Synthesize</strong>&lt;br&gt;“Putting together elements and parts to form a whole&lt;br&gt;<strong>Evaluate</strong>&lt;br&gt;Making value judgments about the method.”</td>
<td>Appraise&lt;br&gt;Connect&lt;br&gt;Create&lt;br&gt;Critique&lt;br&gt;Design&lt;br&gt;Judge&lt;br&gt;Justify&lt;br&gt;Prove&lt;br&gt;Report&lt;br&gt;Synthesize</td>
<td>• Design and conduct an experiment that requires specifying a problem; report results/solutions&lt;br&gt;• Synthesize ideas into new concepts&lt;br&gt;• Critique experimental designs&lt;br&gt;• Design a mathematical model to inform and solve a practical or abstract situation.&lt;br&gt;• Connect common themes across texts from different cultures&lt;br&gt;• Synthesize information from multiple sources</td>
</tr>
</tbody>
</table>
Levels of Complexity

• Recall/Reproduction – Recall a fact, information, or procedure; process information on a low level

• Skill/Concept – Use information or conceptual knowledge, two or more steps

• Strategic Thinking – Requires reasoning, developing a plan or a sequence of steps, more than one reasonable approach

• Extended Thinking – Requires connections and extensions, high cognitive demands and complex reasoning