# Depth of Knowledge (DOK) Overview Chart

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

**Bloom**  
*Analyze*  
“Breaking information into parts to explore understanding and relationship.”  
*Evaluate*  
“Checks/Critiques – makes judgments based on criteria and standards.”  

**Bloom**  
*Synthesize*  
“Putting together elements and parts to form a whole”  
*Evaluate*  
Making value judgments about the method.”
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