# 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>
</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  
Observe  
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 |
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| **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 |
|  
Bloom  
Analyze  
“Breaking information into parts to explore understanding and relationship.”  
Evaluate  
“Checks/Critiques – makes judgments based on criteria and standards.” | • 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.  
Bloom  
**Synthesize**  
“Putting together elements and parts to form a whole  
Evaluate  
Making value judgments about the method.” | 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 |
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