### Depth of Knowledge (DOK) Levels

#### Level One Activities
- Recall elements and details of story structure, such as sequence of events, character, plot and setting.
- Conduct basic mathematical calculations.
- Label locations on a map.
- Represent in words or diagrams a scientific concept or relationship.
- Perform routine procedures like measuring length or using punctuation marks correctly.
- Describe the features of a place or people.

#### Level Two Activities
- Identify and summarize the major events in a narrative.
- Use context cues to identify the meaning of unfamiliar words.
- Solve routine multiple-step problems.
- Describe the cause/effect of a particular event.
- Identify patterns in events or behavior.
- Formulate a routine problem given data and conditions.
- Organize, represent and interpret data.

#### Level Three Activities
- Support ideas with details and examples.
- Use voice appropriate to the purpose and audience.
- Identify research questions and design investigations for a scientific problem.
- Develop a scientific model for a complex situation.
- Determine the author’s purpose and describe how it affects the interpretation of a reading selection.
- Apply a concept in other contexts.

#### Level Four Activities
- Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/solutions.
- Apply mathematical model to illuminate a problem or situation.
- Analyze and synthesize information from multiple sources.
- Describe and illustrate how common themes are found across texts from different cultures.
- Design a mathematical model to inform and solve a practical or abstract situation.

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## DOK Question Stems

### DOK 1
- Can you recall ____?
- When did ____ happen?
- Who was ____?
- How can you recognize ____?
- What is ____?
- How can you find the meaning of ____?
- Can you recall ____?
- Can you select ____?
- How would you write ____?
- What might you include on a list about ____?
- Who discovered ____?
- What is the formula for ____?
- Can you identify ____?
- How would you describe ____?

### DOK 2
- Can you explain how ____ affected ____?
- How would you apply what you learned to develop ____?
- How would you compare ____?
- Contrast ____?
- How would you classify ____?
- How are ____ alike? Different?
- How would you classify the type of ____?
- What can you say about ____?
- How would you summarize ____?
- How would you summarize ____?
- What steps are needed to edit ____?
- When would you use an outline to ____?
- How would you estimate ____?
- How could you organize ____?
- What would you use to classify ____?
- What do you notice about ____?

### DOK 3
- How is ____ related to ____?
- What conclusions can you draw ____?
- How would you adapt ____ to create a different ____?
- How would you test ____?
- Can you predict the outcome if ____?
- What is the best answer? Why?
- What conclusion can be drawn from these three texts?
- What is your interpretation of this text? Support your rationale.
- How would you describe the sequence of ____?
- What facts would you select to support ____?
- Can you elaborate on the reason ____?
- What would happen if ____?
- Can you formulate a theory for ____?
- How would you test ____?
- Can you elaborate on the reason ____?

### DOK 4
- Write a thesis, drawing conclusions from multiple sources.
- Design and conduct an experiment. Gather information to develop alternative explanations for the results of an experiment.
- Write a research paper on a topic.
- Apply information from one text to another text to develop a persuasive argument.
- What information can you gather to support your idea about ____?
- DOK 4 would most likely be the writing of a research paper or applying information from one text to another text to develop a persuasive argument.
- DOK 4 requires time for extended thinking.

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From Depth of Knowledge - Descriptors, Examples and Question Stems for Increasing Depth of Knowledge in the Classroom Developed by Dr. Norman Webb and Flip Chart developed by Myra Collins
**Depth of Knowledge – Level 3**

Students provide support for reasoning, apply complex and abstract thinking, and make decisions.

**Engagement Prompts**

- What makes ____ better than/superior to _____?
- Explain or connect ideas using supporting evidence to ______.
- Analyze/synthesize information within one data source or text.
- What is the recurring theme in ________?
- Provide supporting details. Support your rationale.
- Evaluate and provide rationale.
- Verify the reasonableness of ________________.
- What is your interpretation of ________________?
- Cite evidence and develop a logical argument for ________________.
- How is ______________ related to ______________?
- How would you adapt ______________ to ______________?
- How would your test ________________?
- What would happen if ________________?

**Strategic thinking**

DOK Level 3 requires higher cognitive demands than the previous levels. Students explain/justify thinking and provide supporting evidence for reasoning or conclusions drawn. Level 3 tasks typically require reasoning, complexity, developing a plan or sequence of steps, and have more than one possible response or solution.

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**Depth of Knowledge – Level 4**

Students make connections, related ideas within the content or among content areas, and devise one approach among alternatives on how a situation can be solved.

**Engagement Prompts**

- Investigate and draw conclusions about how _____ impacts the world today.
- How would you adapt ____ to create ______ that would be applicable in the real world?
- Analyze and explain multiple perspectives/issues within or across time periods, events, or cultures.
- Analyze how similar themes or ideas are developed in multiple texts.
- Evaluate for real-world occurrence.
- Design ____ to improve ___.
- Justify your choice.
- Gather, organize, and interpret information from multiple sources.
- Write a research report.

**Extended thinking**

DOK Level 4 requires complex reasoning and time to research, plan, and problem solve, and think. Tasks involve investigation or application to the real world and include non-routine manipulations or connections with and across discipline, content areas, and multiple sources. Students select one approach among many alternatives. Tasks usually occur over an extended period of time.

*From Dept-of – knowledge Levels for Four Content Areas by Webb, N.*
| Revised Bloom’s Taxonomy  
| Level 4 Apply  |
| The student makes use of information in a context different from the one in which it was learned. |

| Engagement Prompts |
| Which other way would you choose to _________?  
| Use other attributes/characteristics to group/sort _____.
| Explain another situation where ___________.  
| Which factors would you change if ___________

| Apply (level 4)  
| Carry out or use a procedure in a given situation |

| Cognitive Processes  
| Carrying out  
| Executing  
| Implementing  
| Using |

| Revised Bloom’s Taxonomy  
| Level 5 Analyze  |
| The student breaks learned information into parts to explore understandings and relationships. |

| Engagement Prompts |
| Determine if the information is based on fact or opinion.  
| Explain what must have happened when ___________.  
| What conclusions can you draw ___________.  
| Which events could not have happened?  
| What is similar to or different from ___________.  
| What is the motive/underlying them/message ___________.  
| What are other possible outcomes?  
| Distinguish between ___________.  
| What is the relationship ___________. |

| Analyze (level 5)  
| Break down a concept or idea into parts and determine the relationships among the parts. |

| Cognitive Processes  
| Differentiation  
| Distinguishing  
| Focusing  
| Attributing  
| Outlining  
| Discrimination  
| Finding Coherence  
| Integrating  
| Deconstruction  
| Organizing |

| Revised Bloom’s Taxonomy  
| Level 6 Create  |
| The student creates new ideas, products, or viewpoints from previously learned information. |

| Engagement Prompts |
| What changes could you make to revise __________?
| What theory can you propose for _________?
| Develop a plan/proposal that __________?
| What might be a solution to __________?
| How many ways can you __________?
| What is the relationship ________?
| What are the alternatives?
| Design a ________ to __________. |

| Create (Level 6)  
| Combine elements or ideas to form a whole; reorganized elements or ideas into new patterns or structures. |

| Cognitive Processes  
| Construction  
| Hypothesizing  
| Designing  
| Planning  
| Generating  
| Producing |

*From Dept-of –knowledge Levels for Four Content Areas by Webb, N.*
Making Connections
Grades 6-12