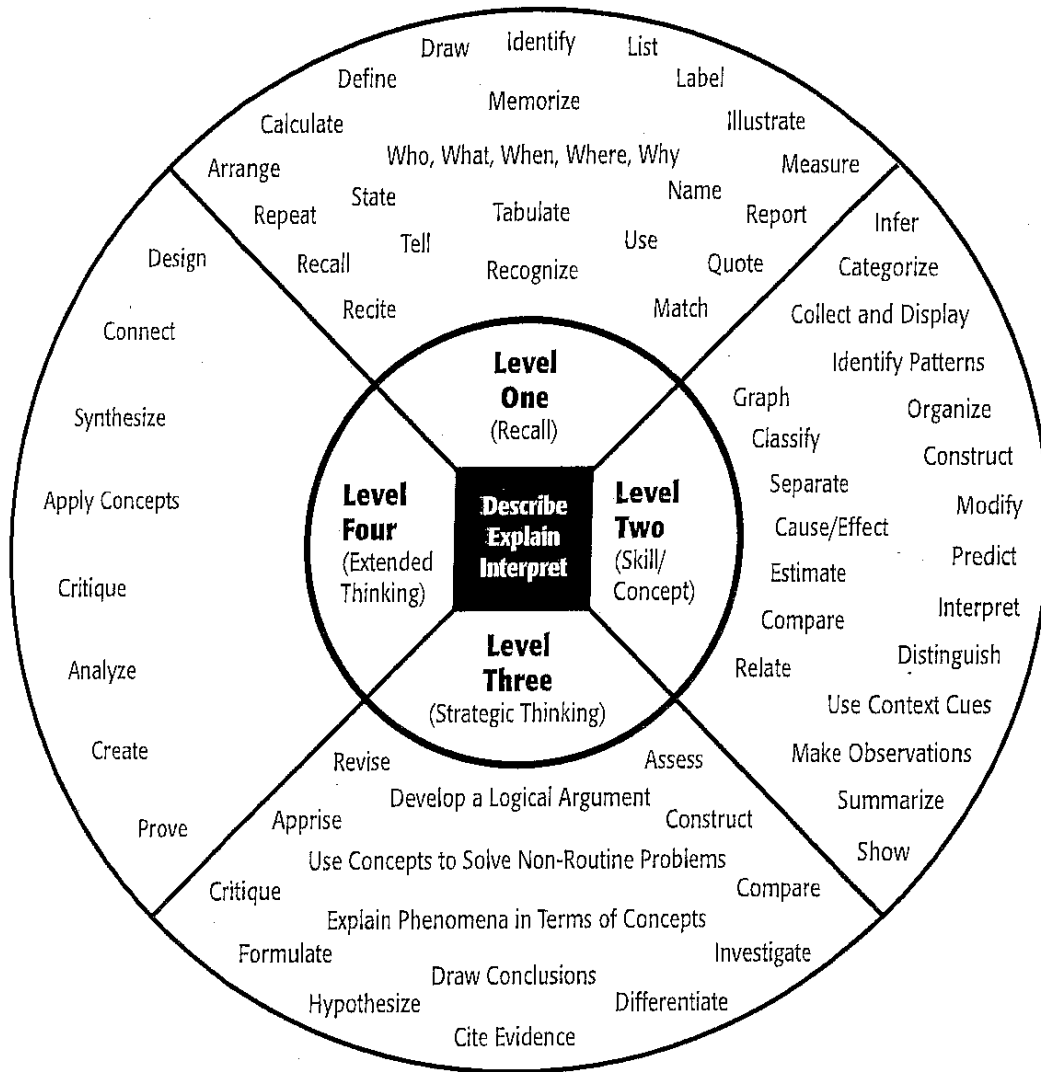


Depth of Knowledge (DOK) Levels



Level One Activities	Level Two Activities	Level Three Activities	Level Four Activities
Recall elements and details of story structure, such as sequence of events, character, plot and setting.	Identify and summarize the major events in a narrative.	Support ideas with details and examples.	Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/solutions.
Conduct basic mathematical calculations.	Use context cues to identify the meaning of unfamiliar words.	Use voice appropriate to the purpose and audience.	Apply mathematical model to illuminate a problem or situation.
Label locations on a map.	Solve routine multiple-step problems.	Identify research questions and design investigations for a scientific problem.	Analyze and synthesize information from multiple sources.
Represent in words or diagrams a scientific concept or relationship.	Describe the cause/effect of a particular event.	Develop a scientific model for a complex situation.	Describe and illustrate how common themes are found across texts from different cultures.
Perform routine procedures like measuring length or using punctuation marks correctly.	Identify patterns in events or behavior.	Determine the author's purpose and describe how it affects the interpretation of a reading selection.	Design a mathematical model to inform and solve a practical or abstract situation.
Describe the features of a place or people.	Formulate a routine problem given data and conditions.	Apply a concept in other contexts.	
	Organize, represent and interpret data.		

Utah SAGE Elementary Mathematics Blueprints

Grade 3		
45 Operational Items		
Domain	Min.	Max.
Operations and Algebraic Thinking (OA)	29%	38%
Number and Operations in Base Ten (NBT)	18%	22%
Number and Operations- Fractions (NF)	27%	31%
Measurement and Data and Geometry (MD/G)	18%	22%
DOK 1	18%	31%
DOK 2	38%	58%
DOK 3	9%	20%

Grade 4		
50 Operational Items		
Domain	Min.	Max.
Operations and Algebraic Thinking (OA)	18%	22%
Number and Operations in Base Ten (NBT)	28%	32%
Number and Operations- Fractions (NF)	28%	32%
Measurement and Data and Geometry (MD/G)	16%	22%
DOK 1	22%	44%
DOK 2	44%	58%
DOK 3	12%	22%

Grade 5		
50 Operational Items		
Domain	Min.	Max.
Operations and Algebraic Thinking (OA)	16%	20%
Number and Operations in Base Ten (NBT)	30%	36%
Number and Operations- Fractions (NF)	28%	34%
Measurement and Data and Geometry (MD/G)	18%	22%
DOK 1	16%	28%
DOK 2	50%	64%
DOK 3	10%	24%

Grade 6		
50 Operational Items		
Domain	Min.	Max.
Ratios and Proportional Relationships (RP)	28%	32%
The Number System (NS)	18%	22%
Expressions and Equations (EE)	28%	34%
Geometry/Statistics and Probability (G/SP)	16%	20%
DOK 1	18%	32%
DOK 2	46%	62%
DOK 3	8%	20%

Note: The percentages shown represent target aggregate values; individual student experiences will vary based on the adaptive algorithm.

Disclosure: Depth of Knowledge (DOK) and Elements of Rigor are essential components of the Utah Mathematics Core Standards. As such, DOK and Elements of Rigor are integrated into the Student Assessment of Growth and Excellence (SAGE) assessment items. All students will see a variety of DOK and Elements of Rigor on the SAGE summative assessment. For more information about DOK and Elements of Rigor please see: <http://www.schools.utah.gov/assessment/Criterion-Referenced-Tests/Math.aspx>

Utah SAGE Science Blueprints

Grade 4 Science		
# of Items (48 scored items)	Min	Max
Standard 4.I	17%	21%
Standard 4.II	17%	21%
Standard 4.III	17%	21%
Standard 4.IV	23%	27%
LO1	29%	33%
LO3	38%	42%
LO4	27%	31%
LO5/6	N/A	N/A
DOK 1	8%	33%
DOK 2	21%	60%
DOK 3/4	20%	40%

Grade 5 Science		
# of Items (45 scored items)	Min	Max
Standard 5.I	18%	22%
Standard 5.II	18%	22%
Standard 5.III	18%	22%
Standard 5.IV	18%	22%
Standard 5.V	18%	22%
LO1	24%	29%
LO3	22%	27%
LO4	22%	27%
LO5/6	22%	27%
DOK 1	9%	33%
DOK 2	22%	60%
DOK 3/4	20%	40%

Grade 6 Science		
# of Items (54 scored items)	Min	Max
Standard 6.I	15%	19%
Standard 6.II	15%	19%
Standard 6.III	15%	19%
Standard 6.IV	15%	19%
Standard 6.V	15%	19%
Standard 6.VI	15%	19%
LO1	26%	30%
LO3	24%	28%
LO4	22%	26%
LO5/6	20%	24%
DOK 1	9%	33%
DOK 2	22%	60%
DOK 3/4	20%	40%

Grade 7 Science		
# of Items (45 scored items)	Min	Max
Standard 7.I	18%	22%
Standard 7.II	18%	22%
Standard 7.III	18%	22%
Standard 7.IV	18%	22%
Standard 7.V	18%	22%
LO1	22%	27%
LO3	24%	29%
LO4	20%	24%
LO5/6	24%	29%
DOK 1	9%	33%
DOK 2	22%	60%
DOK 3/4	20%	40%

Grade 8 Science		
# of Items (45 scored items)	Min	Max
Standard 8.I	24%	29%
Standard 8.II	18%	22%
Standard 8.III	24%	29%
Standard 8.IV	24%	29%
LO1	27%	31%
LO3	22%	27%
LO4	22%	27%
LO5/6	20%	24%
DOK 1	9%	33%
DOK 2	22%	60%
DOK 3/4	20%	40%

Earth Science		
# of Items (45 scored items)	Min	Max
Standard ES.I	18%	22%
Standard ES.II	18%	22%
Standard ES.III	18%	22%
Standard ES.IV	18%	22%
Standard ES.V	18%	22%
LO1	22%	27%
LO3	22%	27%
LO4	24%	29%
LO5/IL06	24%	29%
DOK 1	9%	33%
DOK 2	22%	60%
DOK 3/4	20%	40%

Biology		
# of Items (45 scored items)	Min	Max
Standard BI.I	18%	22%
Standard BI.II	18%	22%
Standard BI.III	18%	22%
Standard BI.IV	18%	22%
Standard BI.V	18%	22%
LO1	22%	27%
LO3	22%	27%
LO4	22%	27%
LO5/IL06	24%	29%
DOK 1	9%	33%
DOK 2	22%	60%
DOK 3/4	20%	40%

Chemistry		
# of Items (54 scored items)	Min	Max
Standard CH.I	15%	19%
Standard CH.II	15%	19%
Standard CH.III	15%	19%
Standard CH.IV	15%	19%
Standard CH.V	15%	19%
Standard CH.VI	15%	19%
LO1	22%	26%
LO3	24%	28%
LO4	22%	26%
LO5/IL06	24%	28%
DOK 1	9%	33%
DOK 2	22%	60%
DOK 3/4	20%	40%

Physics		
# of Items (48 scored items)	Min	Max
Standard PH.I	23%	27%
Standard PH.II	17%	21%
Standard PH.III	17%	21%
Standard PH.IV	17%	21%
Standard PH.V	17%	21%
LO1	21%	25%
LO3	26%	29%
LO4	21%	25%
LO5/IL06	25%	29%
DOK 1	8%	33%
DOK 2	21%	56%
DOK 3/4	20%	40%

Note: The percentages shown represent target aggregate values; individual student experiences will vary based on the adaptive algorithm.

DOK Blueprint Disclosure: Depth of Knowledge (DOK) is an essential component of the Science Instruction. As such, DOK is integrated in all science items throughout the Student Assessment of Growth and Excellence (SAGE) and their respective blueprints. All students will see a variety of DOK and item difficulty on the summative SAGE. For more information about DOK please see: http://static.pearson.com/content/documents/M1-Slide_22_DOK_Hess_Cognitive_Rigor.pdf



English Language Arts Adaptive Testing Item Selection Criteria

Grade 3 ELA		
	Min	Max
Reading Standards for Literature	20%	23%
Reading Standards for Informational Text	20%	23%
Listening Comprehension (Informational)	11%	14%
Language	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

Grade 4 ELA		
	Min	Max
Reading Standards for Literature	20%	23%
Reading Standards for Informational Text	20%	23%
Listening Comprehension (Informational)	11%	14%
Language	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

Grade 5 ELA		
	Min	Max
Reading Standards for Literature	20%	23%
Reading Standards for Informational Text	20%	23%
Listening Comprehension (Informational)	11%	14%
Language	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

Grade 6 ELA		
	Min	Max
Reading Standards for Literature	17%	20%
Reading Standards for Informational Text	21%	24%
Listening Comprehension (Informational)	11%	14%
Writing	29%	29%
Language (vocabulary, 2 editing items)	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

Grade 7 ELA		
	Min	Max
Reading Standards for Literature	17%	20%
Reading Standards for Informational Text	21%	24%
Listening Comprehension (Informational)	11%	14%
Writing	29%	29%
Language (vocabulary, 2 editing items)	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

Grade 8 ELA		
	Min	Max
Reading Standards for Literature	17%	20%
Reading Standards for Informational Text	21%	24%
Listening Comprehension (Informational)	11%	14%
Writing	29%	29%
Language (vocabulary, 2 editing items)	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

Grade 9 ELA		
	Min	Max
Reading Standards for Literature	16%	19%
Reading Standards for Informational Text	23%	26%
Listening Comprehension (Informational)	11%	14%
Writing	29%	29%
Language (vocabulary, 2 editing items)	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

Grade 10 ELA		
	Min	Max
Reading Standards for Literature	13%	16%
Reading Standards for Informational Text	26%	29%
Listening Comprehension (Informational)	11%	14%
Writing	29%	29%
Language (vocabulary, 2 editing items)	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

Grade 11 ELA		
	Min	Max
Reading Standards for Literature	13%	16%
Reading Standards for Informational Text	26%	29%
Listening Comprehension (Informational)	11%	14%
Writing	29%	29%
Language (vocabulary, 2 editing items)	17%	17%
Writing	29%	29%
DOK 1	11%	19%
DOK 2	17%	30%
DOK 3	14%	23%
DOK 4 (Writing)	29%	29%

NOTE: Writing and DOK 4 reflect 2 essays, each scored on 3 dimensions, for a total of 6 scores

DOK Blueprint : Depth of Knowledge (DOK) is an essential component of ELA instruction. As such, DOK is integrated in all ELA items throughout the Student Assessment of Growth and Excellence (SAGE). All students will see a variety of DOK and item difficulty. For more information about DOK please see: http://static.pdesas.org/content/documents/M1-slide_22_DOK_Hess_Cognitive_Rigor.pdf