

*Delaware Alternate*  
*Portfolio Assessment*  
**2008-2009**

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**GLE**  
**QUICK**  
**REFERENCE**

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Welcome to the GLE Quick Reference Guide!

*This tool was developed by the Center for Disabilities Studies at the University of Delaware in conjunction with the Delaware Department of Education to assist in navigating the Delaware Recommended Curriculum (DRC)\*.*

*The Grade Level Expectations (GLEs) highlighted in this guide are a sampling of the most frequently cited skills from previous DAPA portfolios. Additionally, appropriate modifications and other considerations are provided.*

*This document in no way replaces the DRC. It is meant to act as a quick reference in locating concepts and skills for instruction. Refer to the DRC for the complete collection of GLEs.*

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\*intended for use during instruction and assessment for students who participate in the DAPA

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**ENGLISH  
LANGUAGE  
ARTS**

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Standard 1—Students will use written and oral English appropriate for various purposes and audiences. [Written Communication]

**Consider this Standard if you are working on:**

- Grammar
- Organization of Writing
- Punctuation
- Sentence Structure
- Word Choice

**Sample GLEs for this Standard** (DRC, ELA 1 pages 5-33):

GLE	Grade	Notes
Use appropriate adjectives	2	
Organize writing with a beginning, middle and end	2, 3	
Use capital letters and end marks to indicate intended beginning and end of simple sentences	2, 3	
Use concrete nouns	2, 3, 4	
Use periods, question marks and exclamation marks	2, 3, 4, 5, 6	
Use simple transition words that show order (first, next, finally)	2, 3, 4, 5, 6	
Use capital letters to indicate the beginning of sentences, familiar proper nouns, and the pronoun "I"	2, 3, 4, 5, 6	
Use complete sentences to express thoughts	2, 3, 4, 5, 6, 7, 8, 9, 10	<i>This GLE relates to <b>writing</b></i>
Use appropriate verb tense	3, 4, 5, 6	Grade 3 is "use appropriate verbs"
Control agreement of subject/verb, pronoun/antecedent most of the time	5, 6, 7, 8, 9, 10	May modify to "control agreement of subject/verb"

Standard 1—Students will use written and oral English appropriate for various purposes and audiences. [Oral Communication]

**Consider this Standard if you are working on:**

- Asking/responding to Questions
- Listening Comprehension
- Following Directions
- Listening Skills

**Sample GLEs for this Standard** (DRC, ELA 1 pages 34-47):

GLE	Grade	Notes
Express ideas in complete sentences	2	<i>This GLE relates to <b>speaking</b></i>
Follow rules for conversation	2, 3, 4, 5, 6, 7, 8	
Ask and respond to questions from teachers and other group members	2, 3, 4, 5, 6, 7, 8, 9, 10	
Follow basic directions	2, 3, 4, 5, 6, 7, 8, 9, 10	
Give and follow oral directions	2, 3, 4, 5, 6, 7, 8, 9, 10	
Choose words and use voice appropriate to audience and purpose (e.g., inform, persuade, entertain)	2, 3, 4, 5, 6, 7, 8, 9, 10	Wording slightly differs in grades 2-3
Listen attentively by making eye contact, facing the speaker, asking questions, and restating what is said	2, 3, 4, 5, 6, 7, 8, 9, 10	Wording slightly differs in each grade; May modify to one step
Ask and respond to questions in group settings	3, 4, 5, 6, 7, 8, 9, 10	Wording slightly differs in grades 8-10
Recall significant details and sequence accurately	8, 9, 10	

Standard 2—Students will construct, examine, and extend the meaning of literary, informative, and technical texts through listening, reading, and viewing.

**Consider this Standard if you are working on:**

- Context Clues
- Decoding
- Fluency
- Letter Recognition
- Phonological Awareness
- Sight Words
- Spelling

**Sample GLEs for this Standard (DRC, ELA 2 pages 9-15):**

GLE	Grade	Notes
Recognize all letters upper and lower case with automaticity	K	
Produce 1-1 letter/sound correspondence	1	
Read more sight words accurately with automaticity	2	May modify to “read x sight words accurately”
Use picture clues to determine meaning of unknown words	2, 3, 4	
Learn and use unfamiliar words, introduced in stories	2, 3, 4, 5	
Spell phonetically regular words correctly	2, 3, 4, 5	
Read orally from familiar text at an appropriate rate with accuracy and prosody (inflection)	2, 3, 4, 5, 6, 7, 8, 9, 10	
Selecting the correct definition of words that have multiple meanings	2, 3, 4, 5, 6, 7, 8, 9, 10	
Using illustrations to clarify meanings of words and concepts	5, 6, 7	

Standard 2—Students will construct, examine, and extend the meaning of literary, informative, and technical texts through listening, reading, and viewing.

**Consider this Standard if you are working on:**

- Analyzing Story Elements
- Answering Questions
- Graphic Organizers
- Identifying Fact vs. Opinion
- Identifying Text Features
- Making Predictions
- Note Taking
- Predicting Outcomes

**Sample GLEs for this Standard** (DRC, ELA 2 pages 16-57):

GLE	Grade	Notes
Ask and answer questions about the text	2, 3	
Identify the beginning, middle and the end of the story	2, 3, 4	
Identify essential information from text features to enhance understanding of text	2, 3, 4, 5, 6	Grades 3-6 is "Describe"
Restate in own words the main events in the text	2, 3, 4, 5, 6, 7, 8, 9, 10	
Making and revising predictions	2, 3, 4, 5, 6, 7, 8, 9, 10	
Summarizing text	2, 3, 4, 5, 6, 7, 8, 9, 10	
Generating and answering questions	2, 3, 4, 5, 6, 7, 8, 9, 10	May modify to "answering questions"
Identify characters in a literary text	2, 3, 4, 5, 6, 7, 8, 9, 10	Wording slightly differs in each grade
Discriminate between fact and opinion in text	2, 3, 4, 5, 6, 7, 8, 9, 10	Grade 2 is "Differentiate"
Use a graphic organizer or other note taking technique to record important ideas	4, 5, 6, 7, 8, 9, 10	

Standard 2—Students will construct, examine, and extend the meaning of literary, informative, and technical texts through listening, reading, and viewing.

**Consider this Standard if you are working on:**

- Compare/Contrast Text
- Making Judgments
- Drawing Conclusions

**Sample GLEs for this Standard** (*DRC*, ELA 2 pages 58-89):

GLE	Grade	Notes
Listen to different versions of the same piece of text and consider, through classroom discussion, how these versions differ	2, 3	
Use personal experiences to make judgments (e.g., polar concepts such as good/bad, happy/sad) about concepts in literary text	2, 3, 4, 5	Wording changes in grade 5
Draw conclusions	2, 3, 4, 5, 6, 7, 8, 9, 10	Wording slightly differs in each grade
Read a variety of texts and rate them using these criteria to determine their literary merit (based on details, purpose, and/or clear distinctive characters)	6, 7, 8, 9, 10	Wording slightly differs in each grade

Standard 3—Students will access, organize, and evaluate information gained by listening, reading, and viewing.

**Consider this Standard if you are working on:**

- Organizing Information
- Technology
- Research

**Sample GLEs for this Standard** (DRC, ELA 3 pages 3-26):

GLE	Grade	Notes
Use text features (e.g., guide words, indices, glossaries, key words, table of contents) to access information	2, 3, 4, 5, 6, 7, 8, 9, 10	Wording slightly differs in grades 5-10
Relay facts from research	2, 3, 4, 5, 6, 7, 8, 9, 10	
Organize and interpret gathered information using various graphic organizers (e.g., outlining, webbing)	2, 3, 4, 5, 6, 7, 8, 9, 10	
Use teacher selected internet sites and databases to access information	3, 4, 5, 6, 7, 8, 9, 10	
Select a topic for research	3, 4, 5, 6, 7	Wording slightly differs in grades 5-7
Locate information using appropriate sources and strategies	3, 4, 5, 6, 7, 8, 9, 10	
Using a word processor to relay findings	3, 4, 5, 6, 7, 8, 9, 10	<i>This GLE relates to <b>research projects</b>;</i> Wording slightly differs in grades 5-10
Gather information from one or more sources	4, 5, 6, 7, 8, 9, 10	

Standard 4—Students will use literary knowledge accessed through print and visual media to connect self to society and culture.

**Consider this Standard if you are working on:**

- Compare and Contrast
- Identifying with Characters
- Drawing Conclusions from Literature

**Sample GLEs for this Standard (DRC, ELA 4 pages 8-40):**

GLE	Grade	Notes
Describe the reasons for a character's actions in a literary text	2, 3, 4, 5, 6, 7, 8	Modify from "Describe" to "Identify"; May modify by removing "critically analyzing the text" (grades 6, 7, 8)
Make reasonable predictions as they read	2, 3, 4, 5, 6, 7, 8, 9, 10	
Read and compare stories from different cultures and eras to broaden cultural awareness	5, 6, 7, 8, 9, 10	Grades 8-10 may modify "analyze" to "compare"
Demonstrate an understanding of the experiences and feeling of characters (e.g., show empathy for, disagree with, compare to personal or other familiar experiences) based on age, gender, nationalities, races, cultures, and/or disabilities	5, 6, 7, 8, 9, 10	

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# MATH

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Standard 1—Numeric Reasoning: Students will develop Numeric Reasoning and an understanding of *Number and Operations* by solving problems in which there is a need to represent and model real numbers verbally, physically, and symbolically; to explain the relationship between numbers; to determine the relative magnitude of real numbers; to use operations with understanding; and to select appropriate methods of calculations from among mental math, paper-and-pencil, calculators, or computers.

**Consider this Standard if you are working on:**

- Addition
- Estimation
- Percents
- Counting
- Fractions
- Ratios
- Decimals
- Multiplication
- Subtraction
- Division
- Number Sequencing

**Sample GLEs for this Standard** (*DRC, Math 1 pages 4-8*):

GLE	Grade	Notes
Count sets of objects up to 20	K	May modify to “count sets of objects up to x”
Show more than one way to make numbers up to 10	K	
Connect number words and numbers (up to 50) to the quantities they represent using various physical models and representations	1	May modify to “...(up to x)...”
Count sets of objects up to 50 by 1s, 2s, 5s, and 10s	1	
Understand that addition of whole numbers result in a larger number and subtraction of whole numbers result in a smaller number	2	
Connect counting up and counting back to addition and subtraction	3	

Standard 1 (continued)

**Consider this Standard if you are working on:**

- Addition
- Estimation
- Percents
- Counting
- Fractions
- Ratios
- Decimals
- Multiplication
- Subtraction
- Division
- Number Sequencing

**Sample GLEs for this Standard (DRC, Math 1 pages 4-8):**

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Select and use appropriate methods and tools for computing (e.g., mental computation, estimation, calculators, paper and pencil) depending on the context and nature of the computation	3, 4, 5, 6, 7, 8, 9	
Use decimal notation to show the value of coins	4	
Choose the appropriate operation to solve a word problem and explain why	4	May modify by removing "and explain why"
Add and subtract decimals using money models	4	
Describe numbers according to characteristics such as evens, odds, factors, multiples, and squares	5	
Compare relative sizes of real numbers	9	

Standard 2—Algebraic Reasoning: Students will develop Algebraic Reasoning and an understanding of Patterns and Functions by solving problems in which there is a need to recognize and extend a variety of patterns; to progress from the concrete to the abstract using physical models, equations, and graphs; to describe, represent, and analyze relationships among variable quantities; and to analyze, represent, model, and describe, real-world functional relationships.

**Consider this Standard if you are working on:**

- Patterns
- Symbols
- Sorting

**Sample GLEs for this Standard** (*DRC*, Math 2 pages 9-13):

GLE	Grade	Notes
Repeat and extend a simple repeating pattern given the core	K	
Find visual patterns in the world around us	K	
Sort objects by more than one attribute	2	May modify to “sort by one attribute”
Develop a system for sorting a given set of objects	2	
Record patterns of growth in tables and graphs	4	
Describe trends in patterns and graphs	5	
Demonstrate that a given situation may be represented by a table, graph or equation	6	

Standard 3—Geometric Reasoning: Students will develop Geometric Reasoning and an understanding of Geometry and Measurement by solving problems in which there is a need to recognize, construct, transform, analyze properties of, and discover relationships among geometric figures; and to measure to a required degree of accuracy by selecting appropriate tools and units.

**Consider this Standard if you are working on:**

- Calendar Use
- Classification
- Fractions
- Measurement: Length, Volume, Weight
- Money Concepts
- Relative Positioning
- Time Concepts

**Sample GLEs for this Standard** (*DRC*, Math 3 pages 14-17):

GLE	Grade	Notes
Find and name locations with simple relationships (e.g., near to, over, under, beside, between, outside)	K	
Talk about time using calendar (e.g., today, tomorrow and yesterday, and the date)	K	
Describe and compare volume/capacity of two objects (e.g. full/empty; more/less)	K	
Describe and compare the mass/weight of two objects (e.g. light/heavy)	K	
Talk about the days of the week and the days of the month during calendar time	1	
Recognize coins	1	
Identify combinations of coins to make one dollar	2	

Standard 3 (continued)

Consider this Standard if you are working on:

- Calendar Use
- Classification
- Fractions
- Measurement: Length, Volume, Weight
- Money Concepts
- Relative Positioning
- Time Concepts

Sample GLEs for this Standard (DRC, Math 3 pages 14-17):

GLE	Grade	Notes
Talk about the time that events happen (e.g., get up, go to lunch, go home, go to bed)	2	
Tell time to the hour	2	
Find objects that are the same in length	2	
Name and sort solid and plane figures using several attributes	2, 3	May modify to "solid objects" and/or "one attribute"
Tell time to the half hour	3	
Make number lines and break each unit into smaller units ( $1/2$ , $1/3$ , $1/4$ )	3	
Find the number of square units it takes to cover a geometric figure (area)	3, 4, 5	May modify to "find area by counting units used to cover or fill"
Tell time to the nearest 5 minutes	4	
Use measuring cups and graduated cylinders to find volume	4	May modify to "fill up measuring devices to find volume"

Standard 3 (continued)

**Consider this Standard if you are working on:**

- Calendar Use
- Classification
- Fractions
- Measurement: Length, Volume, Weight
- Money Concepts
- Relative Positioning
- Time Concepts

**Sample GLEs for this Standard** (*DRC, Math 3 pages 14-17*):

GLE	Grade	Notes
Estimate and then measure the length of objects to the nearest whole unit (e.g., find your height in inches or centimeters)	4	
Estimate and then measure the mass of an object to the nearest whole unit	4	
Find elapsed time	5	
Identify corresponding parts of similar figures	7	
Classify 3-dimensional figures according to the shapes of their bases and faces	9	
Use appropriate units to measure a given quantity	9	

Standard 4—Quantitative Reasoning: Students will develop Quantitative Reasoning and an understanding of Data Analysis and Probability by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions and to present convincing arguments; and to model mathematical situations to determine the probability.

**Consider this Standard if you are working on:**

- Collect & Organize Data
- Graphing
- Measures of Center (e.g., Mean, Median, Mode)

**Sample GLEs for this Standard** (*DRC*, Math 4 pages 18-21):

GLE	Grade	Notes
Demonstrate a variety of informal and conventional techniques for representing and organizing categorical and numerical data	2, 3	May modify to "organize data using tally marks, line plot, bar graph, etc."
Collect categorical data where the data is described using numbers	2, 3, 4	May modify to "collect categorical data to answer a question"
Choose an appropriate measure of center (means median, mode) and spread (range) to interpret data sets	4, 5, 6, 7, 8	Wording slightly differs in each grade
Construct and use data displays (e.g., tables, scaled pictographs, bar graphs, line plots) in order to answer a question	4, 5, 6, 7, 8	Wording slightly differs in each grade

**Please Note:** Math Standards 5-8 are Process Standards and CAN NOT be taught in isolation. GLEs from these Standards CAN NOT be used for purposes of the assessment.

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**SOCIAL  
STUDIES**

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Standard 1—Students will examine the structure and purposes of governments with specific emphasis on constitutional democracy. [Government]

**Consider this Standard if you are working on:**

- Authority
- Leadership
- Branches of Government

**Sample GLEs for this Standard** (*DRC*, SS Civics 1 pages 1-2):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Explain why leaders are important to people	K/1	
Understand that positions of authority, whether elected, appointed, or familial, carry responsibilities and should be respected	2/3	May modify to "demonstrate respect to those in authority"
Understand that leaders are sometimes chosen by election, and that elected officials are expected to represent the interests of the people who elected them	2/3	May modify to "explain how we choose leaders"
Understand that the United States government is divided into executive, legislative, and judicial branches, each with specific responsibilities and powers	4/5	May modify to "identify the branches of US government"

Standard 2—Students will understand the principles and ideals underlying the American political system. [Politics]

**Consider this Standard if you are working on:**

- Democracy
- Responsibility
- Political Parties

**Sample GLEs for this Standard** (*DRC, SS Civics 2 page 3*):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Explain how people show respect for others	K/1	May modify to "demonstrate respect for others"
Explain why citizens have responsibilities	4/5	May modify to "identify responsibilities of citizens"
Explain why political parties exist in a democracy	9-12	May modify to "identify political parties"

Standard 3—Students will understand the responsibilities, rights, and privileges of United States citizens. [Citizenship]

**Consider this Standard if you are working on:**

- Bill of Rights
- Citizenship
- Democracy
- Responsibility

**Sample GLEs for this Standard** (DRC, SS Civics 3 page 4):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Understand that American citizens have distinct responsibilities, rights, and privileges	2/3	May modify to "identify responsibilities as citizens"
Identify the fundamental rights of all American citizens as enumerated in the Bill of Rights	4/5	
Identify the responsibilities of a citizen	6-8	
Explain ways in which citizens can participate in a democratic society	9-12	

Standard 4—Students will develop and employ the civic skills necessary for effective, participatory citizenship. [Participation]

**Consider this Standard if you are working on:**

- Participation
- Citizenship

**Sample GLEs for this Standard** (DRC, SS Civics 4 page 5):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Acquire the skills necessary for participating in a group, including defining an objective, dividing responsibilities, and working cooperatively	2/3	May modify to "demonstrate working cooperatively in a group"
Explain how a citizen can become informed about candidates for public office and contemporary issues	4/5	

Standard 1—Students will analyze the potential costs and benefits of personal economic choices in a market economy. [Microeconomics]

**Consider this Standard if you are working on:**

- Consumers & Producers
- Goods & Services

**Sample GLEs for this Standard** (*DRC, SS Economics 1 page 6*):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Identify different types of resources used to produce goods and services	K/1	
Identify the next best option when a choice is made and explain reasoning for the choice	K/1	May modify to "make a choice and explain reasoning for the choice"
Explain why price acts as an incentive for both consumers and producers in a market economy	4/5	May modify to "explain how price effects what you buy"

Standard 2—Students will examine the interaction of individuals, families, communities, businesses, and governments in a market economy. [Macroeconomics]

**Consider this Standard if you are working on:**

- Barter Systems
- Trade
- Money Management

**Sample GLEs for this Standard** (*DRC, SS Economics 2 page 7*):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Understand how barter, money, and other media are employed to facilitate the exchange of resources, goods, and services	2/3	May modify to "identify ways that people trade"
Explain why individuals might save, invest, or borrow money	4/5	

Standard 3—Students will understand different types of economic systems and how they change. [Economic Systems]

**Consider this Standard if you are working on:**

- Goods & Services
- Economic Resources

**Sample GLEs for this Standard** (*DRC, SS Economics 3 page 8*):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Identify human wants and the various resources and strategies which have been used to satisfy them over time	2/3	May modify to "identify wants and the resources that will satisfy them"
Identify different ways goods and services have been exchanged, characteristics of money, and functions of money	4/5	May modify to "identify different ways that goods have been exchanged"

Standard 4—Students will examine the patterns and results of international trade. [International Trade]

**Consider this Standard if you are working on:**

- Trade

**Sample GLEs for this Standard** (*DRC, SS Economics 4 page 9*):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Explain why people specialize and trade	4/5	May modify to "identify specializations and trade"
Explain how international trade will affect a nation's standard of living	9-12	May modify to "identify items of international trade"

Standard 1—Students will develop a personal geographic framework, or “mental map,” and understand the uses of maps and other geographics. [Maps]

**Consider this Standard if you are working on:**

- Globes
- Maps
- Mental Maps

**Sample GLEs for this Standard** (*DRC, SS Geography 1 page 10*):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Explain how maps and globes use symbols to represent distance and direction	K/1	May modify to "identify meaning of symbols on maps and globes"
Understand the nature and uses of maps, globes, and other geo-graphics	2/3	May modify to "demonstrate the use of a map"
Demonstrate the ability to locate places on maps and globes using a grid system such as latitude and longitude	4/5	
Apply mental maps to ask and answer questions that require awareness of the relative location of places in the world's sub-regions	4/5, 6-8	May modify to "apply mental maps to answer questions"; Wording slightly differs in grades 4-5

Standard 2—Students will develop a knowledge of the ways humans modify and respond to the natural environment. [Environment]

**Consider this Standard if you are working on:**

- Physical Features on Maps
- Weather Features on Maps

**Sample GLEs for this Standard** (*DRC*, SS Geography 2 page 11):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Identify different land, water, and weather features displayed on maps, globes, and photographs	K/1	
Explain how different climates and land forms affect human activity	2/3	
Identify the processes that shape the natural environment	6-8	

Standard 3—Students will develop an understanding of the diversity of human culture and the unique nature of places. [Places]

**Consider this Standard if you are working on:**

- Cultures
- Geographic Regions

**Sample GLEs for this Standard** (*DRC*, SS Geography 3 page 12):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Identify how people live in different locations around the world	K/1	
Identify how cultures are similar or different	K/1	

Standard 4—Students will develop an understanding of the character and use of regions and the connections between and among them.  
[Regions]

**Consider this Standard if you are working on:**

- Geographic Regions

**Sample GLEs for this Standard** (*DRC*, SS Geography 4 page 13):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Explain how a place changes over time	4/5	
Identify types of geographic regions	6-8	

Standard 1—Students will employ chronological concepts in analyzing historical phenomena. [Chronology]

Consider this Standard if you are working on:

- Chronology

Sample GLEs for this Standard (*DRC*, SS History 1 page 14):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Tell time with a clock and calendar	K/1	May modify to "tell time with a clock or calendar"
Analyze the order of events to arrange them chronologically	2/3	
Use clocks, calendars, schedules, and written records to record or locate events in time	2/3	
Create a chronology from selected historical materials	4/5	

Standard 2—Students will gather, examine, and analyze historical data. [Analysis]

**Consider this Standard if you are working on:**

- Fact vs. Interpretation
- Historic Artifacts

**Sample GLEs for this Standard** (DRC, SS History 2 page 14):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Use artifacts and documents to gather information about the past	2/3	May modify to "identify artifacts or documents that people used in the past"
Arrange selected historical sources chronologically	4/5	
Examine historical materials relating to a particular region, society, or theme; chronologically arrange them and analyze change over time	4/5	May modify to "identify historical materials relating to a particular region, society, or theme"
Explain how to identify the differences between historical facts and historical interpretations	9-12	May modify to "identify historical facts"

Standard 3—Students will interpret historical data. [Interpretation]

Consider this Standard if you are working on:

- Historical Viewpoint

Sample GLEs for this Standard (*DRC*, SS History 3 page 16):

<b>GLE</b>	<b>Grade</b>	<b>Notes</b>
Identify historical accounts as descriptions of the past	K/1	
Explain why point of view can alter historical accounts	4/5	

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# SCIENCE

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Standard 1—Nature and Application of Science and Technology

Consider this Standard if you are working on:

- Collect & Analyze Data
- Scientific Inquiry
- Generate Hypotheses

Sample GLEs for this Standard (DRC, Science 1 pages 7-57):

GLE	Grade	Notes
Accurately collect data through the selection and use of tools and techniques appropriate to the investigation. Construct tables, diagrams, and graphs showing relationships between two variables, to display and facilitate analysis of data. Compare and question results with and from other students.	2, 3, 4, 5, 6, 7, 8	May modify to "collect data using observations", "record data in tables, charts, or bar graphs", or "compare data with others to examine and question results"; Wording slightly differs in each grade
Generate questions and predictions using observations and exploration about the natural world.	2, 3, 4, 5	Wording slightly differs in grades 4-5
Construct a simple explanation by analyzing observational data. Revise the explanation when given new evidence or information gained from other resources or further investigation.	2, 3, 4, 5	May modify to "construct an explanation by analyzing observational data"; Wording slightly differs in grades 4-5

Standard 2—Materials and Their Properties

Consider this Standard if you are working on:

- Evaporation, Condensation
- Magnetism
- Mixtures, Solutions
- Observe & Identify Physical Properties
- Sorting & Classification

Sample GLEs for this Standard (DRC, Science 2 pages 8-20):

GLE	Grade	Notes
Observe and describe the properties of a variety of non-living materials using the senses (i.e., sight, touch, smell, hearing).	K	
Use the physical properties of non-living materials (e.g., texture, size, shape, color) to describe similarities and differences.	K	
Use non-standard units of measure (e.g., string, paper clips) to compare the size and weight of non-living materials.	K	
Sort and group solids based on physical properties such as color, shape, ability to roll or stack, hardness, magnetic attraction, or whether they sink or float in water.	1	
Conduct simple investigations to identify the physical properties (e.g., ability to sink or float, dissolve in water, roll or stack) of solids and liquids. Record the results on charts, diagrams, graphs or drawings.	1	

Standard 2 (continued)

Consider this Standard if you are working on:

- Evaporation, Condensation
- Magnetism
- Mixtures, Solutions
- Observe & Identify Physical Properties
- Sorting & Classification

Sample GLEs for this Standard (DRC, Science 2 pages 8-20):

GLE	Grade	Notes
Investigate evaporation and condensation. Recognize the relationship between temperature and changes of state from liquid to gas in evaporation and gas to liquid in condensation using water as an example.	3, 4	May modify to "observe and describe changes in the properties of water"; Wording slightly differs in grade 3
Test objects for their magnetism and classify objects based on whether they are attracted to a magnet or not attracted to a magnet.	4	
Compare the mass of mixtures and solutions to the mass of their component parts.	5	
Distinguish between physical properties that are dependent upon mass (size, shape) and those physical properties such as boiling point, melting point, solubility, density, conduction of heat and pH of a substance or material that are not altered when the mass of the material is changed.	7	

Standard 3—Energy and Its Effects

Consider this Standard if you are working on:

- Energy Transfer
- Time/Distance Traveled

Sample GLEs for this Standard (DRC, Science 3 pages 9-48):

GLE	Grade	Notes
Observe the evidence of the force of air pushing on objects and materials such as pinwheels and kites. Compare how the direction and speed (fast, slow) of the moving air affects the motion of objects.	1	May modify to "observe how the air makes trees and other objects move"
Investigate what happens to the temperature of an object when it is placed in direct sunlight. Record data and conclude that the energy in the sunlight was changed into heat energy in the object.	1	
Determine the effect of adding heat energy (warming) or removing heat energy (cooling) on the properties of water as it changes state (gas to liquid to solid and visa versa).	3	
Demonstrate and explain how forces of different sizes and directions can produce different kinds of changes in the motion of an object.	5	
Conduct investigations of a moving object and make measurements of time and distance traveled and determine the average speed of moving objects.	6	

Standard 4—Earth in Space

Consider this Standard if you are working on:

- Day/Night
- Seasons
- Eclipses
- Solar Energy
- Order & Characteristics of Planets
- Tides

Sample GLEs for this Standard (DRC, Science 4 pages 6-13):

GLE	Grade	Notes
List objects that can be observed in the sky in the daytime and objects that can be observed in the sky at night time.	1	
Use models to describe how the Earth's rotation on its axis causes one half of the Earth to always be illuminated by the Sun (day) and one half to not be illuminated by the Sun (night). Apply this model of the rotating Earth to explain why the Sun appears to move across the sky each day from east to west.	4	May modify to "use simple models to demonstrate how Earth's rotation causes day and night"
Identify and order the major planets and describe how they all revolve around the Sun.	4	
Use photos gathered from terrestrial telescopes, robot probes, the Hubble telescope, and manned exploration of the Moon to examine pictures of the planets and Moon.	4	May modify to "use photos to examine pictures of the planets and/or Moon"

Standard 4 (continued)

Consider this Standard if you are working on:

- Day/Night
- Seasons
- Eclipses
- Solar Energy
- Order & Characteristics of Planets
- Tides

Sample GLEs for this Standard (DRC, Science 4 pages 6-13):

GLE	Grade	Notes
Use models to describe how the relative positions of the Sun, Moon and Earth account for Moon phases, eclipses and tides.	8	
Explain how the Sun is the central and largest body in our solar system and the source of the light energy that hits our planet. Use models to explain how variations in the amount of Sun's energy hitting the Earth's surface results in seasons.	8	May modify to "use models to show how Sun's energy results in seasons"
Use a variety of resources (e.g., NASA photographs, computer simulations) to compare and contrast the physical properties (i.e., temperature, size, composition, surface features) of planets.	8	May modify to "use photos to examine pictures of the planets"

Standard 5—Earth’s Dynamic Systems

Consider this Standard if you are working on:

- Classifying Rocks
- Soil Characteristics
- Cloud Patterns/Formations
- Weather Conditions
- Temperature

Sample GLEs for this Standard (DRC, Science 5 pages 7-19):

GLE	Grade	Notes
Keep daily records of weather conditions (wind speed, type and amount of precipitation, cloud cover and type, temperature) and use these records to identify patterns over short term and seasonal patterns in Delaware.	1, 4	May modify to “keep daily records of weather conditions”; Wording slightly differs in each grade
Use a thermometer to measure temperature in degrees Fahrenheit. Describe how hot or cold and object or weather event feels by using thermometer.	1	
Describe different weather conditions and discuss how these conditions affect plants, animals, and human activity.	1	
Select and use appropriate instruments such as wind scales, thermometers, cloud charts, and rain gauges to measure weather conditions.	1	
Observe and identify basic components of soil. Use the senses to observe and then describe the physical properties of soil components.	2	

Standard 5 (continued)

Consider this Standard if you are working on:

- Classifying Rocks
- Soil Characteristics
- Cloud Patterns/Formations
- Weather Conditions
- Temperature

Sample GLEs for this Standard (DRC, Science 5 pages 7-19):

GLE	Grade	Notes
Examine an assortment of rocks and use appropriate measuring tools (balances, meter tapes, syringes) to gather data about the rocks' physical properties (length, circumference, weight).	3	
Sort and group an assortment of minerals based on similarities and differences in their physical properties.	3	
Examine satellite imagery pictures and use these images to identify cloud patterns and storm systems.	8	
Classify and describe features that are used to distinguish between igneous, sedimentary, and metamorphic rocks.	9	

Standard 6—Life Processes

Consider this Standard if you are working on:

- Animal Characteristics
- Five Senses
- Human Body
- Living vs. Non-Living Things
- Plant Characteristics
- Safety Equipment

Sample GLEs for this Standard (DRC, Science 6 pages 8-19):

GLE	Grade	Notes
Observe and describe the properties of a variety of living and non-living things using the five senses.	K	
Identify the five sense structures and tell which sense is associated with which structure.	K	
Sort, group, and regroup a variety of familiar living and non-living things based on their physical properties (e.g., shape, color, texture, taste, size, etc.).	K	
Use non-standard units of measure to compare the size and mass of structures of living things (e.g., string around trees, paper clips to measure length of leaves).	K	
Observe individuals of the same plant or animal group. Describe physical differences (e.g., size, color, shape, markings).	1	

Standard 6 (continued)

Consider this Standard if you are working on:

- Animal Characteristics
- Living vs. Non-Living Things
- Five Senses
- Plant Characteristics
- Human Body
- Safety Equipment

Sample GLEs for this Standard (DRC, Science 6 pages 8-19):

GLE	Grade	Notes
Observe a variety of plants and animals. Compare specific needs that are common to plants or animals of the same group.	2	
Sort and group plants and animals according to similarities in structures or functions of structures. Explain why the plants and animals have been grouped in this manner.	4	May modify by deleting "explain why..."
Identify safety equipment (e.g., goggles, gloves) and procedures (e.g., washing hands, wafting, not eating) <b>used in classroom science investigations.</b> Explain how these promote healthy living and prevent injuries.	5	<i>This GLE relates to <b>classroom science investigations</b></i>
Explain that human body systems are comprised of organs (e.g., heart, stomach, and lungs) that perform specific functions within one or more systems.	6	May modify to "identify organs that perform..."

Standard 7—Diversity and Continuity of Living Things

Consider this Standard if you are working on:

- Animal Characteristics
- Life Cycle
- Diversity of & within Species
- Plant Characteristics
- Ecosystems

Sample GLEs for this Standard (DRC, Science 7 pages 8-19):

GLE	Grade	Notes
Recognize that there are many different kinds of plants and animals in the world. Sort terrestrial animals from aquatic animals. Identify the characteristics used to separate the terrestrial from aquatic animals.	1	May modify to "sort terrestrial animals from aquatic animals"
Observe the life cycle of a selected organism (e.g., plant, butterfly, frog) and recognize that the stages of the life cycle are predictable and describable.	2	May modify to "identify the stages in a life cycle"
Compare the similarities and difference of offspring to their parents. Know that offspring receive characteristics from both parents.	4	
Identify plants and animals in an ecosystem (e.g., beach, woodland, marsh, meadow). Examine life cycles of the plants and animals and identify factors in the ecosystem that are beneficial or harmful to the organisms at various stages in its life cycle.	5	May modify to "identify plants or animals in an ecosystem"

Standard 8—Ecology

Consider this Standard if you are working on:

- Ecosystems
- Impact of Weather
- Foodwebs

Sample GLEs for this Standard (*DRC*, Science 8 pages 8-16):

GLE	Grade	Notes
Recognize that humans interact with the environment through the use of their five senses.	K	
Describe the impact of weather conditions on plant and animal activities.	1	
Observe the plants and animals living in an environment. Identify ways in which plants and animals benefit from each other (e.g., animals use plants for food and shelter, and plants need insects to spread pollen).	2	May modify to "identify plants and/or animals that live in an environment"
Examine a variety of ecosystems such as marsh, pond, field, and forest. Compare how the organisms, the habitat, and the food chains are similar and different in these ecosystems.	5	May modify to "identify ecosystems and the organisms that live within them"
Design food webs and trace the flow of matter and energy (beginning with the Sun) through the food web.	8	

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