



LOUISIANA
Grade Level Expectations
(as to the Alexandria Zoo)

GRADE 9



MATH:**Number and Number Relations**

1. Identify and describe differences among natural numbers, whole numbers, integers, rational numbers, and irrational numbers (N-1-H) (N-2-H) (N-3-H)
2. Evaluate and write numerical expressions involving integer exponents (N-2-H)
3. Apply scientific notation to perform computations, solve problems, and write representations of numbers (N-2-H)
4. Distinguish between an exact and an approximate answer, and recognize errors introduced by the use of approximate numbers with technology (N-3-H) (N-4-H) (N-7-H)
5. Demonstrate computational fluency with all rational numbers (e.g., estimation, mental math, technology, paper/pencil) (N-5-H)
6. Simplify and perform basic operations on numerical expressions involving radicals (e.g., $2\sqrt{3} + 5\sqrt{3} = 7\sqrt{3}$) (N-5-H)
7. Use proportional reasoning to model and solve real-life problems involving direct and inverse variation (N-6-H)

Algebra

8. Use order of operations to simplify or rewrite variable expressions (A-1-H) (A-2-H)
9. Model real-life situations using linear expressions, equations, and inequalities (A-1-H) (D-2-H) (P-5-H)
10. Identify independent and dependent variables in real-life relationships (A-1-H)
11. Use equivalent forms of equations and inequalities to solve real-life problems (A-1-H)
12. Evaluate polynomial expressions for given values of the variable (A-2-H)
13. Translate between the characteristics defining a line (i.e., slope, intercepts, points) and both its equation and graph (A-2-H) (G-3-H)
14. Graph and interpret linear inequalities in one or two variables and systems of linear inequalities (A-2-H) (A-4-H)
15. Translate among tabular, graphical, and algebraic representations of functions and real-life situations (A-3-H) (P-1-H) (P-2-H)
16. Interpret and solve systems of linear equations using graphing, substitution, elimination, with and without technology, and matrices using technology (A-4-H)

Measurement

17. Distinguish between precision and accuracy (M-1-H)
18. Demonstrate and explain how the scale of a measuring instrument determines the precision of that instrument (M-1-H)
19. Use significant digits in computational problems (M-1-H) (N-2-H)
20. Demonstrate and explain how relative measurement error is compounded when determining absolute error (M-1-H) (M-2-H) (M-3-H)
21. Determine appropriate units and scales to use when solving measurement problems (M-2-H) (M-3-H) (M-1-H)
22. Solve problems using indirect measurement (M-4-H)

Geometry

23. Use coordinate methods to solve and interpret problems (e.g., slope as rate of change, intercept as initial value, intersection as common solution, midpoint as equidistant) (G-2-H) (G-3-H)
24. Graph a line when the slope and a point or when two points are known (G-3-H)
25. Explain slope as a representation of “rate of change” (G-3-H) (A-1-H)
26. Perform translations and line reflections on the coordinate plane (G-3-H)

Data Analysis, Probability, and Discrete Math

27. Determine the most appropriate measure of central tendency for a set of data based on its distribution (D-1-H)
28. Identify trends in data and support conclusions by using distribution characteristics such as patterns, clusters, and outliers (D-1-H) (D-6-H) (D-7-H)
29. Create a scatter plot from a set of data and determine if the relationship is linear or nonlinear (D-1-H) (D-6-H) (D-7-H)
30. Use simulations to estimate probabilities (D-3-H) (D-5-H)
31. Define probability in terms of sample spaces, outcomes, and events (D-4-H)
32. Compute probabilities using geometric models and basic counting techniques such as combinations and permutations (D-4-H)
33. Explain the relationship between the probability of an event occurring, and the odds of an event occurring and compute one given the other (D-4-H)
34. Follow and interpret processes expressed in flow charts (D-8-H)

Patterns, Relations, and Functions

35. Determine if a relation is a function and use appropriate function notation (P-1-H)
 36. Identify the domain and range of functions (P-1-H)
 37. Analyze real-life relationships that can be modeled by linear functions (P-1-H) (P-5-H)
 38. Identify and describe the characteristics of families of linear functions, with and without technology (P-3-H)
 39. Compare and contrast linear functions algebraically in terms of their rates of change and intercepts (P-4-H)
- Explain how the graph of a linear function changes as the coefficients or constants are changed in the function’s symbolic representation (P-4-H)

SCIENCE:

Science as Inquiry

The Abilities Necessary to Do Scientific Inquiry

- Write a testable question or hypothesis when given a topic (SI-H-A1)
- Describe how investigations can be observation, description, literature survey, classification, or experimentation (SI-H-A2)
- Plan and record step-by-step procedures for a valid investigation, select equipment and materials, and identify variables and controls (SI-H-A2)
- Conduct an investigation that includes multiple trials and record, organize, and display data appropriately (SI-H-A2)
- Utilize mathematics, organizational tools, and graphing skills to solve problems (SI-H-A3)

- Use technology when appropriate to enhance laboratory investigations and presentations of findings (SI-H-A3)
- Choose appropriate models to explain scientific knowledge or experimental results (e.g., objects, mathematical relationships, plans, schemes, examples, role-playing, computer simulations) (SI-H-A4)
- Give an example of how new scientific data can cause an existing scientific explanation to be supported, revised, or rejected (SI-H-A5)
- Write and defend a conclusion based on logical analysis of experimental data (SI-H-A6) (SI-H-A2)
- Given a description of an experiment, identify appropriate safety measures (SI-H-A7)

Understanding Scientific Inquiry

- Evaluate selected theories based on supporting scientific evidence (SI-H-B1)
- Cite evidence that scientific investigations are conducted for many different reasons (SI-H-B2)
- Identify scientific evidence that has caused modifications in previously accepted theories (SI-H-B2)
- Cite examples of scientific advances and emerging technologies and how they affect society (e.g., MRI, DNA in forensics) (SI-H-B3)
- Analyze the conclusion from an investigation by using data to determine its validity (SI-H-B4)
- Use the following rules of evidence to examine experimental results:
 - (a) Can an expert's technique or theory be tested, has it been tested, or is it simply a subjective, conclusive approach that cannot be reasonably assessed for reliability?
 - (b) Has the technique or theory been subjected to peer review and publication?
 - (c) What is the known or potential rate of error of the technique or theory when applied?
 - (d) Were standards and controls applied and maintained?
- Has the technique or theory been generally accepted in the scientific community? (SI-H-B5) (SI-H-B1) (SI-H-B4)

Physical Science

(Recommended for Grade 9)

Physical Science

Measurement and Symbolic Representation

1. Measure the physical properties of different forms of matter in metric system units (e.g., length, mass, volume, temperature) (PS-H-A1)
2. Gather and organize data in charts, tables, and graphs (PS-H-A1)
3. Distinguish among symbols for atoms, ions, molecules, and equations for chemical reactions (PS-H-A2)
4. Name and write chemical formulas using symbols and subscripts (PS-H-A2)

Atomic Structure

5. Identify the three subatomic particles of an atom by location, charge, and relative mass (PS-H-B1)

- Determine the number of protons, neutrons, and electrons of elements by using the atomic number and atomic mass from the periodic table (PS-H-B1)
- Describe the results of loss/gain of electrons on charges of atoms (PS-H-B1) (PS-H-C5)
- Evaluate the uses and effects of radioactivity in people's daily lives (PS-H-B2)
- Compare nuclear fission to nuclear fusion (PS-H-B2)
- Identify the number of valence electrons of the first 20 elements based on their positions in the periodic table (PS-H-B3)

The Structure and Properties of Matter

- Investigate and classify common materials as *elements*, *compounds*, or *mixtures* (heterogeneous or homogeneous) based on their physical and chemical properties (PS-H-C1)
- Classify elements as *metals* or *nonmetals* based on their positions in the periodic table (PS-H-C2)
- Predict how factors such as particle size and temperature influence the rate of dissolving (PS-H-C3)
- Investigate and compare methods for separating mixtures by using the physical properties of the components (PS-H-C4) (PS-H-C1)
- Using selected elements from atomic numbers 1 to 20, draw Bohr models (PS-H-C5) (PS-H-B3)
- Name and write the formulas for simple ionic and covalent compounds (PS-H-C5)
- Name and predict the bond type formed between selected elements based on their locations in the periodic table (PS-H-C5)
- Diagram or construct models of simple hydrocarbons (four or fewer carbons) with single, double, or triple bonds (PS-H-C6)
- Analyze and interpret a graph that relates temperature and heat energy absorbed during phase changes of water (PS-H-C7)
- Predict the particle motion as a substance changes phases (PS-H-C7) (PS-H-C3)

Chemical Reactions

- Classify changes in matter as *physical* or *chemical* (PS-H-D1)
- Identify evidence of chemical changes (PS-H-D1)
- Classify unknowns as *acidic*, *basic*, or *neutral* using indicators (PS-H-D2)
- Identify balanced equations as neutralization, combination, and decomposition reactions (PS-H-D3)
- Determine the effect of various factors on reaction rate (e.g., temperature, surface area, concentration, agitation) (PS-H-D4)
- Illustrate the laws of conservation of matter and energy through balancing simple chemical reactions (PS-H-D5) (PS-H-D3) (PS-H-D7)
- Distinguish between endothermic and exothermic reactions (PS-H-D6)
- Identify chemical reactions that commonly occur in the home and nature (PS-H-D7)

Forces and Motion

- Differentiate between *mass* and *weight* (PS-H-E1)
- Compare the characteristics and strengths of forces in nature (e.g., gravitational, electrical, magnetic, nuclear) (PS-H-E1)
- Differentiate between speed and velocity (PS-H-E2)
- Plot and compare line graphs of acceleration and velocity (PS-H-E2)
- Calculate velocity and acceleration using equations (PS-H-E2)

34. Demonstrate Newton's three laws of motion (e.g., inertia, net force using $F = ma$, equal and opposite forces) (PS-H-E3)
35. Describe and demonstrate the motion of common objects in terms of the position of the observer (PS-H-E4)

Energy

36. Measure and calculate the relationships among energy, work, and power (PS-H-F1)
37. Model and explain how momentum is conserved during collisions (PS-H-F2)
38. Analyze diagrams to identify changes in kinetic and potential energy (PS-H-F2)
39. Distinguish among thermal, chemical, electromagnetic, mechanical, and nuclear energy (PS-H-F2)
40. Demonstrate energy transformation and conservation in everyday actions (PS-H-F2)

Interactions of Energy and Matter

41. Identify the parts and investigate the properties of transverse and compression waves (PS-H-G1)
42. Describe the relationship between wavelength and frequency (PS-H-G1)
43. Investigate and construct diagrams to illustrate the laws of reflection and refraction (PS-H-G1)
44. Illustrate the production of static electricity (PS-H-G2)
45. Evaluate diagrams of series and parallel circuits to determine the flow of electricity (PS-H-G2)
46. Diagram a magnetic field (PS-H-G2)
47. Explain how electricity and magnetism are related (PS-H-G2)
48. Compare properties of waves in the electromagnetic spectrum (PS-H-G3)
49. Describe the Doppler effect on sound (PS-H-G3)
50. Identify positive and negative effects of electromagnetic/mechanical waves on humans and human activities (e.g., sound, ultraviolet rays, X-rays, MRIs, fiber optics) (PS-H-G4) (PS-H-G3)

SOCIAL STUDIES:

Geography (Core Course: World Geography)

Geography

The World in Spatial Terms

1. Identify, explain, and apply the five themes of geography (G-1A-H1)
2. Compare and contrast various types of maps (G-1A-H1)
3. Analyze or interpret a map to locate geographic information, using a variety of map elements (e.g., compass rose, symbols, distance scales, time zones, latitude, longitude) (G-1A-H1)
4. Use a city or road map to plot a route from one place to another or to identify the shortest route (G-1A-H1)
5. Construct a map based on given narrative information (e.g., location of cities, bodies of water, places of historical significance) (G-1A-H1)
6. Construct a chart, diagram, graph, or graphic organizer to display geographic information (G-1A-H1)

7. Analyze, interpret, and use information in charts, diagrams, and graphs to explain geographic issues (G-1A-H1)
8. Use maps drawn from memory to answer geographic questions (G-1A-H2)

Places and Regions

9. Identify and analyze the distinguishing physical or human characteristics of a given place (e.g., landforms, precipitation, ecosystems, settlement patterns, economic activities) (G-1B-H1)
10. Evaluate how location, topography, climate, natural resources, and other physical characteristics affect human activities (e.g., cultural diversity, migration, physical features, historical events, plantation, subsistence farming) or the significance of a place (G-1B-H1)
11. Draw conclusions about a place or area from its geographic or physical features (G-1B-H1)
12. Explain how topography, climate, soil, vegetation, and natural resources shape the history of a region (G-1B-H2)
13. Explain how location, physical features, and human characteristics of places influenced historical events (e.g., World War II, Cuban Missile Crisis, Vietnam, Middle East conflicts) (G-1B-H2)
14. Explain ways in which regional systems are interconnected (e.g., interstate transportation and trade, interconnecting rivers and canals) (G-1B-H3)
15. Analyze world regions in terms of given characteristics (e.g., population density, natural resources, economic activities, demography) (G-1B-H3)
16. Explain how physical or geographical characteristics (e.g., mountain ranges, interconnecting waterways) facilitate or hinder regional interactions (G-1B-H3)
17. Explain how technological advances have led to increasing interaction between regions (e.g., use of satellites for monitoring and exploration) (G-1B-H3)
18. Analyze how human activities and physical characteristics of regions have led to regional labels (e.g., Dust Bowl, New South, Sunbelt) (G-1B-H4)
19. Describe how physical, historical, and cultural characteristics give definition to a place or region (e.g., New South, Jerusalem) (G-1B-H4)

Physical and Human Systems

20. Categorize elements of the natural environment as belonging to one of four components of Earth's physical systems: atmosphere, lithosphere, biosphere, or hydrosphere (G-1C-H1)
21. Characterize areas or regions in terms of the physical processes that affect them (e.g., Pacific Ocean "Rim of Fire," San Andreas fault) (G-1C-H1)
22. Examine the physical effects of Earth-Sun relationships (G-1C-H1)
23. Explain the movement of wind patterns across the earth, its relationship to ocean currents, and its climatic effects on various regions of the world (G-1C-H1)
24. Examine the effects of a physical process (e.g., erosion and depository processes, global warming, El Niño) on the natural environment and societies of an area and draw conclusions from that information (G-1C-H1)
25. Compare and contrast past and present trends in human migration (G-1C-H2)
26. Assess the role of environmental changes, economic scarcity, conflict, political developments, cultural factors, and prosperity in human migration (e.g., escape from persecution or famine, migration to the suburbs) (G-1C-H2)
27. Analyze patterns of urban development in an area or region (G-1C-H3)

28. Compare, contrast, and analyze the distribution, growth rates, and other demographic characteristics of human populations in various countries or regions (G-1C-H3)
29. Analyze the current and future impact of population growth on the world (e.g., natural resources, food supply, standard of living) (G-1C-H3)
30. Analyze population pyramids and use other data, graphics, and maps to describe population characteristics of different societies and to predict future growth (G-1C-H3)
31. Compare the role that culture plays in incidents of cooperation and conflict in the present-day world (G-1C-H4)
32. Analyze how certain cultural characteristics can link or divide regions (e.g., language, religion, demography) (G-1C-H4)
33. Identify the geographical distribution of the different economic systems (market, command, traditional, mixed) (G-1C-H5)
34. Distinguish between developed and developing countries, including the standard of living in these nations, GDP, and per capita income (G-1C-H5)
35. Analyze ways in which the distribution of economic systems relates to regional tensions or regional cooperation (e.g., North and South Korea) (G-1C-H6)
36. Analyze the role of differing points of view and national self-interest in disputes over territory and resources (e.g., oil, water, boundaries) (G-1C-H6)
37. Analyze regional issues and alliances in terms of common interests related to territory and resources (e.g., oil, water, boundaries) (G-1C-H6)

Environment and Society

38. Identify technological advances that expanded human capacity to modify the environment (e.g., steam, coal, electric, nuclear power, levees) (G-1D-H1)
39. Describe challenges to human systems and activities posed by the physical environment or the impact of natural processes and disasters on human systems (e.g., infrastructure) (G-1D-H2)
40. Analyze or evaluate strategies for dealing with environmental challenges (e.g., dams or dikes to control floods, fertilizer to improve crop production) (G-1D-H2)
41. Analyze the relationship between the development of natural resources in a region and human settlement patterns or regional variations in land use (G-1D-H3)
42. Assess the ways in which unequal distribution of natural resources has led to exploration, colonization, and conflict (G-1D-H3)
43. Analyze world or regional distribution of natural resources in terms of import need and export capacity (G-1D-H3)
44. Analyze the relationship between a country's standard of living and its locally accessible natural resources (e.g., the effects of oil or natural gas reserves in a region) (G-1D-H3)
45. Describe the impact of the scarcity of natural resources (e.g., water shortage) or pollution (e.g., air, water) (G-1D-H3)
46. Assess the role of government in preserving natural resources and protecting the physical environment (G-1D-H4)
47. Evaluate the effectiveness of policies and programs related to conservation and use of natural resources (G-1D-H4)
48. Evaluate import and export policies in regard to a country's needs for resources (G-1D-H4)
49. Debate a position on an environmental issue involving conservation or use of natural resources (e.g., private vs. public interest) (G-1D-H5)

Evaluate options for solving a local or regional problem involving physical processes or environmental challenges (e.g., government disaster aid, environmental clean-up cost responsibility) (G-1D-H5)

ENGLISH LANGUAGE ARTS:

Reading and Responding

Standard 1:

1. Extend basic and technical vocabulary using a variety of strategies, including:
 - use of context clues
 - use of knowledge of Greek and Latin roots and affixes
 - use of denotative and connotative meanings
 - tracing etymology (ELA-1-H1)
2. Identify and explain story elements, including:
 - the author's use of direct and indirect characterization
 - the author's pacing of action and use of plot development, subplots, parallel episodes, and climax to impact the reader
 - the revelation of character through dialect, dialogue, dramatic monologues, and soliloquies (ELA-1-H2)
3. Identify and explain the significance of literary devices, including:
 - mixed metaphors
 - imagery
 - symbolism
 - flashback
 - foreshadowing
 - sarcasm/irony
 - implied metaphors
 - oxymoron (ELA-1-H2)
4. Draw conclusions and make inferences in oral and written responses about ideas and information in texts, including:
 - nonfiction works
 - short stories/novels
 - five-act plays
 - poetry/epics
 - film/visual texts
 - consumer/instructional materials
 - public documents (ELA-1-H3)
5. Explain ways in which ideas and information in a variety of texts (e.g., scientific reports, technical guidelines, business memos, literary texts) connect to real-life situations and other texts (ELA-1-H4)

Standard 6:

6. Compare/contrast cultural elements including a group's history, perspectives, and language found in multicultural texts in oral and written responses (ELA-6-H1)
7. Identify and explain connections between historical contexts and works of various authors, including Homer, Sophocles, and Shakespeare (ELA-6-H2)
8. Identify and explain recurrent themes in world literature (ELA-6-H2)
9. Analyze in oral and written responses distinctive elements (including theme, structure, characterization) of a variety of literary forms and types, including:
 - essays by early and modern writers
 - epic poetry such as *The Odyssey*

- forms of lyric and narrative poetry such as ballads and sonnets
 - drama, including ancient, Renaissance, and modern
 - short stories and novels
 - biographies and autobiographies (ELA-6-H3)
10. Identify and explain in oral and written responses ways in which particular genres reflect life experiences, for example:
- an essay expresses a point of view
 - a legend chronicles the life of a cultural hero
 - a short story or novel provides a vicarious life experience (ELA-6-H4)

Standard 7:

11. Demonstrate understanding of information in grade-appropriate texts using a variety of strategies, including:
- summarizing and paraphrasing information and story elements
 - comparing and contrasting information in texts, including televised news, news magazines, documentaries, and online information
 - comparing and contrasting complex literary elements, devices, and ideas within and across texts
 - examining the sequence of information and procedures in order to critique the logic or development of ideas in texts
 - making inferences and drawing conclusions
 - making predictions and generalizations (ELA-7-H1)
12. Solve problems using reasoning skills, including:
- using supporting evidence to verify solutions
 - analyzing the relationships between prior knowledge and life experiences and information in texts
 - using technical information in specialized software programs, manuals, interviews, surveys, and access guides to Web sites (ELA-7-H2)
13. Identify and explain the impact of an author's life on themes and issues of a single text or multiple texts by the same author (ELA-7-H3)
14. Analyze information within and across grade-appropriate texts using various reasoning skills, including:
- identifying cause-effect relationships
 - raising questions
 - reasoning inductively and deductively
 - generating a theory or hypothesis
 - distinguishing facts from opinions and probability (ELA-7-H4)

Writing

Standard 2:

15. Develop organized, coherent paragraphs that include the following:
- topic sentences
 - logical sequence
 - transitional words and phrases
 - appropriate closing sentences
 - parallel construction where appropriate (ELA-2-H1)
16. Develop multiparagraph compositions organized with the following:
- a clearly stated central idea or thesis statement
 - a clear, overall structure that includes an introduction, a body, and an appropriate conclusion

- supporting paragraphs appropriate to the topic organized in a logical sequence (e.g., spatial order, order of importance, ascending/descending order, chronological order, parallel construction)
 - transitional words and phrases that unify throughout (ELA-2-H1)
17. Develop complex compositions on student- or teacher-selected topics that are suited to an identified audience and purpose and that include the following:
- word choices appropriate to the identified audience and/or purpose
 - vocabulary selected to clarify meaning, create images, and set a tone
 - information/ideas selected to engage the interest of the reader
 - clear voice (individual personality) (ELA-2-H2)
18. Develop complex compositions using writing processes, including:
- selecting topic and form (e.g., determining a purpose and audience)
 - prewriting (e.g., brainstorming, clustering, outlining, generating main idea/thesis statements)
 - drafting
 - conferencing (e.g., peer and teacher)
 - revising for content and structure based on feedback
 - proofreading/editing to improve conventions of language
 - publishing using technology (ELA-2-H3)
19. Develop paragraphs and complex, multiparagraph compositions using all modes of writing (description, narration, exposition, and persuasion) emphasizing exposition and persuasion (ELA-2-H4)
20. Develop paragraphs and complex, multiparagraph compositions that include complex stylistic features, including:
- literary devices such as student-composed oxymoron, touches of sarcasm, and/or irony
 - vocabulary and phrasing that reflect an individual character (voice)
 - a variety of sentence lengths and structures, including simple, compound, and complex (ELA-2-H5)
21. Write for various purposes, including:
- formal and business letters, such as letters of complaint and requests for information
 - letters to the editor
 - job applications
 - text-supported interpretations that connect life experiences to works of literature (ELA-2-H6)

Writing/Proofreading

Standard 3:

22. Apply standard rules of sentence formation, avoiding common errors, such as:
- fragments
 - run-on sentences
 - syntax problems (ELA-3-H2)
23. Apply standard rules of usage, including:
- making subjects and verbs agree
 - using verbs in appropriate tenses
 - making pronouns agree with antecedents
 - using pronouns appropriately in nominative, objective, and possessive cases
 - using adjectives in comparative and superlative degrees and adverbs correctly

- avoiding double negatives
 - using all parts of speech appropriately (ELA-3-H2)
24. Apply standard rules of mechanics, including:
- using commas to set off appositives or parenthetical phrases
 - using quotation marks to set off titles of short works
 - using colons preceding a list and after a salutation in a business letter
 - using standard capitalization for names of political and ethnic groups, religions, and continents (ELA-3-H2)
25. Use correct spelling conventions when writing and editing (ELA-3-H3)
26. Use a variety of resources, such as dictionaries, thesauruses, glossaries, technology, and textual features (e.g., definitional footnotes, sidebars) to verify word spellings (ELA-3-H3)

Speaking and Listening

Standard 4:

27. Use standard English grammar, diction, and syntax when responding to questions, participating in informal group discussions, and making presentations (ELA-4-H1)
28. Select language appropriate to specific purposes and audiences when speaking, including:
- delivering informational/book reports in class
 - conducting interviews/surveys of classmates or the general public
 - participating in class discussions (ELA-4-H1)
29. Listen to oral instructions and presentations, speeches, discussions, and carry out procedures, including:
- taking accurate notes
 - writing summaries or responses
 - forming groups (ELA-4-H2)
30. Organize and use precise language to deliver oral directions and instructions about general, technical, or scientific topics (ELA-4-H2)
31. Deliver oral presentations that include the following:
- phrasing, enunciation, voice modulation, verbal and nonverbal techniques, and inflection adjusted to stress important ideas and impact audience response
 - language choices selected to suit the content and context
 - an organization that includes an introduction, relevant details that develop the topic, and a conclusion (ELA-4-H3)
32. Use active listening strategies, including:
- monitoring messages for clarity
 - selecting and organizing essential information
 - noting cues such as changes in pace
 - generating and asking questions concerning a speaker's content, delivery, and attitude toward the subject (ELA-4-H4)
33. Deliver clear, coherent, and concise oral presentations about information and ideas in texts (ELA-4-H4)
34. Analyze media information in oral and written responses, including:
- summarizing the coverage of a media event
 - comparing messages from different media (ELA-4-H5)
35. Participate in group and panel discussions, including:
- identifying the strengths and talents of other participants
 - acting as facilitator, recorder, leader, listener, or mediator

- evaluating the effectiveness of participant's performance (ELA-4-H6)

Information Resources

Standard 5:

36. Identify and use organizational features to locate relevant information for research projects using a variety of resources, including:
 - print resources (e.g., prefaces, appendices, annotations, citations, bibliographic references)
 - electronic texts (e.g., database keyword searches, search engines, e-mail addresses) (ELA-5-H1)
37. Locate, analyze, and synthesize information from a variety of grade-appropriate resources, including:
 - multiple printed texts (e.g., encyclopedias, atlases, library catalogs, specialized dictionaries, almanacs, technical encyclopedias, and periodicals)
 - electronic sources (e.g., Web sites, databases)
 - other media sources (e.g., community and government data, television and radio resources, and other audio and visual materials) (ELA-5-H2)
38. Analyze the usefulness and accuracy of sources by determining their validity (e.g., authority, accuracy, objectivity, publication date, and coverage) (ELA-5-H2)
39. Access information and conduct research using various grade-appropriate, data-gathering strategies/tools, including:
 - formulating clear research questions
 - gathering evidence from primary and secondary sources
 - using graphic organizers (e.g., outlining, charts, timelines, webs)
 - compiling and organizing information to support the central ideas, concepts, and themes of formal papers or presentations (ELA-5-H3)
40. Write a variety of research reports, which include the following:
 - research supporting the main ideas
 - facts, details, examples, and explanations from sources
 - graphics when appropriate
 - complete documentation (e.g., endnotes, parenthetical citations, works cited lists or bibliographies) (ELA-5-H3)
41. Use word processing and/or other technology (e.g., illustration, page-layout, Web-design programs) to draft, revise, and publish various works, including research reports documented with parenthetical citations and bibliographies or works cited lists (ELA-5-H4)
42. Give credit for borrowed information in grade-appropriate research reports following acceptable use policy, including:
 - using parenthetical documentation to integrate quotes and citations
 - preparing bibliographies and/or works cited list (ELA-5-H5)
43. Analyze information found in a variety of complex graphic organizers, including detailed maps, comparative charts, extended tables, graphs, diagrams, cutaways, overlays, and sidebars to determine usefulness for research (ELA-5-H6)