

## KEY LEARNINGS: EIGHTH GRADE

2009-2011

### BIBLE

**Into His Likeness:** Through the Trinity, Personal Relationship with Jesus and Practical Christianity

- Explain the role of inspiration in the formation of the Bible as it was written and preserved
- Describe the concept of the Trinity and identify the characteristic of each member
- Understand the importance of faith, commitment and a dynamic relationship with Jesus
- Know the fundamental Seventh-day Adventist beliefs
- Explain the importance of developing relationships with others based on Christian values
- Know how to apply Christian principles to one's daily life

### FINE ARTS

**Art** - Consult the *NAD Fine Arts Curriculum Guide* for suggested activities to meet these objectives.

- Select media, techniques and processes; analyze what makes them effective or not effective in communicating ideas; and reflect upon the effectiveness of their choices
- Employ organizational structures and analyze their effectiveness in the communication of ideas
- Use subjects, themes and symbols that demonstrate knowledge of contexts, values and aesthetics that communicate intended meaning in artwork
- Describe and place a variety of art objects in historical and cultural context
- Analyze, describe and demonstrate how factors of time and place influence visual characteristics that give meaning and value to a work of art
- Describe and compare a variety of individual responses to their own artworks and to artworks from various eras and cultures
- Describe ways in which the principles and subject matter of other disciplines taught in the school are interrelated with the visual arts

### Music

- Identify irregular meter patterns (5/4, 7/4)
- Learn all major key signatures
- Sing a more complex two-part song
- Recognize modulation
- Recognize symphonic form
- Describe how a computer can enhance music
- Listen to music of the Renaissance period
- Learn how to use the various indexes in the SDA hymnal

### LANGUAGE ARTS

#### Extended Reading and Writing

- Write poetry, letters, and plays
- Write essays within a specific time period
- Show how the writer thinks and feels about a topic in the final draft
- Develop a spool paper
- Use the writing process
- Write and create visual media from a Christ-centered perspective
- Write for various purposes and audiences
- Write using story elements
- Read to obtain information
- Write expository papers
- Write newspaper articles
- Write parables

#### Comprehending, Studying, and Evaluating Ideas

- Use projection, rate, articulation, and phrasing to communicate effectively
- Dramatize
- Write paragraphs with main ideas and details
- Evaluate by opinion-proof notes and persuasive paragraphs
- Give oral reports

- Develop presentations
- Develop a Venn diagram
- Determine meaning of unfamiliar words and phrases by using context clues or resource materials
- Create and experiment with visual media to communicate story elements and understanding of concepts
- Use graphic organizers
- Analyze story elements
- Synthesize information from multiple, reliable sources
- Use writing to persuade
- Develop two-column and opinion-proof notes
- Communicate effectively by listening, speaking, and non-verbal language
- Analyze and compare characters through maps, notes, charts, and diagrams
- Keep response journals

**Reference Skills**

- Use reference resources

**Word Study**

- Correctly spell grade-appropriate words
- Recognize the use of rhythm and rhyme
- Read, spell, and write synonyms, antonyms, homonyms, and homophones
- Use new vocabulary in concept maps, sentences, and discussions

**Sentence Skills**

- Recognize and use singular, plural, and possessive nouns
- Recognize and use predicate, collective, compound, concrete and abstract nouns
- Identify and use verbs
- Recognize and use verb tenses
- Recognize and use progressive verb tenses
- Identify and use adjectives
- Recognize the difference between adjectives and adverbs
- Diagram sentences with adjectives and adverbs
- Identify and use proper adjectives and predicate adjectives
- Identify and use comparative and superlative forms
- Write sentences, paragraphs, reports, and stories
- Identify and use pronouns

**MATH****Number and Operations**

- Use appropriate significant digits in calculations
- Extend understanding of number operations to irrational numbers
- Know the definition of real numbers, set notation and set operations

**Algebra**

- Add and subtract matrices
- Recognize slope and intercept relationships
- Use information to determine whether situations are functions
- Recognize minimum and maximum values
- Understand the properties of arithmetic and geometric sequences
- Develop an initial conceptual understanding of different uses of variables
- Identify functions as linear or nonlinear; contrast their properties from tables, graphs or equations

**Geometry**

- Find the surface area of various geometric shapes, e.g. pyramids and cones
- Find the volume of spheres using formula
- Define objects by geometric properties
- Recognize sine, cosine and tangent relationships with respect to the right triangle

**Measurement**

- Draw picture to assist in solving measurement problems
- Find the size of interior and exterior angles of convex polygons using formula and protractor
- Use appropriate significant digits in calculations
- Convert temperature between Fahrenheit and Celsius

**Data Analysis and Probability**

- Determine the number of combinations from a given set
- Make a box and whisker plot

**PHYSICAL EDUCATION****Spiritual Emphasis**

- Recognize that God's ideal for quality living includes a healthy lifestyle
- Incorporate into one's lifestyle the principles that promote health: nutrition, exercise, water, sunlight, temperance, air, rest, trust in God
- Avoid at-risk behaviors
- Apply Christian principles in recreation and sports
- Achieve a balance in work and leisure; balancing physical, mental, social and spiritual activities
- Recognize interaction of physical, mental and spiritual health with emotional and social well-being

**Movement and Motor Skills**

- Demonstrate competence in modified versions of a variety of movement forms
- Understand and apply more advanced movement and game strategies
- Identify the techniques of intermediate and advanced sport specific skills
- Identify the steps needed to achieve a high performance level in individual, dual and team sports
- Learn, apply and share advanced sport skill knowledge

**Lifestyle and Fitness**

- Establish personal physical activity goals
- Participate regularly in health-enhancing physical activities in and out of the physical education class
- Explore a variety of new physical activities for personal interest in and out of the physical education class
- Describe the relationships between a healthy lifestyle and "feeling good"
- Participate in a variety of health-related fitness activities in both school and non-school settings
- Assess physiological indicators of exercise during and after physical activity
- Learn and apply basic principles of training to improve physical fitness
- Begin to develop personal fitness goals independently
- Meet the health-related fitness standards as defined by available fitness tests, e.g. AAPHERD Physical Best, Fitnessgram, President's Challenge
- Enjoy participation in physical activity
- Recognize the social benefits of participation in physical activity
- Try new and challenging activities
- Recognize physical activity as a vehicle for self-expression

**Sportsmanship and Appropriate Behaviors**

- Apply God's help in resisting the influence of peer pressure
- Solve problems by analyzing causes and potential solutions
- Analyze potential consequences when confronted with true competition
- Work cooperatively with a group to achieve group goals in competitive as well as cooperative settings
- Recognize the role of sport, games and recreation
- Identify behaviors that are supportive and inclusive as well as behaviors that are exclusionary in physical activity settings
- Willingly join others of diverse cultures, religions, ethnicity, physical abilities and races during physical activity

**SCIENCE****Life: Plants**

- Compare types of plant kingdom divisions in their structure and function
- Describe photosynthesis, cell respiration, transportation, and transpiration
- Describe plant reproduction
- Describe types of plant tropisms and how plants adapt to their environment

**Health: Consumer Health, Community Health, Teen Health Risks, Diseases**

- Know how to locate and use community health resources that provide valid health information
- Identify community health organizations and agencies such as The American Cancer Society and the advocacy services they provide
- Identify major risks to teen health and how these risks may be reduced
- Describe how life style pathogens, family history, and other risk factors are related to the cause or prevention of disease
- Identify the structure and function of bacteria and viruses; explain how they transmit diseases
- Describe personal and community health care practices that result in prevention, detection and treatment of communicable diseases
- Explain how the immune system protects the body from disease

**Physical: Chemistry, Energy Forms, Work and Machines**

- Identify characteristics of a simple physical and chemical changes
- Describe the relationship between atoms, elements, molecules, ions, and isotopes
- Identify symbols of common elements and describe how they are organized on the periodic table
- Distinguish between compounds, mixtures, and types of mixtures
- Explain a chemical reaction and chemical bonds
- Identify the make-up of the three types of radiation
- Describe how nuclear fission and fusion are produced and their associated dangers and benefits
- Compare the properties of acids and bases
- Explain how energy can change from one form to another
- Describe the relationship between simple and compound machines
- Explain the operation of a simple mechanical device and its relation to work and power

**Earth: Creation, Evolution, Earth's Age, Fossil Record, Ecology**

- Distinguish between the basic ideas of and evidence for naturalistic evolution and special creation
- Identify several theories of origins and their basic assumptions
- Explain why "The Story of the Flood" is important to creation
- Describe Darwin's basic idea and assumptions of naturalistic evolution
- Describe the three views on the age of the earth
- Compare the naturalistic interpretation of fossils with that of creationist interpretation
- Analyze the impacts of human activity on the ecosystems of the earth
- Identify ways in which organisms react to changing environments
- Describe methods of conserving natural resources
- Identify factors that cause species to become endangered or extinct

**Scientific Inquiry: May be included in each unit of study**

- Make observations
- Ask questions or form hypotheses based on these observations
- Plan a simple investigation
- Collect data from the investigation
- Use the data collected from the investigation to explain the results
- Safely use and store tools and equipment

**Service and Career Options**

- Explore ways to use Physical, Life, Health and/or Earth Science to serve the community
- Identify careers in areas of science

**SOCIAL STUDIES****History**

**Eighth Grade will begin with a synopsis of U.S. History up to the Reconstruction after the Civil War, and pick up with the Reconstruction and the Industrial Revolution.**

Biblical and Seventh-day Adventist Perspectives:

- Identify how God has ultimate control and discuss the way He has led in the past
- Teach how the history of the Adventist church is threaded throughout modern U.S. history
- Trace the Millerite movement and the Great Disappointment
- Study Joseph Bates and the spread of Sabbath keeping
- Discuss the aftermath of the Great Disappointment

Reconstruction Era (1865-1877):

- Discuss attempts made to improve the lives of African Americans during the Reconstruction era
- Development of the Industrial United States (1865 to the early 1900's):

- Identify the major inventors during the time of the Industrial Revolution
- Describe the growth and development of the transportation industry
- Show how industrial growth caused people to migrate from rural to urban areas

Causes and Effects of the United States emerging as a World Power (1880-1917):

- Study the causes and effects of the Spanish-American War
- Discuss the open-door policy in China and how it impacted the United States
- Describe the development of the Panama Canal
- Study the Great White Fleet, and the U.S. as a World Police

The Progressive Era (1890-1920):

- Study the 17<sup>th</sup>, 18<sup>th</sup>, and 19<sup>th</sup> Amendments

Global Conflict Impacts the United States as a Nation (WWI 1914-1920):

- Explore the events and reasoning that brought the United States to WWI
- Trace the major events of WWI

Explore the new technology of war used during WWI

- Explain the Treaty of Versailles
- Describe the Great Migration of 1920

Prosperity and the Great Depression (1919-1930):

- Discuss the roaring 20's and prohibition
- Study the crash of the stock market and the resulting Great Depression

WWII and Recovery (1931-1945):

- Study the rise of dictators in Europe and Asia that led to WWII
- Discuss the bombing of Pearl Harbor
- Trace the major events of WWII
- Study how atomic weapons were used to end the war
- Explore how Soviet-American tensions shaped the cold war
- Discuss the United States attempt to contain communism both at home and abroad

Modern America (1950-Present):

- Explore the civil rights movement
- Discuss the age of flight
- Discuss the general political philosophies of the presidents from Nixon to the current administration

**Civics and Government**

Foundations of Government:

- Explain the relationship between rights and responsibilities of citizens
- Identify how a person becomes a citizen of the United States
- Evaluate the policies, practices, and consequences of Reconstruction, including the 13<sup>th</sup>, 14<sup>th</sup>, and 15<sup>th</sup> Amendments

Functions of Government:

- Describe the responsibilities of the United States government to its citizens

Roles of Citizens:

- Describe various types of elections and explain ways that citizens can participate in political parties, campaigns, and elections

**Geography**

Maps, Globes, and Graphics:

- Learn to read topographic maps and interpret their symbols
- Describe how physical features influence industrialization, urbanization, and population density in a nation

Places:

- Explain how geography impacts international relationships

Climate:

- Identify how climate affected different events in history

Natural Resources and Environment:

- Study the climatic changes brought about by the greenhouse effect, acid rain, air and water pollution, and depletion of the ozone layer
- Identify on maps the distribution of natural resources

**Economics**

Historic Issues:

- Explain how government programs have encouraged business expansion
- Discuss child labor, working conditions, and laissez-faire policies toward big business and examine the labor movement
- Evaluate how the characteristics of a market economy have affected the economic development of the United States

Commerce:

- Use charts, graphs, tables, and diagrams to compare growth in national product, imports, exports, population growth, etc.

**Individuals, Society, and Culture**

Individual:

- Understand the importance of developing a personal relationship with Christ
- Understand that God's plan for the individual is to engage in service to others

Society:

- Understand how the daily life of Americans has changed as a result of the Industrial Revolution
- Describe how the Great Depression affected American society
- Discuss the changing roles of women during WWI and WWII

Culture:

- Compare the adaptations of different immigrant groups in the United States/Bermuda/Canada
- Identify solutions to problems that arise when scientific advancements and social norms or values come into conflict

Religion:

- Show how religious leaders and the spiritual awakening affect reforms from the 19<sup>th</sup> century to the present

Mission/Outreach:

- Identify ways that Seventh-day Adventist organizations work to improve life in communities

**TECHNOLOGY**

- Integrate advanced word processing skills into daily assignments
- Continue to advance in keyboarding skills
- Troubleshoot basic malfunctions
- Know proper technology terms
- Understand the equipment to access, process, retrieve and communicate information
- Incorporate database and spreadsheet components into presentations
- Integrate advanced use of electronic resources into class assignments and presentations
- Investigate technology-related occupations
- Demonstrate a responsible, ethical use of technology
- Understand the legal issues for using/accessing software, music, etc.