

## KEY LEARNINGS: EIGHTH GRADE

2004-2005

### BIBLE

**Explore Origins of the Bible:** 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 over thousands of years
- Describe the concept of the Trinity and identify the characteristics 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

#### Viewing

- Locate and interpret examples of literary forms from visual media
- Define aspects of media production and distribution
- Determine the cause and effect of detailed answers to extend the understanding of visual media
- Use figurative language from visual media and answer specific questions to demonstrate understanding

#### Listening

- Analyze presentations by purpose
- Analyze propaganda and argumentation

#### Reading

- Develop study skills
- Use specific strategies to understand confusing parts of text; e.g. predict, clarify, question, and summarize
- Read for comprehension and application

#### Speaking

- Analyze the impact of media on consumers
- Participate in group discussions; refine and use cooperative group processes

**Visually Representing**

- Create visual media to support a presentation
- Model visual media techniques to show the impact on a particular audience

**Writing**

- Practice the writing process
- Begin using characteristics of good writing
- Continue enhancing the writing modes
- Narrow the topic to achieve an appropriate focus
- State main idea clearly in a cohesive one sentence thesis
- Write documents related to career development

**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 and 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 the 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****Physical: Chemistry**

- Explain the structure of matter and how different forms can be combined to create new substances
- Explain conservation of matter
- Describe how elements are organized on the periodic table
- Compare the properties of acids and bases
- Identify and compare physical and chemical change
- Identify methods used to separate mixtures into their component parts

**Life: Ecology (Natural Resources); Plant Processes**

- Explain how use of natural resources affects quality of life and the health of ecosystems
- Recognize that Earth’s materials are limited and explore strategies for addressing this problem
- Describe how water, carbon dioxide, oxygen, and nitrogen are recycled through the environment
- Describe the life processes of a plant including photosynthesis and reproduction

**Earth: Creation/Evolution**

- Distinguish between the basic ideas of and evidence for naturalistic evolution and special creation

**Health: Health Risks, Community Health**

- Describe personal and community health care practices that result in prevention, detection and treatment of communicable 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

**Scientific Inquiry**

- 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**

**OVERRIDING STATEMENTS:** Civics, geography and economics should be studied within the context of the history for each grade.

**INTEGRATION OF FAITH & LEARNING:** Although individual religious concepts are not explicitly stated, the idea of God's leading in the affairs of history and human relationships should be embedded in all of the social studies lessons.

**United States History:** 1861-Present, (Civil War and Reconstruction, Industrial Revolution, Social and Economic Reform, Global Conflicts, United States as World Power, Depression, Modern America, Current Events, U.S. Government-Constitution)

- Understand God's ultimate control and protection over human affairs
- Understand the basic precepts of the Constitution and the Bill of Rights
- Describe the relationships between key people/groups, events and cultures in U S history
- Explain the causes and effects of major events in American history
- Know causes and effects of key influences/events and place them on a time line
- Interpret events using time lines and narratives
- Use primary and secondary documents and artifacts to interpret historical events
- Understand the daily life and social history of people who lived in the early United States
- Recognize how forces from different spheres of life can cause or shape events
- Understand the role and work of the Adventist church in North America

**Civics**

- Understand the roles of the Christian citizen in government
- Understand the checks and balance function of the three branches of government
- Trace the development of the American political system and government based on the United States constitution and the Bill of Rights
- Identify citizen rights and how the constitution protects those rights
- Understand the purposes of government as stated in the constitution
- Explain the role of laws in the United States and the process through which they are made, applied and enforced
- Identify how actions of the United States government affect its own citizens as well as citizens of other countries

**Geography**

- Understand the nature, distribution and migration of human population on the earth's surface
- Understand how human actions modify the environment
- Understand the patterns of human settlement and their causes
- Identify the geographic role of the United States in international relationships
- Identify geographic regions and major places of the United States

**Economics**

- Identify the principles of Christian stewardship
- Understand the meaning of Gross National Product
- Understand the role of the United States and free enterprise in a global economy
- Understand the concept of prices and the interaction of supply and demand in a market economy
- Identify how changes in technology affect the economy

- Understand that every job opportunity is related to economics
- Recognize how the influence of the development of technology, immigration of peoples and changes in the world market effect career opportunities

**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.