

# KEY LEARNINGS: SIXTH GRADE

2003-2005

## BIBLE

### Exploring Jesus' Life: His Teaching, Death, Resurrection and the Early Church

- Identify the Bible as God's way of communicating who He is to humanity
- Demonstrate how to use aides for greater understanding when studying the Bible
- Understand that God is omnipotent, omniscient and infinite, yet is affected by one's response to Him
- Explain the relationship of God, heaven and the angels to Jesus and His life on earth
- Know what the great controversy is and how the plan of salvation relates to it
- Know the gospel story and why it is important to accept Jesus as Savior and model one's life after His
- Understand the importance of baptism and becoming a part of God's family
- Explain the mission of the church and the importance of using one's spiritual gifts to share the Gospel
- Understand the early development of the Christian church

## 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

- Recognize and write the C major scale
- Recognize the sound of a major scale
- Sight-read a simple song
- Identify and sing cadence
- Demonstrate and use first and second endings
- Identify canon form (liturgy)
- Know symbols and meanings for fermata and tenuto
- Compare the tone qualities of orchestral music from different cultures
- Identify and sing early Advent hymns

## LANGUAGE ARTS

### Viewing

- Scan for a specific purpose using visual media
- Define and interpret examples of literary forms from visual media

### Listening

- Adapt listening strategies to fit various situations
- Analyze presentations using established criteria
- Follow multi-step instructions

### Reading

- Adapt pace and reading techniques
- Understand specific devices an author uses to accomplish purpose
- Recognize and determine meaning of non-standard usage – images, slang, dialects
- Read for comprehension and application

**Speaking**

- Use effective speaking skills in varied situations
- Use appropriate verbal and non-verbal techniques for oral presentations

**Visually Representing**

- Produce visual media to support an opinion
- Generate visual media to compare and contrast information
- Design visual media to conduct an interview
- Demonstrate how media effects the coverage of events or issues

**Writing**

- Begin word processing in all subject areas
- Practice the writing process
- Use characteristics of good writing
- Write entertaining and complete stories
- Check for effective transitions between sentences to unify ideas
- Write clear, coherent, and focused essays and reports including footnotes and italics

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

- Understand the meaning and use of exponents
- Understand the associative property of addition and multiplication
- Extend understanding of whole number operations to fractions, decimals, percents and mixed numbers
- Understand and apply divisibility rules
- Round decimals to the nearest thousandths
- Understand the concepts of ratio, percent and percentage
- Compare and order improper fractions, mixed numbers and decimal fractions to thousandths
- Develop meaning for integers and use integers to represent and compare quantities
- Add, subtract, multiply and divide integers
- Give the prime factorization of a number
- Use factor trees to give the prime factorization of a number
- Convert fractions to decimals to percents and vice versa
- Convert fractions to terminating, repeating or rounded decimals
- Solve proportions with an unknown
- Understand and use mathematical vocabulary appropriately
- Write a remainder as a fraction or decimal
- Find the percent of a number
- Find the percent one number is of another and find the original number when the percent is given
- Use percents to determine sales tax, commission, discount and simple interest

**Algebra**

- Write, solve and graph linear equations
- Use two-step operations to solve linear equations
- Write and solve inequalities
- Infer and use a rule to determine a missing number
- Use appropriate mathematical vocabulary and properties
- Compare integers on a number line

**Geometry**

- Define and use appropriate geometrical vocabulary
- Use strategies to develop formulas for determining perimeter and area of triangles, rectangles and parallelograms and volume of rectangular prisms
- Find the area of parallelograms and triangles
- Find the circumference and area of circles
- Find the volume and surface area of prisms
- Classify triangles according to the angles and sides

- Understand parallel, intersecting, and perpendicular lines
- Measure an angle using a protractor
- Draw similar figures that model proportional relations
- Explore fractal patterns
- Do geometric construction, e.g. bisect a segment

**Measurement**

- Describe how perimeter, area and volume are affected when dimensions of a figure are changed
- Use strategies to develop formulas for finding circumference and area of circles, and area of sectors ( $\frac{1}{2}$  circle,  $\frac{2}{3}$  circle,  $\frac{1}{3}$  circle,  $\frac{1}{4}$  circle)
- Express solutions to the nearest unit
- Estimate length, area, volume, perimeter, circumference, area of a circle, various shapes and surfaces using everyday objects, e.g. string, arms, etc.
- Make conversions within the same measurement system while performing computations
- Use indirect measurement such as similar triangles to solve problems

**Data Analysis and Probability**

- Calculate the probability of independent and dependent events
- Construct a multiple line graph
- Make logical inferences from statistical data
- Calculate the odds
- Design an experiment to test a theoretical probability and explain how the results may vary
- Construct a scatter plot
- Make organized lists and tree diagrams

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

- Recognize that God's ideal for quality living includes a health 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 mature form for all basic manipulative, locomotor and non-locomotor skills
- Demonstrate increasing competence in more advanced specialized skills
- Adapt and combine skills to the demands of increasingly complex situations of selected movement forms
- Demonstrate beginning strategies for net and invasion games
- Apply previously learned knowledge, or use instruction to improve performance
- Apply information from a variety of internal and external sources to improve performance
- Identify and apply principles of practice and conditioning that enhance performance
- Recognize sport specific movement patterns that can be applied to games, e.g. similarity of the ready position in striking movement forms
- Understand terms that describe basic movement
- Use basic offensive and defensive strategies in non-complex settings

**Lifestyle and Fitness**

- Identify opportunities in the school and community for regular participation in physical activity
- Participate daily in some form of health-enhancing physical activity
- Discover personal interests and capabilities in regard to one's exercise behavior
- Identify the critical aspects of a healthy lifestyle
- Participate in moderate to vigorous physical activity in a variety of settings
- Monitor intensity of exercise

- Understand the reason for proper cool-down and warm-up techniques
- Begin to develop a strategy for the improvement of selected fitness components
- Work somewhat independently with minimal supervision in pursuit of personal fitness goals
- Meet the health-related fitness standards as defined by a standard physical fitness test, e.g. AAHPERD Physical Best, Fitnessgram, President's Challenge
- Recognize physical activity as a positive opportunity for social and group interaction
- Experience enjoyment from participation in physical activities
- Use physical activity to express feelings and relieve stress
- Seek personally challenging experiences in physically active opportunities

#### **Sportsmanship and Appropriate Behaviors**

- Participate in establishing rules, procedures and etiquette that are safe and effective for specific activity situations
- Work cooperatively and productively in a group to accomplish a set goal in cooperative and competitive activities
- Make conscious Christ-like decisions about applying rules, procedures and etiquette
- Utilize time effectively to complete assigned tasks
- Acknowledge differences in the behaviors of people of different gender, culture, ethnicity, development and disability by learning more about both similarities and differences
- Cooperate with disabled peers and those of different gender, race, ethnicity and religion
- Work cooperatively with both more and less skilled peers

### **SCIENCE**

#### **Physical:** Electricity, Magnetism

- Compare and describe static and current electricity
- Identify the difference between conductors and insulators.
- Differentiate between open and closed circuits and parallel and series circuits.
- Identify characteristics of magnets and what causes magnetism
- Describe the relationship between electricity and magnetism
- Identify uses of electromagnets

#### **Life:** Human Body Systems

- Describe and explain the structure and functions of the human body in terms of cells, tissues and organs
- Describe the functions of each major organ system in the human body
- Describe and explain the relationship and interaction of the organ systems in the human body

#### **Earth:** Geology

- Describe Earth's structure and features
- Explain how Earth changes/has changed over time e.g. erosion, weathering, earthquakes
- Explore and interpret evidences for the Genesis Flood and the Ice Age
- Describe the components and relationships of Earth's land forms and geological features
- Describe the processes by which rocks and soils are formed
- Classify rocks, minerals and soils based on their origin and their chemical and physical properties
- Identify how successive layers of sedimentary rock and the fossils contained within them can be used to confirm the age, history and changing life forms of the Earth

#### **Health:** Drug Effects, Decision Making, Nutrition

- Define drug and identify helpful and harmful drugs
- Explain the short- and long-term physical and emotional consequences of drug use
- Identify personal and community resources for drug abuse education and treatment
- Describe the steps in decision-making, how values develop and how these apply to healthy choices
- Explain healthy eating practices and design nutritional goals based on national dietary guidelines and individual needs
- Identify eating disorders and explain how they adversely affect health

**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 - NPUC**

**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.

**World History:** Creation – Middle Ages (Ancient Civilizations: Mesopotamia, India, Sub-Saharan Africa, Egypt, Greece, Rome, China; Americas: Incas, Mayas, Aztecs; Current Events)

- Recognize God's involvement in the world's history through the prophetic fulfillment of the rise and fall of nations
- Describe the relationships between people/groups, events and cultures in World History
- Understand the major characteristics and historical influence of ancient civilizations on world development – past and present, and be able to place them on a timeline
- Understand the democratic legacy of Greek ideas and government
- Describe the relationships between people/groups, events and cultures in World History
- Understand the democratic legacy of Greek ideas and government
- Understand the global role and work of the Adventist church in North America

**Civics**

- Compare and contrast the various forms of government in the world's history and identify their effect on the modern world
- Understand how politics helps people with different ideas to reach agreements
- Understand competing ideas about the purposes government should serve
- Know that the world is divided into nations that claim sovereignty over a defined territory and jurisdiction over everyone within it
- Know the rights and responsibilities of citizenship
- Know the importance of Christian citizenship and cultural diversity

**Geography**

- Interpret maps and charts of the world and organize information about people, places and environments
- Construct charts and maps to show information
- Identify the characteristics of ecosystems on the Earth's surface

**Economics**

- Understand the broader defining characteristics of the term stewardship
- Understand the concept of prices and the interaction of supply and demand in a market economy
- Know the impact of trade on the development of countries
- Identify and understand the changes in people's lives as a result of technology
- Understand economic systems

**TECHNOLOGY**

- Demonstrate proper use and care of computers and input/output devices
- Learn to troubleshoot basic malfunctions
- Practice keyboarding, using correct hand position and posture
- Use word processing, editing and file management skills
- Begin using presentation software
- Use a variety of electronic resources to enhance and access information
- Know proper technology terms
- Understand consumer issues regarding technology in every aspect of our lives
- Investigate technology-related occupations
- Use courtesy while sharing computer time
- Become aware of legal issues when using software
- Identify computer abuse including use of Internet