

Curriculum Guide For Fifth Grade

NORTHBROOK
DISTRICT



Teaching Learning Caring

Northbrook School District
2016-2017

Larry A. Hewitt, Ed.D. Superintendent of Schools
Kathy Horvath, Ed.D. Assistant Superintendent
Stephanie L. Smith, M.A.L.S. Director of Learning
Rosanne Dwyer, Ed.D. Director of Student Services
1475 Maple Avenue
Northbrook IL 60062
(847) 498-7900 (847) 498-7970 fax

Greenbriar School
1225 Greenbriar Lane
Northbrook IL 60062
(847) 498-7950
Principal: Ginny Hiltz

Meadowbrook School
1600 Walters Avenue
Northbrook IL 60062
(847) 498-7940
Principal: Pat Thome

Westmoor School
2500 Cherry Lane
Northbrook IL 60062
(847) 498-7960
Principal: Mary Sturgill

Northbrook Junior High School
1475 Maple Avenue
Northbrook IL 60062
(847) 498-7920
Principal: Scott Meek, Ed.D.

NORTHBROOK
DISTRICT 28

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Dear Parents,

We hope you find this Curriculum Guide helpful! Over the past few years, members of the Northbrook District 28 Curriculum Council have designed these guides for you. The guides will give you an overview of what your child will be learning at a grade level. Hopefully, this overview will assist you when you have conversations about classroom work with your child's teacher and as you reinforce learning concepts at home with your child(ren).

We welcome your feedback as you use these Parent Curriculum Guides throughout this year. Your feedback helps us improve our design. The Northbrook District 28 faculty, assistants, and administrators appreciate your working with us as we work on behalf of all children in this district. We thank you.

Best wishes for a successful school year.

Yours truly,

Northbrook School District 28 Faculty, Staff and Administrators

District 28 Curriculum Guides are available on the district website:

www.northbrook28.net

LITERACY

The skills and knowledge of the language arts are essential for student success in virtually every area of the curriculum. They are also essential for the development of clear expression and critical thinking. District 28 has adopted a comprehensive language arts philosophy which integrates language, reading, writing, speaking and listening.

By the end of Fifth Grade we expect students to be able to.....

READING

- make connections using schema.
- visualize and use sensory images to understand text.
- ask questions while reading.
- determine important ideas and themes in text.
- make inferences.
- synthesize.
- self - monitor while reading.
- recognize and use new vocabulary.
- identify the main idea, details, sequence of events. cause/effect relationships and authors use of imagery.
- identify genre of a selection, dramatic and poetic forms including dialect and language patterns.
- interpret maps, tables, graphs, and diagrams.



WRITING

- recognize and use parts of speech.
- recognize and use correct punctuation and capitalization.
- write complete, simple and compound sentences.
- group sentences into a sequentially and logically ordered paragraph using topic sentences, details and a conclusion.
- use and evaluate revision and proofreading techniques.
- use descriptive, narrative, expository and persuasive writing and correspondence.
- spell previously learned and grade level list words correctly.
- use technology and other sources to locate and organize information using note taking skills.
- plan, write, edit and revise documents generated from research.

SPEAKING AND LISTENING

- summarize, clarify, sequence and demonstrate listening behavior.
- demonstrate appropriate delivery, planning, sequencing and use of visual aids within the allotted time.
- deliver persuasive, expository, narrative and descriptive language.
- give directions, participate in and lead group discussions.



LIBRARY

The library curriculum focuses heavily on literature appreciation and cultivating a lifelong love of reading through exposure to a wide variety of reading materials and constant access to a school library with trained library personnel. In addition, students learn information literacy skills as outlined below.

By the end of Fifth Grade we expect students to be able to.....

- effectively use the library catalog system, Destiny.
- determine importance when researching information.
- understand and utilize the 5 A's of research:

Ask questions to guide/direct research

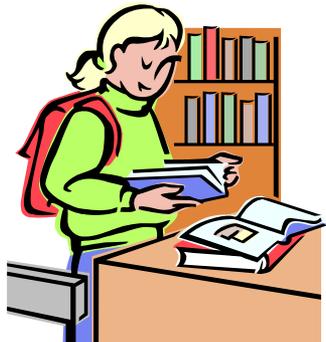
Access online resources such as World Book and Britannica

Analyze the information as it is gathered into note taking form

Apply Information to create a shared product

Assess the research process

- create accurate citations.
- use informational text features to locate information
- choose appropriate materials independently from wide variety of texts, including award winning titles.
- paraphrase information gathered from a resource.
- evaluate text and web based information (bias, accuracy, purpose, author's intent).
- use primary sources to find information.
- interpret information from graphic aids.



MATHEMATICS

The purpose of mathematics is to provide essential problem-solving tools applicable to a range of scientific disciplines, business practices, and everyday situations. The District 28 mathematics curriculum promotes opportunities for students to develop and apply basic mathematical skills and solve problems confidently using a wide variety of strategies. The program encourages students to become independent thinkers, share responsibility for their own learning, and appreciate the value of working together to solve difficult problems. Instruction fosters skillful reasoning in diverse situations and effective communication of both solutions and methods.

By the end of Fifth Grade we expect students to be able to...

NUMERICAL CONCEPTS AND OPERATIONS

- round whole numbers and decimals to make predictions and solve problems.
- read, write, compare, and order whole numbers and money amount to millions.
- demonstrate facility with addition and subtraction.
- understand concept of money and calculate money amounts.
- gain facility with multiplication and division.
- represent, read, write, compare, order, and simplify fractions.
- find equivalent fractions.
- know fractions and multiples.
- add and subtract fractions and mixed numbers with unlike denominators.
- round and rename mixed numbers.
- read, write, compare, and order decimals to the thousandth.
- add, subtract, and multiply decimals.
- use fractions, decimals, and percentages to represent equality.
- explore simple percentages as benchmarks.



ALGEBRA

- recognize and extend patterns of multiples, factors, prime numbers, and composite numbers.
- know the order of operations.
- use variables and formulas.

GEOMETRY

- identify and name the properties of polygons and circles.
- identify, construct, and measure acute, obtuse, right, and straight angles.
- find and plot coordinates on a four-quadrant graph.
- use coordinates and a scale to arrange objects on a flat surface.

MEASUREMENT

- estimate and measure length and volume using metric and standard units.
- find perimeter, area, and circumference of geometric figures.
- add and subtract time and determine elapsed time.
- calculate differences in temperature.

DATA ANALYSIS AND PROBABILITY

- collect, organize, graph, and analyze data.
- investigate, use, and compare mode, mean, and median.
- extrapolate and interpolate data.
- use coordinates and a scale to arrange objects on a flat surface.

8 MATHEMATICAL PRACTICES

- make sense of problems and persevere in solving them.
- reason abstractly and quantitatively.
- construct viable arguments and critique the reasoning of others.
- model with mathematics.
- use appropriate tools strategically.
- attend to precision.
- look for and make use of structure.
- look for and express regularity in repeated reasoning.

SCIENCE

The biological, physical and earth sciences are studied in kindergarten through fifth grade. The opportunity to use the scientific method of questioning, experimentation and drawing conclusions is provided throughout the grade levels. A science teacher/consultant provides student instruction on a regular basis in our well-equipped science labs.

By the end of Fifth Grade, we expect students to be able to.....

SCIENCE AND ENGINEERING PRACTICES

- develop and use models.
- plan and carry out investigations.
- use mathematics and computational thinking.
- engage in argument from evidence.
- analyze and interpret data.
- obtain, evaluate and communicate information.

ECOLOGY: MATTER AND ENERGY

- identify the Earth's four major systems (geosphere, atmosphere, biosphere, hydrosphere) and how they interact with one another.
- explain how a geographical region's climate affects the organisms that live there.
- graph and analyze the amounts and percentages of water on Earth.
- create a model that shows how energy from the sun provides animals with the materials they need to live (includes photosynthesis).
- create a flow chart to demonstrate how organisms are related in food webs.
- describe how homeostasis is maintained and interrupted in an ecosystem.
- explain how human interactions (positive and negative) have affected the world around us.
- gather information, evaluate and communicate the ways communities use science to protect the Earth.

CHEMISTRY: STRUCTURES AND PROPERTIES OF MATTER

- use a particle model to show how the three states of matter differ.
- develop a model to illustrate the basic components of an atom (neutrons, protons, and electrons) and their location relative to the nucleus.
- provide evidence (using measurements and graphs) to demonstrate that the weight of matter is conserved when heated, cooled, or mixed.
- describe what matter is (takes up space and can be weighed) and identify its properties.
- use the periodic table to gain information about various elements (metal or nonmetal, number of electrons/protons, and state of matter at room temperature).
- make observations and measurements to identify materials based on their properties.
- explain the differences between atom, molecule, elements, mixtures, and compounds.
- experiment to determine whether mixing two or more substances results in new substances.

SPACE: STARS AND THE SOLAR SYSTEM

- explore and describe how an object's mass is related to the force of gravity on that object.
- explain that gravity pulls towards the center of the Earth, not necessarily "down."
- gather evidence to support the argument that gravitational force pulls to the center of the Earth.
- explain how a star's distance affects how it appears in space.
- identify similarities and differences between the sun's appearance and the appearance of other stars in the sky.
- use a graph to explain why the length and direction of shadows are different throughout the day.
- use an illustration to communicate why the length of shadows are different throughout the year.
- communicate with a drawing why the sun is out longer in summer and less in winter.
- analyze how the visible constellations are affected by the Earth's orbital motion around the sun.

SOCIAL STUDIES

Social Studies for kindergarten through fifth grade focuses on home, school, community, Chicago, Illinois, regions of our nation, and the United States. Students learn map skills, place geography and cultural awareness.

By the end of Fifth Grade, we expect students to be able to.....

AMERICAN REVOLUTION

- demonstrate knowledge of major historical events before and during the American Revolution.
- understand the role of important people.

U.S. GOVERNMENT

- explain the evolution of the U.S. Government.
- explain the federal branches of government and the checks and balance system.



WESTWARD MOVEMENT

- identify and define events of expansion.
- place the events of expansion in appropriate times of history.
- identify reasons for the War of 1812 and its major battles.
- understand that inventions led to the growth of factories and mass production.
- describe new methods of transportation that made settlement easier.
- explain how the country's growth affected Native Americans.

CIVIL WAR

- compare and contrast Northern and Southern views and lifestyles.
- identify famous abolitionists and their contributions.
- describe major military events of the war.

CIVIL RIGHTS

- describe the impact of the Civil Rights and the Women's Rights movement on life today.
- identify significant figures of the Civil Rights movement and the Women's Rights movement.

SPANISH

All students in grades one through five will study Spanish for 30 minutes daily. Students focus on basic language acquisition and cultural awareness in a learning environment in which students are immersed in the target language.

By the end of Fifth Grade, we expect students to be able to...

LISTENING COMPREHENSION

- understand simple descriptions, stories, and conversations directly related to the curriculum.
- follow simple directions given in the target language.



SPEAKING

- mimic correct Spanish pronunciations.
- speak about known topics in familiar conversations, as appropriate to grade level.
- use the target language in spontaneous and meaningful ways.

READING

- recognize the alphabet, sound/letter correspondence and target vocabulary words in Spanish.
- read simple descriptions, stories and conversations directly related to the curriculum, as appropriate to grade level.

WRITING

- write simple guided sentences and phrases directly related to the curriculum, as appropriate to grade level.

CULTURE

- recognize common Hispanic holiday traditions and celebrations.
- recognize where Spanish is spoken in the US and worldwide.
- participate in children's songs and games from Spanish-speaking cultures.



THEMATIC UNITS

- provide students with real-life connections and applications to their own lives as well as the Spanish-speaking world.

SOCIAL EMOTIONAL LEARNING

Effective SEL programs begin at an early age and continue through high school. They work to develop students' key SEL skills. These include five core social and emotional competencies:

- **SELF-AWARENESS:** Knowing what we are feeling in the moment; having a realistic assessment of our own abilities and a well-grounded sense of self-confidence.
- **SOCIAL AWARENESS:** Sensing what others are feeling; being able to take their perspective; appreciating and interacting positively with diverse groups.
- **SELF-MANAGEMENT:** Handling our emotions so they facilitate rather than interfere with the task at hand; being conscientious and delaying gratification to pursue goals; persevering in the face of setbacks and frustrations.
- **RELATIONSHIP SKILLS:** Handling emotions in relationships effectively; establishing and maintaining healthy and rewarding relationships based on cooperation, resistance to inappropriate social pressure, negotiating solutions to conflict, and seeking help when needed.
- **RESPONSIBLE DECISION MAKING:** Accurately assessing risks, making decisions based on a consideration of all relevant factors and the likely consequences of alternative courses of actions, respecting others, and taking personal responsibility for one's decisions.
(Excerpt from Safe & Sound, CASEL)

By the end of Fifth Grade, we expect students to learn and apply the following skills:

Review and practice the 9 step Problem Solving Model

Accepting consequences/responsibility

Get Calm/ Keep Calm.....Relaxation

Dealing with disappointment

Standing up to bullying

Goal setting

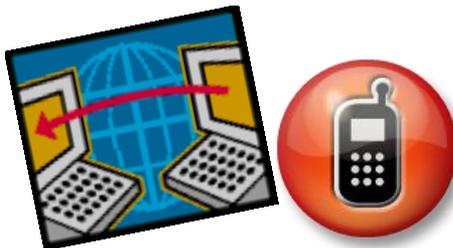
Peer Pressure

INTERNET SAFETY

The District 28 Internet safety curriculum teaches students not only how to navigate the Internet safely but also how to be good citizens while online. This curriculum meets the Illinois General Assembly requirement that schools provide Internet safety instruction for students in grades three through eight.

By the end of Fifth Grade, we expect students to be able to demonstrate the internet safety skills they have previously learned and to

- understand that one cannot infer tone through Internet communication.
- understand the meanings of Terms of Agreements for Social Networking sites, Websites, and online accounts.
- understand that email can be forwarded to anyone and saved.
- understand email and chat etiquette.
- discuss and apply criteria for rating informational websites, compare results and infer that all websites are not equally good sources of research information.
- understand cyber-bullying includes social networking sites, text-messaging, and comments on public sites.
- understand group bullying includes carrying on negative comment threads and how to stop the practice.



The entire Internet Safety Curriculum is available online at the District 28 website:

www.northbrook28.net

ART

By the end of Fifth Grade we expect students to be able to....

DRAWING

- understand the concepts of realism and abstraction and be able to draw in these modes.
- draw different subjects in an interpretive style.

PAINTING

- identify and use different color theories in a painting.
- use their own ideas within a theme.
- understand that painting is a means of self-expression.

DESIGN

- expand use of art concepts including values, positive-negative space, and patterning.
- develop a theme to visually express an idea.

SCULPTURE

- continue to use various methods (ie; coil and slab) to build and attach clay.
- create a relief or in-the-round sculpture from paper mache.
- use advanced techniques to create a sculpture using fabric, cardboard etc.

GRAPHICS

- introduce multicultural printing techniques (e.g., adrinkra, and gytaku).
- use carving techniques to create a print.

ART APPRECIATION

- compare and contrast different artworks.
- be able to identify many different art forms (e.g., stained glass, mosaics).
- distinguish between form and function.

MUSIC

The purpose of music education in District 28 is to cultivate thoughtful members of society that are tuneful, beatful, and artful. This is achieved by incorporating folk songs, multicultural music, and historical musical selections into the curriculum. A balanced mix of learning experiences utilizing creative movement, instruments, and singing are extended and further developed each year.

By the end of Fifth Grade, we expect students to be able to demonstrate....

MELODY/PITCH

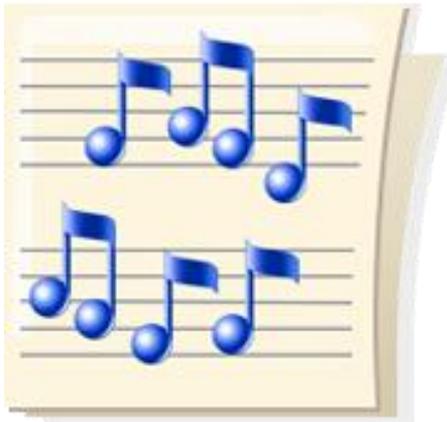
- match pitch in major and minor scales, chord progressions

RHYTHM

- eighth and sixteenth note combinations, duple and triple meter

EXPRESSION/TEXTURE TIMBRE

- choreography, articulations (fermata), character interpretation



PHYSICAL EDUCATION

Northbrook School District 28 recognizes daily, elementary physical education as an integral part of every student's educational program. Growth in social, emotional, cognitive and motor skills is fostered through physical activity. In addition to the development of physical skills, we emphasize good sportsmanship and encourage healthful living. Cooperation and respect for each other helps provide a safe environment, both physically and emotionally.

Healthful, active life-styles are taught through developmentally appropriate physical activity. The goal of elementary physical education is to achieve and maintain a healthy level of physical fitness that begins at the earliest possible age and progresses sequentially.

In grades 4-5, we expect students to gain knowledge and skills in the following four areas.....

MOVEMENT SKILLS

- combination of locomotor movements (dance movements, tumbling)
- combinations of non-locomotor movements (push-ups, curl ups, etc.)
- combinations of locomotor and non-locomotor movements (running and throwing, running and kicking, running and bending, etc.)
- combinations of manipulative movements (lead up activities and sport variations)

PHYSICAL FITNESS

- components of physical fitness (cardiovascular endurance, flexibility, muscular endurance, agility and muscular strength)
- heart rate (resting heart rate, maximum heart rate, target heart rate, self monitor, etc.)
- goal (setting, self assessment, logging, etc.)
- body awareness (nutrition and long term effects of physical activity on the body)

TEAM BUILDING

- individual responsibility during group activities (work independently on task until completed, following rules, settling disagreements, etc.)
- responsibilities as a team member (work cooperatively with a partner or small group to reach a shared goal during physical activity.)

TEAM SPORTS

- strategies (offense, defense)
- general rules (sport specific game rules)
- sportsmanship (making good choices, appropriate communication skills, winning and losing)



Notes:

Notes:

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WE WELCOME YOUR COMMENTS