

# CURRICULUM GOALS FOR GRADE 4 GENERAL STUDIES

The fourth grade continues the transition from acquisition of basic skills, which forms the core of early education, to the independent application of these skills in order to acquire new learning. Students are increasingly expected to meet educational opportunities with greater autonomy under the guidance and support of their teachers.

## Math

*Students should be able to:*

- ✓ Understand, select and apply various methods of performing numerical operations, including addition and subtraction with multiple regrouping; multiplication of 2-3 digits by 2 digits and division with 2 and 3 digit quotients with remainders.
- ✓ Create number stories, use concrete manipulatives to represent, and apply strategies to recall basic multiplication and division facts to 144.
- ✓ Understand the interrelationships between the four arithmetic operations.
- ✓ Represent, build models, compare and identify place of digits in numbers to 1,000,000.
- ✓ Connect mathematics to other learning by understanding the interrelationships of mathematical ideas.
- ✓ Understand the role that mathematics plays in real life and other disciplines.
- ✓ Select an appropriate strategy for problem solving including: mental math, estimation, guess and check, logical reasoning, detecting a pattern, draw a picture, choose an operation, organizing data, etc.
- ✓ Use models to represent common fractions and decimals.
- ✓ Compute sums and differences of common fractions using a variety of models.
- ✓ Communicate mathematically by forming written or oral explanations for solutions. Use mathematics vocabulary when solving problems.
- ✓ Understand and use algebraic vocabulary.
- ✓ Understand and apply the properties of operations: commutative, distributive, identity.
- ✓ Classify shapes, understand lines and angles and measurement of geometric areas.
- ✓ Organize, represent and interpret data using a variety of graphs and charts.
- ✓ Develop an understanding of algebraic concepts by detecting patterns, completing function tables, and solving simple algebraic equations.
- ✓ Read and interpret Fahrenheit and negative numbers.
- ✓ Calculate length and perimeter in customary and metric units.

## Integrated Language Arts

*The student should be able to:*

- ✓ Read grade level material (prose, poetry, nonfiction) with understanding.
- ✓ Use active reading strategies when engaged in guided reading: make predictions, form inferences, use prior knowledge, draw conclusions, detect sequence, recall details use contextual clues etc;
- ✓ Read with fluency and expression.
- ✓ Identify key elements in literature: characters, setting, plot, conflict/problem and resolution.
- ✓ Read class novels in order to analyze a complete fictional work.
- ✓ Read for a variety of purposes.
- ✓ Complete periodic book reports that require familiarity with various genres of literature.
- ✓ Use a variety of strategies for decoding including: phonetic principles, structural analysis and context.
- ✓ Employ active listening for purposes of enjoyment, gaining information and following directions.
- ✓ Apply the steps of the writing process through pre-writing, revision, editing and publishing.
- ✓ Communicate ideas and information in writing with clarity using conventional grammar and spelling.
- ✓ Engage in opportunities for public speaking to convey ideas, persuade, inform or entertain.
- ✓ Read various forms of free verse and formal types of poetry with understanding.

- ✓ Create original formal poetry or free verse.
- ✓ Participate actively in classroom discussions using appropriate grammar and grade appropriate vocabulary.
- ✓ Master the skill of letter-writing using conventional form.
- ✓ Infer and expand oral and written word meaning by using context, prefixes/suffixes, roots.

### **Social Studies**

*Students should be expected to:*

- ✓ To interpret maps, diagrams and charts.
- ✓ Understand the history and culture of New Jersey, including the establishment of the state and the role New Jersey has played in key events in American History.
- ✓ Understand the political structure of the government of New Jersey.
- ✓ Gain an appreciation of the history, culture and contributions of the Native Americans of New Jersey.
- ✓ Evaluate the effects of Native American history and culture upon present society.
- ✓ Apply research skills in order to obtain information about topics related to the fourth grade curriculum. This will include selection of appropriate on-line or library resources, using notetaking, summarizing and outlining skills to organize information.
- ✓ Analyze and discuss current local, state, national and world events.
- ✓ Identify the ways in which the agriculture and industry of New Jersey have become essential to its economy.
- ✓ Explore the concept of democracy and individual rights.

### **Science**

*The fourth grader should:*

- ✓ Master the steps of the "scientific method".
- ✓ Expand scientific vocabulary.
- ✓ Recognize the relationship between science and math.
- ✓ Investigate electricity and magnetism and how they affect matter.
- ✓ Define laws governing motion.
- ✓ Describe and classify plants.
- ✓ Identify rocks and explain their formation.
- ✓ Identify components of a well-balanced diet.
- ✓ Identify and evaluate parts of digestive and circulatory systems.
- ✓ Identify how sound and light travel.
- ✓ Identify all properties of matter.

### **Computer Skills**

*Students should:*

- ✓ Understand the difference between spell checking and proofreading, and be able to accurately use both techniques on the computer.
- ✓ Retrieve a saved document from the computer network, and understand the difference between a local and network drive.
- ✓ Understand more advanced menu functions on the EDIT menu, including copying and pasting, search and replace, etc.
- ✓ Change font characteristics.
- ✓ Continue development of Hebrew writing skills.

### **Library Skills**

*Students in fourth grade should:*

- ✓ Consult with the librarian when selecting references and conducting research.
- ✓ Identify, select, locate and utilize magazines.
- ✓ Continue to develop an appreciation of Jewish literature.
- ✓ Understand that reference sources may provide different and sometimes conflicting data on the same topic.
- ✓ Access information to satisfy an assignment.
- ✓ Apply with guidance the information gathered to a simple research project.
- ✓ Use library classification systems (print and electronic) to locate information.

## **Art**

*Fourth graders should create/study:*

- ✓ The techniques of Vincent van Gogh and Henri Rousseau.
- ✓ Native American art, including pottery, vests, papier mache masks, Kachina dolls.
- ✓ Projects in different media appropriate to the Jewish holidays.
- ✓ Waterscapes, symmetry, stained glass, bodies in motion.

## **Physical Education**

*The students should participate in activities that emphasize:*

- ✓ Team sports skills.
- ✓ Physical fitness through the use of "fitnessgram".
- ✓ Sportsmanship/proper midot.

## **Study Skills**

*Fourth grade students should be expected to:*

- ✓ Maintain a daily planner listing nightly and long term assignments.
- ✓ Independently maintain and organize in class books and materials.
- ✓ Use resources in class for independent work responsibly.
- ✓ Employ time management techniques; staying on task till work is completed.
- ✓ Transport appropriate materials to and from school, including supplies, homework, other assignments.
- ✓ Use proofreading and self-monitoring skills independently.
- ✓ Transition between subjects and activities in class smoothly.
- ✓ Begin to take simple notes in class during teacher directed lessons.
- ✓ Use a variety of graphic organizers such as flow charts and webs to record information.
- ✓ Learn to create outlines with teacher direction.
- ✓ Paraphrase information from reference sources.
- ✓ Work collaboratively in cooperative learning groups.

## **Life Skills**

*Students should:*

- ✓ Use healthy eating practices.
- ✓ Describe characteristics of safe and unsafe situations.
- ✓ Distinguish among conflict, violence, bullying and the factors that contribute to each.
- ✓ Practice effective listening and communication skills.
- ✓ Recognize the influence of parents, peers and the media in their lives.
- ✓ Practice behaviors that demonstrate core ethical values.
- ✓ Acknowledge and respect individual differences.
- ✓ Recognize the impact of smoking on individuals and others.
- ✓ Recognize the influence of peers, media and adults on our behavior.