
*By the end of Third Grade, your child should be able to do the following in **SOCIAL STUDIES**:*

History:

- ▶ Demonstrate an understanding of the cultural differences within a community.
- ▶ Identify examples of learned cultural experiences, including habits, customs, and traditions.
- ▶ Understand that people of similar and different cultural groups often live together.
- ▶ Recognize that communities change over time.
- ▶ Research historical events through a variety of resources.
- ▶ Show the passage of time using a time line.

Geography:

- ▶ Identify the continents, oceans and equator, using a globe or map.
- ▶ Explain how communities around the world differ in physical features.
- ▶ Explain how climate and geography may affect lifestyles in world communities.

Economics:

- ▶ Explain how people's basic needs are met in different ways.
- ▶ Identify goods and services and their importance in a community.
- ▶ Recognize that people in world communities depend upon others to meet their needs and wants.
- ▶ Show that people around the world develop and make use of natural resources.

Citizenship/Government:

- ▶ Name school rules and what he/she can do to be a better citizen.
- ▶ Tell how people plan, organize, and make decisions for the good of their community.
- ▶ Recognize that governments are formed to develop laws and protect its citizens.
- ▶ Explain how people in world communities celebrate various holidays and festivals.

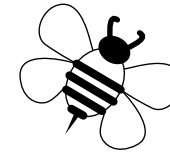
All learning is cumulative.

What is taught the previous year is strengthened by what is taught this year.

*By the end of Third Grade, your child should be able to do the following in **SCIENCE**:*

Plant Growth and Development:

- ▶ Identify the life cycle of a plant from seed to the production of a seed.
- ▶ State the needs of plants (light, water, nutrients, space, heat).
- ▶ Recognize that flowering plants must be pollinated by bees in order to produce seeds.
- ▶ Recognize the structure and relationship between the plant and the bee.
- ▶ Recognize that one seed produces one plant and one plant produces many seeds.



Rocks and Minerals:

- ▶ Know that rocks are made of minerals.
- ▶ Name some properties of rocks and minerals (eg. texture, light, magnetism).
- ▶ Identify the three ways rocks are formed.
- ▶ Recognize that a mineral is made up of one substance.
- ▶ Name everyday uses of rocks and minerals.

Sound:

- ▶ Demonstrate that sound is produced by vibration.
- ▶ Identify and change pitch and volume.
- ▶ Recognize the workings of the ear in relation to sound.
- ▶ Determine that sound is produced by vocal cords.
- ▶ Recognize the importance of ear safety in everyday life.

Simple Machines:

- ▶ Recognize that mechanical energy may cause change in motion through the application of force and through the use of simple machines such as pulleys, levers and inclined planes.

Solar System:

- ▶ Recognize that rotation or spinning of the earth on its axis causes day and night.
- ▶ Recognize that the earth revolves around the sun.
- ▶ Observe the position of the sun at different times of day to understand the rotation of the earth.
- ▶ Model the rotation/revolution of the earth around the sun.

A student with an Individual Education Plan and/or 504 Plan will be provided the necessary accommodations as outlined in his or her specific plan.

Academic Expectations

What You Can Expect During Your Child's Year in *Third Grade*

English Language Arts, Social Studies, Mathematics and Science

While all children learn in different ways, you expect your child to make progress in school every year.

This brochure defines what your child should be able to do in the areas of English language arts, mathematics, social studies and science by the end of this year.



At Scotia-Glenville, learning is often integrated between subject areas. English Language Arts reading and writing skills, for example, are also stressed in social studies, mathematics and science.

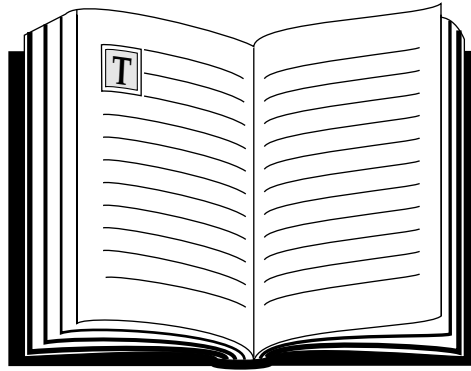
Please review this list of grade-level expectations and, if you have any questions, please feel free to contact your child's teacher or principal. We value the partnership that can exist between school and home.

Our district is committed to an education for your child that is consistent across our elementary schools and which will add depth and richness to your child's experiences.

By the end of Third Grade, your child should be able to do the following in **ENGLISH LANGUAGE ARTS**:

Reading:

- ▶ Read and understand a variety of grade level materials including fiction, non-fiction and poetry.
- ▶ Read for a variety of purposes (enjoyment, information and research).
- ▶ Use reference materials (textbooks, magazines, the Internet and reference books).
- ▶ Recognize story elements.
- ▶ Demonstrate fluency and expression in oral reading.



Writing:

- ▶ Write complete sentences using capitalization, punctuation and appropriate grammar.
- ▶ Use learned spelling words correctly in written work.
- ▶ Participate in the writing process by using graphic organizers, writing rough drafts, revising, editing and producing a final copy.
- ▶ Write to demonstrate reading comprehension.
- ▶ Write a paragraph that includes a topic sentence, main idea, supporting details and a conclusion.
- ▶ Write for a variety of purposes (journals, friendly letters and research reports).

Listening:

- ▶ Listen to and follow multi-step directions.
- ▶ Listen for information and meaning.
- ▶ Respond appropriately to what is heard.
- ▶ Show respect when others are speaking.

Speaking:

- ▶ Express opinions and judgments clearly and appropriately.
- ▶ Ask relevant questions in response to discussion.
- ▶ Respond respectfully and contribute ideas to class discussions.
- ▶ Discuss a reading passage for critical analysis and evaluation.

By the end of Third Grade, your child should be able to do the following in **MATHEMATICS**:

Number Sense and Operations:

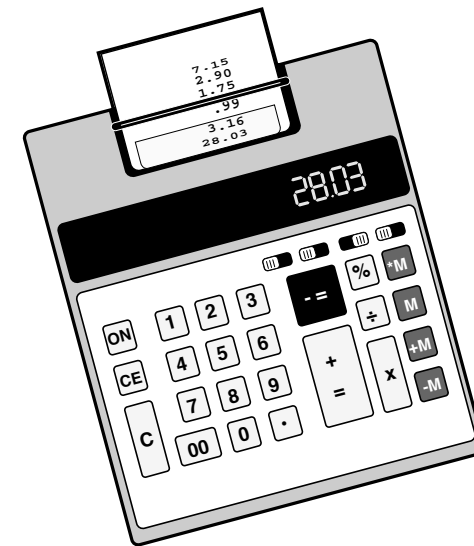
- ▶ Read, write, compare and order numbers to 1,000.
- ▶ Skip count by 25's, 50's, 100's to 1,000.
- ▶ Use numbers in the ones, tens, hundreds and thousands place.
- ▶ Use strategies to add and subtract three-digit numbers with and without regrouping.
- ▶ Use automatic recall for single-digit multiplication and division facts.
- ▶ Use and understand multiplication facts up to and including 12x12.
- ▶ Demonstrate understanding of single-digit division facts.
- ▶ Name, represent, compare and order unit fractions (eg. $1/4$, $1/3$, $1/2$).
- ▶ Explore equivalent fractions (eg. $1/2=2/4$).
- ▶ Identify odd and even numbers.
- ▶ Explain word problem-solving strategies verbally and in writing.
- ▶ Recognize when to estimate (round) numbers.
- ▶ Check answers by using estimation.

Algebra:

- ▶ Use the symbols $>$, $<$ and $=$ to compare numbers and fractions.
- ▶ Describe and extend number and geometric patterns.

Geometry:

- ▶ Define and use correct terminology for shapes (circle, triangle, square, rectangle, rhombus, trapezoid and hexagon).



- ▶ Identify congruent and similar figures.
- ▶ Name, describe, compare and sort three-dimensional shapes.
- ▶ Identify the faces on a three-dimensional shape (cube) as two-dimensional shapes (square).
- ▶ Identify and construct lines of symmetry.

Measurement:

- ▶ Measure and compare length, weight and capacity using U.S. standard units.
- ▶ Count and represent combined coins and dollars, using currency symbols (\$0.00).
- ▶ Relate unit fractions to the face of a clock (whole = 60 min., $1/2 = 30$ min., $1/4 = 15$ min.).
- ▶ Tell time to the minute.
- ▶ Estimate measurements.

Statistics and Probability:

- ▶ Collect and record data.
- ▶ Read, interpret, construct, draw, make predictions and state relationships between pictographs and bar graphs.



All learning is cumulative.

What is taught the previous year is strengthened by what is taught this year.

A student with an Individual Education Plan and/or 504 Plan will be provided the necessary accommodations as outlined in his or her specific plan.

By the end of Fourth Grade, your child should be able to do the following in **SOCIAL STUDIES**:

History:

- Describe how Native Americans used environmental resources to meet their basic needs.
- State contributions made by Native Americans.
- Analyze the Iroquois Confederacy and its importance.
- Name the major explorers of N.Y. State.
- Identify New York State's role in the Revolutionary War.
- Compare and contrast Dutch and English influences in colonial N.Y. State.
- Describe the social changes in women's rights, slavery and child labor.
- Describe facts about local history.

Geography:

- Find a specific location using latitude and longitude.
- Read and interpret different types of maps.
- Identify and locate community, state and national boundaries, continents and oceans.
- Name the important natural resources of N.Y. State.



Economics:

- Recognize how improvements in transportation, especially the Erie Canal, impacted N.Y. State's growth.
- Describe the economic impact of immigrants and their contributions to N.Y. State.
- Explain the impact of the Industrial Revolution.

Citizenship/Government:

- Examine the organization of our local, state and national governments.
- Discuss the basic principles of democracy.
- Name the rights and responsibilities of citizenship.
- Discuss events related to local, national and world news.

All learning is cumulative.

What is taught the previous year is strengthened by what is taught this year.

By the end of Fourth Grade, your child should be able to do the following in **SCIENCE**:

Land and Water:

- Use stream tables to investigate the interactions between water and land.
- Analyze the materials that make up land and describe these materials on the basis of their properties.
- Compare the land changes created by water flowing over and through soil in a stream table and relate these results to natural processes.
- Communicate the results of an investigation through record sheets, oral and written observations, and drawings.
- Investigate the effects of slope, flow and natural land formations on erosion and deposition.
- Design and build models of dams to test their effects on land and water interactions.
- Identify evidence within a model to support predictions, observations and conclusions.

Electrical Circuits:

- Identify and use symbols to represent the different parts of an electric circuit.
- Using an electrical diagram, construct and wire a simple electrical circuit, circuit tester and a switch.
- Observe, describe, record and predict results of electricity experiments.
- Use trouble-shooting to identify incomplete circuits.
- Design and build a flashlight.
- Recognize the electrical design used in wiring a house.

Animal Studies:

- Observe and describe characteristics and behaviors of the dwarf African frog, millipede and fiddler crab.
- Recognize the needs of the animals.
- Maintain a suitable habitat to meet the animals' basic needs, including their comfort and safety.
- Predict and observe the animals' reaction to changes in their environment.
- Compare and contrast the animals studied to humans.

Moon Phases:

- Use a model to demonstrate the differences between rotation and revolution.
- Identify the names and shapes of the moon's phases.

Academic Expectations

What You Can Expect During Your Child's Year in **Fourth Grade**

English Language Arts, Social Studies, Mathematics and Science

While all children learn in different ways, you expect your child to make progress in school every year.

This brochure defines what your child should be able to do in the areas of English language arts, mathematics, social studies and science by the end of this year.

At Scotia-Glenville, learning is often integrated between subject areas. English Language Arts reading and writing skills, for example, are also stressed in social studies, mathematics and science.

Please review this list of grade-level expectations and, if you have any questions, please feel free to contact your child's teacher or principal. We value the partnership that can exist between school and home.

Our district is committed to an education for your child that is consistent across our elementary schools and which will add depth and richness to your child's experiences.



*By the end of Fourth Grade, your child should be able to do the following in **ENGLISH LANGUAGE ARTS**:*

Reading:

- ▶ Read and understand independently grade level materials including fiction and non-fiction, plays, poetry and articles.
- ▶ Use reference materials (dictionary, atlas, encyclopedia, thesaurus and electronic media).
- ▶ Read for judgment, interpretation, and evaluation (eg. graphs, diagrams, advertisements).
- ▶ Demonstrate fluency and expression in oral reading.

Writing:

- ▶ Use proper mechanics of writing (capitalization, punctuation, spelling and grammar).
- ▶ Use the writing process.
- ▶ Write well-constructed paragraphs to demonstrate reading comprehension.
- ▶ Use graphic organizers for planning and note taking.
- ▶ Use reference tools (dictionary, atlas, encyclopedia, thesaurus, and electronic media).
- ▶ Write for a variety of purposes (eg. poetry, friendly letter, persuasive paragraph, and research report).

Listening:

- ▶ Listen to and follow multi-step directions.
- ▶ Listen for information and meaning.
- ▶ Respond appropriately to what is heard.
- ▶ Show respect when others are speaking.
- ▶ Listen for important information in articles and stories.
- ▶ Listen to oral presentations.

Speaking:

- ▶ Express ideas clearly and effectively.
- ▶ Ask relevant questions in response to discussion.
- ▶ Respond respectfully and contribute ideas to class discussions.
- ▶ Use language appropriately according to purpose, audience, and occasion.
- ▶ Make oral presentations.

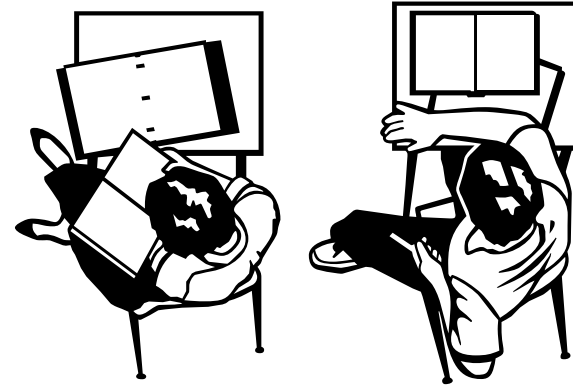
All learning is cumulative.

What is taught the previous year is strengthened by what is taught this year.

*By the end of Fourth Grade, your child should be able to do the following in **MATHEMATICS**:*

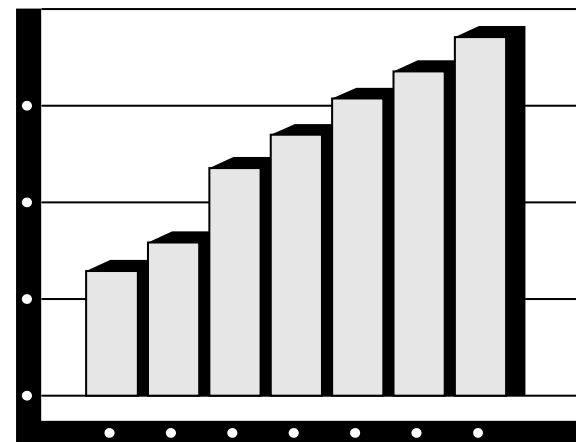
Number Sense and Operations:

- ▶ Read, write, compare, order and round whole numbers to 100,000.
- ▶ Read, write, compare and order decimals to the hundredths.
- ▶ Use numbers up to the ten-thousands place value.
- ▶ Use strategies to add and subtract numbers up to 5 digits.
- ▶ Add and subtract decimals to the hundredths place.
- ▶ Add and subtract fractions with common denominators.
- ▶ Recognize and generate equivalent fractions.
- ▶ Express decimals as an equivalent form of fractions.
- ▶ Multiply 2 digit by 1 or 2 digit numbers.
- ▶ Divide 2 digit by 1 digit numbers with and without remainders.
- ▶ Explain word problem-solving strategies verbally and in writing.
- ▶ Use estimation to check if an answer is reasonable.



Algebra:

- ▶ Analyze a pattern or number sentence and state the rule.
- ▶ Describe, extend and make generalizations about number and geometric patterns.



Geometry:

- ▶ Identify and name shapes (triangle, quadrilateral, pentagon, hexagon and octagon) and lines (intersecting, perpendicular and parallel).
- ▶ Calculate perimeter and area.

- ▶ Classify types of angles (acute, obtuse, right and straight).
- ▶ Define/name parts (vertices, faces and edges) of 3-dimensional shapes.

Measurement:

- ▶ Measure weight, length, capacity and mass using metric and U.S. standard units.
- ▶ Use equivalent U.S. standard units of length.
- ▶ Make change using coins and dollars.
- ▶ Calculate elapsed time in hours, days and weeks.

Statistics and Probability:

- ▶ Read, construct and interpret tables, line graphs, bar graphs and pictographs.
- ▶ Collect data, record information, make predictions and interpretations based on data.
- ▶ Compare pictographs and bar graphs.

All learning is cumulative.

What is taught the previous year is strengthened by what is taught this year.



A student with an Individual Education Plan and/or 504 Plan will be provided the necessary accommodations as outlined in his or her specific plan.

*By the end of Fifth Grade, your child should be able to do the following in **SOCIAL STUDIES**:*

History:

- ▶ Compare and contrast historical, regional and cultural features among Native American groups.
- ▶ Describe the causes / major events of the Revolutionary War.
- ▶ Compare and contrast life in the northern, middle and southern colonies.
- ▶ Describe the causes and effects of the Civil War.
- ▶ Discuss the past and current impact of immigration.
- ▶ Explain western expansion in the United States.

Geography:

- ▶ Identify the country of origin of European explorers and areas of settlement in America.
- ▶ Use maps, photographs and computer models to gather and analyze information.
- ▶ Explain how geological processes shape physical environments.
- ▶ Compare and contrast the U.S., Canada and Latin America with respect to size, population and natural resources.

Economics:

- ▶ Explain how economic conditions have influenced historical events.
- ▶ Exhibit an understanding of economic systems of the major countries of North America.
- ▶ Recognize that standards of living are influenced by resources, technology and governments.
- ▶ Explain industrial growth in the United States.

Citizenship/Government:

- ▶ Describe the purpose of the U.S. Constitution and the three branches of government.
- ▶ Compare and contrast the governmental structures of the U.S., Canada and Latin America.
- ▶ Identify patriotic symbols and celebrations of the U.S., Canada and Latin America.
- ▶ Recognize the importance of current events.

A student with an Individual Education Plan and/or 504 Plan will be provided the necessary accommodations as outlined in his or her specific plan.

*By the end of Fifth Grade, your child should be able to do the following in **SCIENCE**:*

Human Body Systems:

- ▶ Identify digestive, respiratory, circulatory and musculoskeletal systems and describe their purpose.
- ▶ Recognize factors that affect the health of each of the systems and how individuals can impact their health.
- ▶ Describe the flow of nutrients through the digestive system and how each organ supports the digestive process.
- ▶ Identify the parts of the respiratory system and explain how gases are exchanged during the breathing process.
- ▶ Construct a model that demonstrates how the heart's two-pump action delivers oxygen to the body and returns carbon dioxide to the lungs.
- ▶ Compare the component functions of blood / blood vessels.
- ▶ Explain how skeletal muscles and bones interact with the nervous system to produce movement.

Ecosystems:

- ▶ Illustrate the interdependence of organisms in ecosystems.
- ▶ Recognize characteristics of stable and unstable ecosystems.
- ▶ Explain how humans / nature upset an ecosystem's stability.
- ▶ Order an ecosystem's basic elements, living and non-living.

Weather:

- ▶ Label and describe the layers of the Earth's atmosphere.
- ▶ Recognize how altitude and temperature impact air pressure.
- ▶ Explain how the amount of sunlight, angle of sun's rays and origins and movement of air masses affect climate.
- ▶ Evaluate factors that impact weather.
- ▶ Explain how energy from the sun determines the water cycle and results in different types of precipitation.
- ▶ Summarize types of severe weather and safety precautions that can be taken to reduce injury and damage.
- ▶ Identify and classify clouds and their use in predicting weather.



Starlab:

- ▶ Predict and explain how the sun's path varies from season to season in the northeast and how this variation is the cause of the change in seasons.

Academic Expectations

What You Can Expect During Your Child's Year in **Fifth Grade**

English Language Arts, Social Studies, Mathematics and Science

While all children learn in different ways, you expect your child to make progress in school every year.

This brochure defines what your child should be able to do in the areas of English language arts, mathematics, social studies and science by the end of this year.

At Scotia-Glenville, learning is often integrated between subject areas. English Language Arts reading and writing skills, for example, are also stressed in social studies, mathematics and science.

Please review this list of grade-level expectations and, if you have any questions, please feel free to contact your child's teacher or principal. We value the partnership that can exist between school and home.

Our district is committed to an education for your child that is consistent across our elementary schools and which will add depth and richness to your child's experiences.



*By the end of Fifth Grade, your child should be able to do the following in **ENGLISH LANGUAGE ARTS**:*

Reading:

- ▶ Read and understand independently grade level materials including fiction and non-fiction, plays, poetry and articles.
- ▶ Use reference materials (dictionary, atlas, encyclopedia, thesaurus, and electronic media).
- ▶ Read for judgment, interpretation, and evaluation (eg. graphs, diagrams, advertisements).
- ▶ Demonstrate fluency and expression in oral reading.

Writing:

- ▶ Use proper mechanics of writing (capitalization, punctuation, spelling and grammar).
- ▶ Use the four steps of the writing process: prewriting, drafting, revising and editing
- ▶ Write multi-paragraphed essays in response to document based questions.
- ▶ Summarize or paraphrase information read.
- ▶ Produce an outline.
- ▶ Write a research paper using supporting evidence and details and construct a bibliography.
- ▶ Write for a variety of purposes (poetry, friendly and business letters, persuasive essay, book report and electronic mail message).

Listening:

- ▶ Listen to and follow multi-step directions.
- ▶ Listen for information and meaning.
- ▶ Respond appropriately to what is heard.
- ▶ Show respect when others are speaking.
- ▶ Ask/ answer appropriate questions related to instruction.
- ▶ Listen to an oral presentation and respond in writing.
- ▶ Listen to a speaker and form an opinion.

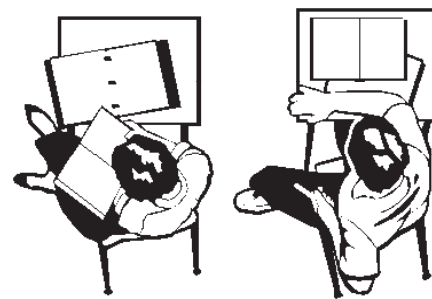
Speaking:

- ▶ Express ideas clearly and effectively.
- ▶ Ask relevant questions in response to discussion.
- ▶ Respond respectfully and contribute ideas to class discussions.
- ▶ Use language appropriately according to purpose, audience, and occasion.
- ▶ Present written information orally (eg. book report).

*By the end of Fifth Grade, your child should be able to do the following in **MATHEMATICS**:*

Number Sense and Operations:

- ▶ Read, write, compare and order whole numbers through billions and decimals through thousandths.
- ▶ Use numbers up to billions .
- ▶ Round numbers from hundredths to ten-millions.
- ▶ Multiply three-digit by three-digit numbers.
- ▶ Divide three-digit numbers by one and two digit numbers.
- ▶ Use addition, subtraction, multiplication and division to estimate and calculate decimals through thousandths.
- ▶ Create equivalent fractions for a given fraction.
- ▶ Express fractions in simplest form.
- ▶ Compare/ order fractions with like/ unlike denominators.
- ▶ Estimate and calculate sums and differences of fractions and mixed numbers with like denominators.
- ▶ Convert improper fractions to mixed numbers and mixed numbers to improper fractions.
- ▶ Multiply and divide fractions and mixed numbers.
- ▶ Differentiate between prime and composite numbers.
- ▶ Calculate the least common multiple and greatest common factor of two numbers.
- ▶ Explain, verbally and in written form, word problem-solving strategies.



Geometry:

- ▶ Identify/ classify triangles and quadrilaterals by their sides and angles and state the sum of their interior angles.
- ▶ Identify similar and congruent triangles.
- ▶ Measure and draw angles with a protractor.
- ▶ Calculate the perimeter of regular and irregular polygons.
- ▶ Locate and draw lines of symmetry in shapes.
- ▶ Use coordinates to plot points on a graph.

All learning is cumulative.

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Measurement:

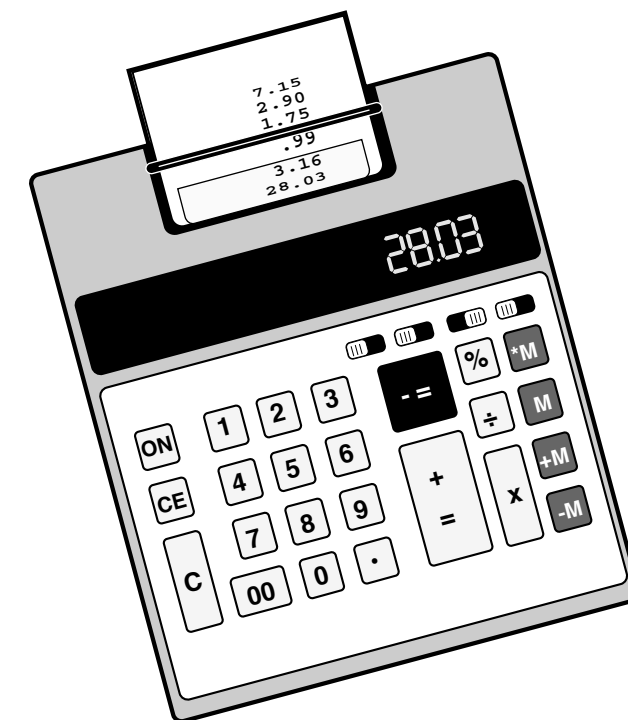
- ▶ Convert linear measurement using U.S. standard and metric systems.
- ▶ Calculate elapsed time in hours and minutes.
- ▶ Identify and estimate equivalent U.S. standard and metric units of length.
- ▶ Measure to the nearest centimeter and to the nearest one-eighth inch.

Algebra:

- ▶ Evaluate algebraic expressions.
- ▶ Solve one-step algebraic equations .
- ▶ Create and explain patterns and relationships.

Statistics and Probability:

- ▶ Collect and record data from a variety of sources.
- ▶ Create a line graph to display changes in data over time.
- ▶ Make predictions/ draw conclusions from data in a graph.
- ▶ Calculate the average (mean) for a given set of data.
- ▶ List outcomes for a single probability event/ record results.
- ▶ Determine the probability of a single event occurring.
- ▶ Express the comparison of two quantities as a ratio.
- ▶ Express ratios in different forms.
- ▶ Identify percent as a comparison to 100.



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