

GRADE 4
CURRICULUM GUIDE



COLCHESTER SCHOOLS

127 NORWICH AVENUE
COLCHESTER, CT 06415

537-7260

fax 537-1252

Superintendent.....Karen Loiseau
Director of Pupil Services ...Katherine Shaughnessy
Director of Curriculum.....Barbara Gilbert

Colchester Elementary School
315 Halls Hill Road
Principal: Jacqueline Somberg

Jack Jackter Intermediate School
215 Halls Hill Road
Principal: Deborah Sandberg

William J. Johnston Middle School
360 Norwich Avenue
Principal: Christopher Bennett

Bacon Academy
611 Norwich Avenue
Principal: Jeffry Mathieu

Dear Parents:

We hope you find this Curriculum Guide helpful. Over the past two years, members of the Strategic Planning Committee and Community Involvement Forums have expressed a desire for a curriculum guide for parents. The teacher teams working on these guides gathered information from the Colchester Curriculum Documents, which are based on state standards, and put them into an overview for each grade level. We will continue to refine the document and add a comprehensive parent support piece in future years.

We hope that 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. We welcome your feedback as you use these Parent Curriculum Guides throughout the year. The Colchester faculty and administration appreciate your working with us to ensure that your children's education is an effective and positive experience.

Best wishes for a successful school year.

Yours truly,

Colchester Faculty and Administrators

LANGUAGE ARTS

Literacy skills are key to becoming a critical thinker, effective writer, articulate speaker, and independent reader. Reading instruction in grade 4 includes whole group instruction, guided reading groups, and independent reading. Students will be exposed to both fiction and non-fiction texts. Writing instruction will include developing narrative and expository pieces.

By the end of fourth grade, we expect students to be able to:

Reading

- Select “just right” books and read for enjoyment.
- Set a purpose for reading.
- Make and confirm predictions prior to during and after reading.
- Compare and contrast elements of an article.
- Sequence events.
- Determine cause and effect.
- Identify main ideas and supporting details.
- Summarize events and draw conclusions about the meaning of a text.
- Interpret the author’s purpose.
- Distinguish between fact and opinion.
- Make and explain connections among literary works, other texts, and the world.
- Expand vocabulary by learning words from a variety of subject areas.
- Read orally with good pace and expression.
- Use context clues to figure out the meaning of new words.
- Support conclusions with evidence from the text or personal experience.
- Begin to understand that literature reflects human experience and culture.

Written Communication

- Write a response to text that includes supporting evidence.
- Set goals for writing.
- Write a well-developed narrative with a beginning, middle and end.

Write a research report and follow a rubric/guideline.

Write narrative and expository pieces.

Identify parts of speech.

Follow the grammatical rules for:

Capitalization

Punctuation

Pronoun usage

Subject/verb agreement

Edit independently for best spelling and grammar.

Use a variety of models to develop their writing.

Apply spelling patterns to spell unfamiliar words.

Spell high-frequency words and monitor their own accuracy.

Revise text to improve elaboration, organization, fluency and clarity.

Oral Communication

Use sentences and standard English in speaking.

Communicate clearly and precisely.

Present information to an audience.

MATH

Math develops a student's ability to reason and solve problems. In math, students have the opportunity to apply basic mathematical skills and concepts and make connections to real world problems across all disciplines. Students learn reasoning and effective communication of solutions and methods. Students become independent thinkers and share responsibility for their learning as they build new math knowledge.

By the end of fourth grade, we expect students to be able to:

Numerical concepts and Operations

Demonstrate understanding of base ten number system by comparing, rounding, ordering, estimating, adding and subtracting whole numbers to 100,000.

Develop fluency with multiplication and division fact families 1-12.

Divide up to 3-digit dividend by 1 digit divisor.

Multiply up to three digit numbers by one digit factors.

Create and solve story problems using all four operations with whole numbers.

Use the number line to represent both decimals and fractions.

Identify equivalent names for fractions.

Read and write mixed decimals to the hundredths place.

Solve problems involving the addition and subtraction of fractions with like denominators.

Apply and explain a variety of estimation strategies when problem solving.

Make reasonable estimates and approximations.

Find equal parts of a set ($\frac{2}{3}$ of 12 = 8).

Geometry and Measurement

Estimate locations and label fractions on number lines and rulers.

Convert linear customary and metric measurement.

Make and use measurements in both customary and metric units to approximate and measure length, area, capacity, and time.

Convert from one unit to another when measuring time and solve problems that involve elapsed time using clocks and calendars.

Draw and measure length to the nearest $\frac{1}{2}$ inch.

Build, draw, describe and classify 2 dimensional figures.

Use coordinate systems to specify locations.

Use formulas to find area and perimeter of a rectangle.

Communication, Application, and Representation

Use mathematical language correctly; organize and communicate math thinking effectively.

Problem Solving and Reasoning

Solve multi-step problems.

Apply problem solving strategies.

Patterns

Demonstrate equivalence with the commutative properties of whole numbers.

Identify, describe, extend numeric and non-numeric patterns.

Use variables in number sentences.

Data Analysis/Probability

Construct and interpret line plots, bars graphs, pictographs, tables, and charts.

Use the range, mode, median to describe features of a data set.

SCIENCE

Science prepares students to be confident critical thinkers who are equipped with the skills needed to access, understand, evaluate, and apply information in various contexts.

By the end of fourth grade, we expect students to be able to:

Magnetism and Electricity

Describe how batteries and wires can transfer energy to light a light bulb.

Explain how simple electrical circuits can be used to determine which materials conduct electricity.

Describe the properties of magnets, and determine which materials magnets will attract.

Properties of Water

Describe the differences in the physical properties of solids and liquids.

Sort and classify materials based on properties such as dissolving in water, sinking and floating, and conducting heat.

Describe the effect of heating on the melting, evaporation, condensation, and freezing of water.

Describe how the sun's energy impacts the water cycle.

Describe the role of water in erosion and river formation.

Structures of Life

Describe how animals, directly or indirectly, depend on plants to provide the food and energy they need in order to grow and survive.

Describe how natural phenomena and some human activities may cause changes to habitats and their inhabitants.

Describe the life cycles of flowering plants as they grow from seeds, proceed through maturation and produce new seeds.

Explore and describe the effects of light and water on seed germination and plant growth.

SOCIAL STUDIES

Social studies prepares students to understand the world around them as well as events in the past so they can become good citizens. As they explore their state, students learn about geography, natural history, government and historical and cultural change.

By the end of fourth grade, we expect students to be able to:

Describe the geography and regions of Connecticut.

Compare and contrast colonial times in Connecticut to today.

Show curiosity about artifacts and how they reveal information about the past.

Write a selection from the point of view of a child in Connecticut's past.

Explain how laws are made.

Identify ways citizens participate in government.

Identify the three branches of government and understand the broad responsibilities of each.

Explain how the whaling industry affected people's lives.

Identify reasons for immigration into Connecticut and problems faced by immigrants.

MUSIC

In grade 4 students will perform a varied repertoire of music by singing and playing instruments. Students will create music through improvising melodies, read and notate music, and listen to, analyze and describe music.

General Music

By the end of fourth grade we expect students to be able to:

Perform a varied repertoire of music by singing and playing instruments.

Create music through improvising melodies.

Read and notate music.
Listen to, analyze, and describe music.

Intermediate Band Grade 4

By the end of fourth grade we expect students in band to be able to:

Use specific instrument skills.
Recognize instrument tendencies, construction, proper position, posture, embouchure and beginning notes (names).
Percussion students will learn about the different instruments, necessary equipment and accessories.
Understand their role individually, in their sections, and in the large group.
Begin to correct mistakes in note errors and basic counting rhythms.
Make adjustments from directions of the conductor.

Chorus Grade 4

By the end of fourth grade we expect students in chorus to be able to:

Use previous knowledge and be part of a larger musical group.
Sing on pitch a varied repertoire of songs.
Sing on pitch and in rhythm maintaining a steady tempo.
Sing in a group blending with others, matching dynamic levels and respond to clues of the conductor.
Use appropriate musical terms.

HEALTHY AND BALANCED LIVING

Jack Jackter Intermediate Schools Physical and Health Education program promotes a variety of activities that will lead to a healthy life style. Emphasis will be placed on health and fitness goals needed for the enhancement of intellectual pursuits and interests of all students. The Physical and Health education program is based on the concept of providing differentiated instruction for all students. Our program will foster the growth and development of the individual child and provide the opportunity to pursue healthy and active lifestyle.

By the end of fourth grade, we expect students to be able to:

Have the skills to perform a variety of physical activities.

Be physically fit.

Participate regularly in physical activity.

Recognize the implications of and benefits from involvement in physical activities.

Understand and demonstrate the value of physical activity and its contributions to a healthful lifestyle.

Make informed decisions about their health.

Practice life skills and have character traits for positive health behaviors.

Solve health problems and think critically.

VISUAL ARTS

In fourth grade, students work with a variety of media, techniques and processes. They use the elements and principles of design to plan & create art which incorporates personal meaning, reflects interdisciplinary connections, and expresses how art relates to everyday life. They explore connections between their culture and past cultures through a study of early art history.

By the end of fourth grade we expect students to be able to:

Recognize and use: a variety of lines including contour line; actual/implied texture; value/light source; 3-D form in drawings. Experiment with color palettes, including earth tones/neutrals.

Recognize and use symmetry, contrast to show form, proportion, emphasis and unity in works of art.

Work with a variety of media (marker, crayon, tempera, watercolor, clay, pastel) and explore a variety of processes and techniques including: drawing, collage/mosaic, painting, relief printing, mixed media, and 3-D construction techniques.

Create and respond to works of art based on a range of subjects, including self-portraits, narrative scenes, and cultural/historical and universal symbols and artifacts (Stone Age, ancient Egyptian, Greek, Roman).

Reflect on, evaluate and form opinions about works of art, including stating reasons for one's ideas/opinions, orally and in writing.

LIBRARY MEDIA

Students use the library to find "just right books." In conjunction with classroom teachers, they also research information using print and electronic sources.

By the end of fourth grade we expect students to be able to:

- Find and check out a book of their choice using the library catalog.
- Use library databases to search for information.
- Recommend books to their classmates.
- Identify fiction genres.
- Use the Dewey Decimal System to find non-fiction books.
- Use reference materials to find information.

TECHNOLOGY SKILLS

Technology skills are an important part of twenty first century learning, and students in second grade learn to use technology resources for problem solving, communication, and illustration of thoughts, ideas and stories.

By the end fourth grade, we expect students to be able to:

- Identify the basic components in a network computer system.
- Use appropriate keyboarding techniques (as grade-level appropriate) fifteen words per minute.
- Have a basic understanding of a spread sheet application.
- Be able to work independently in word processing and presentation software.
- Have a basic understanding how to navigate, retrieve, and cite information off the internet and data bases.
- Advocate and practice safe, legal, and responsible use of information and technology.