



1141 Kimberton Road, Chester Springs, PA 19425

**2017-2018
FIFTH GRADE CURRICULUM**

SOCIAL DEVELOPMENT

Fifth grade children are becoming more aware of themselves socially and emotionally and they are becoming more comfortable with their surroundings. This sense of confidence in their environment allows the children to become more independent and mature. They enjoy personal relationships with their peers and often establish long and lasting friendships.

Fifth grade students enjoy academic challenges. Additionally, they are able to contribute their own ideas and opinions about a broad range of social and political issues. Fifth grade children have a strong sense of what they perceive to be right and wrong. They understand what it means to make good decisions regarding their behavior, and natural consequences often follow these choices.

At Montgomery School, Fifth grade students have the opportunity to assume the roles of leadership in the Lower School. Some of these roles include the responsibilities of bus and car safeties, monitoring a table of younger children during lunch, and raising and lowering the American flag. The fifth grade year prepares children for the challenges and demands of the Middle School. Basic academic skills are defined and polished. There is an increase in expectations of these students. Teachers place special emphasis on teaching the students to deal with the abstract and to use higher order thinking skills.

Students learn how to budget their time and plan for the future. They continue to establish study skills, learn test-taking strategies, and understand the implications of getting good grades for their work. Frequently, the students are responsible for completing long-term projects that require careful planning and the organization of their time and resources. Fifth grade is a transition year when the children begin to accept responsibility for their learning, involve themselves in the learning process, and take charge as they approach adolescence.

LANGUAGE ARTS

In language arts, the students are taught vocabulary, comprehension, phonemic awareness, spelling, study skills, writing, grammar, speaking, and listening skills. These components will be addressed using the Social Studies text, short stories, or literature. Emphasis will be placed on fostering critical thinking skills. Book reports will be assigned based upon different genres. Students will be expected to read nightly for twenty minutes.

The core reading program in fifth grade focuses on the reading strategies from *The Junior Great Books* reading program. These strategies will be used to enhance reading and comprehension skills using *The Junior Great Book Anthologies* as well as other reading material.

Spelling tests are administered weekly. Spelling lessons are taught daily and may include challenging words. Grammar lessons are taught several times a week. Tests will be administered following each unit. Quizzes are given at the discretion of the teacher.

The Six Traits Writing model is being used in grades PreK-8. The program will foster a common language and consistency about writing and assessment for teachers and students, which is designed to teach students the craft and quality of writing. The model is comprised of *ideas and content, word choice, conventions, voice, sentence fluency, and organization*. These traits will be taught through literature, teacher modeling, and student examples. The strength of the model is the opportunity to give feedback and individualize instruction in writing.

SKILLS

Speaking and Listening

- Asks questions to monitor understanding
- Communicates before a group
- Listens attentively in class
- Follows oral directions
- Focuses during instruction
- Listens respectfully
- Participates in Chapel presentations

Reading/Literature/History

- Uses phonetic clues and structural analysis and/or context clues to decode unfamiliar words
- Self-corrects when reading orally
- Identifies root words, prefixes, suffixes, inflectional endings, compound words, contractions, and synonyms
- Applies prior knowledge before and during reading
- Recognizes story elements
- Predicts what might come next

- Summarizes the main events in a story
- Focuses on special story vocabulary
- Participates in literature discussion groups
- Additional skills to be taught through literature and history:
 - Sequence of events
 - Compare and contrast
 - Following directions
 - Cause and effect
 - Points of view
 - Categorizing
 - Making inferences
 - Generalizing
 - Interpreting poetry
 - Main idea
 - Clarifying
 - Differentiating facts and opinion
 - Finding multiple meanings
 - Identifying descriptive details
 - Drawing conclusions
 - Making connections
 - Finding context clues
 - Analyzing literature
 - Analyzing quotations
 - Analyzing primary sources
 - Identifying who, what, why, where, and when
 - Identifying similes and metaphors
 - Study skills and graphic organizers
 - Debating
 - Frame of Reference
 - Responding to guided questions
 - Note-taking and outlining
 - SQ3R Study Method – survey, question, read, recite, review

Writing Skills

- A personal narrative
- A story
- Book reports
- Compare and contrast
- A research report
- Express an opinion (points of view, position paper)

- Persuasion
- Description
- Letter writing
- A dialogue
- A news article
- Poetry
- Essay questions
- Journal
- Character Sketch
- Writing a list and making a plan
- Writing and speaking
- Summary
- Interview
- Writing responses
- Three to five paragraph selection

5 W's – who, what, when, where, why

Writing Process

- Prewriting
- Gathering details
- Writing the first draft
- Revising (editing and proofreading)
- Conferencing (peer, teacher)
- Publishing

Writing Traits

- Stimulating ideas
- Logical organization
- Engaging voice
- Original word choice
- Sentence fluency
- Conventions
- Presentation

Application

- Writes a well-organized paragraph
- Writes for a variety of purposes
- Uses rich and varied vocabulary when writing
- Chooses topics to write about
- Participates in writing conferences
- Revises a story after the first draft
- Attempts to edit and proofread stories

- Develops interesting characters and plots
- Experiments with different styles of writing
- Demonstrates research skills
- Writes a research report

Research Skills

- Uses a dictionary and thesaurus in book and digital form
- Uses a glossary
- Uses an index
- Uses a table of contents
- Locates information
- Uses a variety of resources
- Search Engines
 - Uses “key words” to find the information using a search engine
 - Evaluates Internet sources
 - Reliable Internet sources
 - Online encyclopedias
 - Books
 - Using copyright and fair use practices in bibliographies
- Paraphrases
- Writes a rough draft
- Organizes information on note cards
- Organizes notes into a rough draft
- Uses Easy Bibs online bibliography platform
- Word processes a final copy

Grammar

- Sentence Structure
 - Complete subjects and complete predicates
 - Simple subjects, simple predicates
 - Compound subject and compound predicates
 - Direct and indirect objects
 - Predicate nouns and predicate adjectives
 - Prepositional phrases
 - Active and passive voice
 - Appositives
 - Compound and complex sentences
 - Avoid fragments, run-ons, comma splices, ramble-ons
- Parts of Speech
 - Kinds of nouns
 - Personal, compound, possessive pronouns

- Interrogative and indefinite pronouns
- Action verbs and linking verbs
- The present, past, future tenses
- The present perfect and past perfect tenses
- The present, past, future progressive tenses
- Adjectives and adverbs
- Prepositions and interjections
- Coordinating and subordinating conjunctions
- Usage
 - *Your and You're*
 - *Their, There, They're*
 - *Its and It's*
 - *Being careful with Go and Like*
 - *Good and Well*
 - *Doesn't and Don't*
 - *Who's and Whose*
 - *To, Too, Two*
 - *Leave and Let*
 - *Rise and Raise*
 - *Irregular Verbs: Fly, Run, Swim*
- Spelling
 - *Spells high frequency words correctly*
 - *Studies weekly for spelling tests*
 - *Self-corrects misspelled words*

ENRICHMENT ACTIVITIES

- Published student writing
- Games that reinforce skills
- Classroom library and Montgomery School Library
- Appropriate Internet Sites
- Chapel presentations

RESOURCES

Trade books are correlated with history and various genres are also integrated.

Additional resources:

- *Junior Great Books*
- *American History Poems*
- *American History Writing Prompts*
- *Write Source – A Guide to Writing, Thinking and Reading*

- *Literature Pockets*
- *Moving Forward with Literature Circles*

SOCIAL STUDIES

Our U.S. History program in fifth grade includes the study of history, geography, economics, civics, government, and culture and society. Students will study events, evidence, and points of view to connect the past to the present. Study skills, writing skills, comprehension, test-taking strategies, reading skills, and speaking will be incorporated within this course of study. Current events will be incorporated into the program. Assignments given will allow the students to demonstrate the mastery of concepts through projects that may include a digital format.

The StrataLogica interactive program incorporates technology, geography, and current events into the existing social studies curriculum. Students and teachers interact and collaborate with StrataLogica's multi-layered world powered by Google Earth API. This classroom experience will allow students to think globally and be able to comprehend world and historical impact. The program offers interactive digital reference maps, history maps, charts and atlases along with developmentally appropriate book atlases to use in conjunction with the dynamic digital format. StrataLogica offers us a way to connect digital and geographical literacies, collaboration, and technology while bringing the world into our classrooms.

Concepts

American Expansion

- Governing the New Land
- Westward Expansion
- Civil War
- Expansion beyond our Borders
- Current Events/ Map Skills

ENRICHMENT ACTIVITIES

- Subscription to "Time for Kids"
- Historical Field Trips
- Research
- Plays

RESOURCES

- *Harcourt Horizons U.S. History and Its Components*
- *"Time for Kids"*
- *Scholastic teacher references*
- *Scholastic Super Book of Outline Maps*

- *Super Social Studies*
- *Internet Resources*
- *Children's Periodicals*

MATHEMATICS

Fifth grade is the beginning of the transition between arithmetic and pre-algebra. Thus, fifth grade students are homogeneously grouped to best support their individual needs. The fifth grade math curriculum uses the Singapore Math in Focus Program to provide an in-depth study of mathematical concepts and skills. The focus on problem solving and reasoning provides opportunities for students to demonstrate and apply their understanding. Math instruction focuses on the why, the how and the when of mathematics so students see connections, make generalizations, and use knowledge effectively. Most students are included in the fifth grade level math group. Those students who demonstrate natural math aptitude and can acquire new skills at a rapid pace may be invited to participate in an accelerated math group.

Daily math homework and weekend assignments should be expected. Students should enter Fifth grade having memorized the basic addition, subtraction, multiplication, and division facts. Tests are administered at the end of each chapter, and quizzes may be given at the teacher's discretion. The Chester County Intermediate Unit provides support of those students who qualify. Enrichment, when appropriate, will be provided within the math group.

The Five Areas of Study include:

1. Numbers and Operations
2. Algebra
3. Geometry
4. Measurement
5. Data Analysis/Probability

Skills:

- Uses problem-solving strategies
- Demonstrates and applies place value concepts
- Compares, rounds, and estimates whole numbers, fractions, and decimals
- Multiplies and divides whole numbers
- Uses order of operations
- Performs and applies fraction operations
- Performs and applies decimal operations
- Evaluates algebraic expressions and equations
- Interprets ratios

- Calculates and applies percents
- Uses data and statistics
- Identifies and applies geometric concepts

ENRICHMENT ACTIVITIES

- Attribute blocks, geoboards, pattern blocks, fraction kit, measuring tools, and other manipulatives
- Math games
- Computer games
- Math support group with Chester County Intermediate Unit
- Ability groupings
- Real life math activities

RESOURCES

- *Math in Focus- Singapore Math by Marshall Cavendish Education, Houghton Mifflin Harcourt*
- *Math in Focus Smartboard Interactive Activities*
- *AIMS Publications, AIMS Education Foundation*
- *Teaching Children Mathematics, National Council of Teachers of Mathematics*
- *A Collection of Math Lessons, by Marilyn Burns and Cathy McLaughlin*
- *The Math Solutions Publications*
- *Math Matters, by Suzanne H. Chapin and Art Johnson, Math Solution Publications*
- *Math Graphic Organizers, Grades 3-5, Creative Teacher Press*
- *Internet Resources*

SERVICE LEARNING

Montgomery has always taken pride in teaching our students the importance of service to others, which is part of our school mission. The service projects are directly tied to our classroom curriculum. This approach gives students the opportunity to observe directly the measurable change that is provided through their efforts in a grade appropriate way. The project will not only affect the recipient of the service, but also the providers -- our students. The service learning project in fifth grade will focus on outreach to the military, as the study of the Civil War correlates well to a service project of this nature.

SCIENCE

The study of science in lower school introduces students to the scientific method, which includes observation, hypothesis formation, hypothesis testing, controlled experiments, measurement and conclusion drawing. Classroom demonstrations, discussions, field observations, and hands-on

projects involve students in the learning experience. The students visit our Lower School Science Lab on a rotating basis. The students regularly use sophisticated science equipment and exciting learning activities. In fifth grade the students begin using an upper level program of study supported by the Prentice Hall Science Explorer textbook series. Students relate scientific content to their lives and to environmental issues. Enrichment activities include habitat studies, field trips, classroom pets and hands-on projects. The lower school curriculum provides a strong foundation that spirals naturally into the middle school science program.

5th Grade Science

In fifth grade science, students will learn about environmental science and ecology as they study the interactions between organisms and their surroundings. Students explore the movement of energy and cycling of matter through ecosystems, and the interconnectedness of life on Earth. Students also study and compare the various biomes found on our planet. Students then move on to an activity based unit where they will develop the strategic thinking and problem-solving skills needed to program Lego Robots. Next, they will work with forces and fluids, to study and measure the relationship between the effects of air pressure, buoyancy, density, and gravity. Students will employ the iterative design process to develop the best solution to a STEAM design challenge. The fifth grade ends the year with an biological exploration of the Animal Kingdom that includes classification, anatomy, and microscopy.

Students will develop an understanding of the methods and standards employed in science and gain competency with scientific process skills and tools while completing laboratory activities. The fifth grade science program includes experiential field trips and hands-on learning, giving students a deep understanding of the scientific method.

GOALS

- Recognize and appreciate the process of Science as a tool for understanding the Universe around us and the diversity of skills required to facilitate Science.
- Develop and apply basic and advanced scientific process skills.
- Identify and explain the niches and behaviors of organisms, describe the interrelationships between biotic and abiotic factors in Ecosystems on Earth, and recognize the factors that influence the development of Biomes and their locations on our planet.
- Understand and employ various methods to assess population size and density, record data, and create, analyze, and interpret graphs to understand changes in populations in an ecosystem.
- Understand and describe how energy flows and matter cycles, and through Ecosystems and organisms on Earth and in the Universe to web together living and nonliving factors.
- Use scientific tools of the lab properly and safely to accurately measure characteristics of matter and record and communicate their findings with

appropriate SI Units.

- Develop an appreciation for the process and skills required to successfully program a NXT robot.
- Understand, measure, calculate, and explain the influences of force and pressure in fluids to describe the effects of density, buoyancy, and Bernoulli's Principle.
- Complete STEM activities utilizing appropriate problem-solving strategies.
- Utilize proper procedures to determine and employ correct formulae to accurately calculate force, work and energy in solving word problems.
- Research and appreciate the role and contributions to scientific knowledge and developments from women and minorities throughout history.
- Identify and describe the classification system used by Scientists to organize the Kingdom Animalia through properties, traits, and evolutionary history.
- Identify and describe the structures and life-cycles of Animals.

CONTENT

- Ecology & the Environment
 - Observing Habitats and Identifying Biotic and Abiotic Factors
 - Identifying and analyzing population dynamics in an Ecosystem
 - Understanding cycles of matter, energy flow, and webs of life
 - Biomes, Succession, and Biogeography
- Robotics
 - Building & Programing Models
- Physics
 - Forces in Fluids
 - Pressure & Hydraulics
 - Aerodynamics
 - Buoyancy & Density
- Animal Life
 - Classification & Diversity of Animal Life
 - Structures and Functions of Organisms
 - Historical Evidences and Understandings

METHODS

- Laboratory investigations and experiments
- Outdoor explorations and investigations
- Teacher demonstrations and student activities
- Lectures, note taking & discussions
- Audio-video materials
- Websites & webquests

- Appropriate tools & technology to collect and analyze data
- STEM activities

ASSESSMENT

- Teacher observation and in-class participation
- Lab Sheets and Reports
- Projects
- Homework
- Tests & Quizzes

TEXTS & MATERIALS

- Prentice Hall Science Explorer textbook series
- Computers & Smartboard
- Lab Tools and Equipment
- NXT Lego Robots and Programming Software
- Pharos GPS enabled PDAs and Nature Mapping Software
- Various Identification Guides for Flora and Fauna