

St. James Day School

Fourth Grade Curriculum



Language Arts

- Consonant sounds
- Short & long vowel sounds
- Hard & soft C & G
- Beginning consonant blends
- Vowels with r; Consonant digraphs
- Silent letters
- Adding ed, er, and ing to words
- Dropping the final e; doubling final consonants
- Words ending with y: adding ed, es, ing
- Words ending with y: adding er, est
- Words with ie and ei
- Vowel pairs ai, ay; diphthongs oi, oy
- Words with ou & ow
- Plurals
- A and an
- Suffixes, prefixes, & contractions
- ordinal numbers ending with 'th'
- Nouns: plurals, possessive, proper, predicate
- Direct object, indirect object; object of the preposition
- Pronouns: antecedents, object, personal, possessive, subject, used as adjectives
- Adjectives, articles, multisyllabic words
- Adverbs
- Agreement: pronouns/antecedents; subject/verb
- Antonyms
- Homonyms
- Interjections
- Capitalization
- Commas, quotation marks
- Underlining & Italics
- Colons, semicolons, & apostrophes
- Interjections, comparative & superlative adverbs
- Double negatives
- Possessives, Gerunds
- Tenses
- Compound verbs; Compound subjects
- Conjunctions; Coordinate conjunctions
- Contractions
- Prepositional phrases
- Alphabetizing
- Dictionary use
- Double negatives
- Prepositions; subject-verb agreement
- Multiple meaning words
- Time and order words
- Digraphs, irregular verbs, root words
- Simple & complex sentences



- Dependent clauses, Independent clauses
- Letter writing: business, friendly, invitations, parent, student, thank you notes
- Venn diagrams
- Writing in first, second, & third person
- Sentence patterns
- Punctuation: Quotations, sentences
- Sentences: declarative, complete, compound, exclamatory, fragment, kinds of, run on
- Topic sentences and paragraph construction
- Main idea & supporting sentences
- Paragraph writing: Expository, Descriptive, & Narrative
- Persuasive writing, figurative language
- Author's point of view: first person; 3rd person
- Realistic Fiction, Biographies, Myths
- Nonfiction, fables, & folktales
- Poetry, Metaphors, Personification, Simile
- Drawing inferences & conclusions
- Fact & opinion
- Outlining: main idea, setting, character, plot, ending
- Poetry: alphabet, cinquain, free verse, haiku
- Other creative writing: autobiography, journals

Spanish

Fourth grade students travel to the Spanish room twice weekly for a 25 minute Spanish class with the Spanish teacher. Continuing Spanish skills taught include:

- Present tense singular forms of 'ser'; use with nouns
- All verbs in the singular
- Definite & indefinite articles
- Oral & written conjugation of verbs
- Food & beverage vocabulary
- Using verbs with the personal "a"
- Writing sentences using prepositions
- Using singular reflexive pronouns with correct verb forms
- Written report of differences in Spanish, Mexican, & American Christmas customs
- Verbs: llamarse; entender

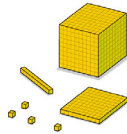
Religion

Christianity and its moral precepts are incorporated into the daily life of both students and teachers. Chapel is held daily in each classroom or the Commons. The entire student body attends Big Chapel each Thursday in the gym. Morning Prayer is led by the rector or curate from St. James Episcopal Church.

Math

The math program systematically distributes instruction and practice and assessment throughout the academic year. Concepts may vary slightly from class to class. Specific concepts taught include, but are not limited to:

- Whole-number concepts & computation
- Estimation
- Patterns and sequences
- Fractions, decimals, and mixed numbers
- Ordinal numbers
- Negative numbers
- Properties of operations
- Place Value
- Expanded Notation
- Addition, subtraction, multiplication, & division operations with whole numbers, fractions, & decimals
- Signed numbers
- Regrouping and pre algebra notation
- Mental division strategies
- Powers (Base & exponent)
- Fractions and mixed numbers (ordering; equivalent; comparing; reducing)
- Improper fractions; least common denominators
- Converting fractions to decimals & percents
- Decimals: comparing, ordering, converting
- Measurement - Standard & Metric
- Temperature scales and conversions
- Time
- Percent; Rates
- Square Roots
- Statistics
- Probability & Estimation
- Number Theory
- Number sets and number systems
- Surveys & graphing
- Perimeter and area
- Polygons; Units (standard and non-standard)
- Circles & Arcs: radius, diameter, center
- Measurement tools: ruler, protractor, thermometer, balance scale, stopwatch
- Geometry: Angles, points, segments, rays, lines, sides, vertices, perimeter, area
- Quadrilaterals
- Congruence & similarity
- Geometric solids
- Volume
- Area
- Symmetry
- Patterns: tessellations
- Perpendicular, obtuse, acute, radius, diameter
- Transformations: Rotation, reflection, translation
- Algebra: patterns, story problems, coding & decoding, Pascal's triangle
- Variables



- Solving multistep equations
- Functions formulas, input output tables, graphs
- Properties of math operations
- Statistics & Data Analysis using tables and graphs
- Ways of representing data legend, graphs, coordinate planes, etc.
- Notations for expressing probability
- Theoretical probability
- Sequences arithmetic, geometric, pictorial, Fibonacci Sequence
- problem solving strategies
- Mathematical Reasoning
- Real world connections

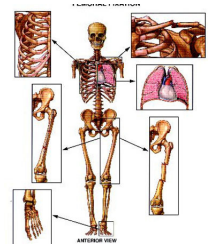
Science

The hands on science program for grade four includes, but is not limited to, the following 18 investigations and explorations:

•**Human Body (5 Investigations)**

Overview of the body systems with emphasis on the skeletal & muscular systems

- Bones: # of bones in the body; functions of bones
- Joints
- Muscles, ligaments, & tendons



•**Landforms and Earth Science**

- Models and maps
- Erosion and deposition
- surface features of land
- Steam table models
- Topographic maps and techniques used to create them
- Contour and elevation
- Fossils
- Inside the earth
- Solar system and beyond

•**Ideas & Inventions (4 Investigations: Rubbings, Carbon Printing, Color Writing, & Reflecting)**

- Observe & record findings of rubbings of textured objects
- Compare venation patterns in leaves
- Observe & record information of patterns made using carbon printing
- Compare fingerprints
- Observe & record data of wicking & the separation of pigments in ink pens
- Compare prints made by pigments & communicate observations
- Observe things in and about the environment that are not easily seen
- Use mirrors to manipulate light & images
- Compare objects using symmetry as a property
- Invent ways to use mirror to produce useful or aesthetically pleasing products

•Levers & Pulleys (4 Investigations)

- Defining simple machines; Newton's Law
- Measure the effort to lift a load when the load remains constant and the effort changes position
- Work with devices that help lift weight or overcome resistance
- Investigate the Fulcrum, effort, an load of class 1 levers
- Conduct experiments with a spring scale
- Diagram class 1, class-2, and class-3 lever systems.
- Investigate & diagram common tools and how they can be applied to levers
- Set up single fixed and single movable pulleys
- Investigate four pulley systems and determine the advantages and disadvantages of each



•World of Living Things

- Cells
- Organisms: classifying, history of, location of
- Changes in the Ecosystem
- Plants: parts of, growth of, reproduction of
- Animals: vertebrate and invertebrate; development & reproduction; survival

•The Earth's Atmosphere: water, weather, air, & wind



- Water cycle
- Oceans
- Water conservation
- Groundwater
- Air, wind, and the atmosphere

•Matter

- Properties and states of matter
- Measuring matter

•Energy

- Motion, force, & energy
- Energy and tools
- Heat, light, and sound
- Static electricity; Current electricity
- Electricity and magnetism
- Nuclear energy

•Science in History

- Biographies of famous scientists and their impact on the world

Social Studies

- Geography: globes, world geography
- Geographic terms; U.S. geography & regions
- Texas History and geography
- Maps & landforms of the four regions of Texas
- Spanish & French explorers & influence in Texas
- Louisiana Purchase
- Mexican Independence & rule
- Colonization of Texas
- Causes of tension under Mexican rule
- People & places in early Texas
- Texas Revolution & battles
- Santa Anna's surrender and the Treaty of Velasco
- The Republic of Texas
- Texas becomes a state 1845
- Presidents of Texas; Texas Constitution
- Manifest Destiny; European settlers in Texas
- Meaning of annexation
- Contributions to Texas culture from immigrants
- Native Americans in Texas



- Texas during the Civil War
- Reconstruction in Texas
- Flags, symbols, & songs of Texas
- Oil industry & boom towns
- Texas in the 20th century
- Texas government
- Texas imports & exports

Computer

Fourth grade students go to the Middle School computer lab once weekly for one hour of instruction in specific skills. Teachers are encouraged to enrich the computer curriculum with technology based projects which use the skills learned in the lab.



Extra lab time can be scheduled by classroom teachers at their discretion. Skills to be taught include, but are not limited to:

- Advanced keyboarding
- Using technology to access, analyze, and evaluate information
- Digital imaging and editing
- Year 4 Logo Programming
- Advanced word processing using Appleworks and/or WORD
- Internet security and safety
- Database creation and manipulation
- Basics of Spreadsheets
- Presentation skills using multimedia applications
- Digital graphics

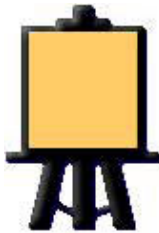
Art

Students travel to the Morriss Building twice weekly for art appreciation and application with the art teacher. Specific studies vary from year to year, but basic principles covered include:



- Understand media, techniques, & processes
- Principles & elements of art
- Learn to assess the characteristics & merits of personal art and the art of others

- Eye/hand drawing
- Choosing & evaluating subject matter, symbols, & ideas for art
- Understanding visual arts in relation to history & culture
- Balance, pattern, & symbols in artwork
- Cathedrals & stained glass; rose window
- Color, line, symmetry, design
- Art & technique of artists: Grant Wood, Albrecht Durer, French Impressionists, Gilbert Stuart, & Georgia O'Keeffe
- Hands on art: Treasure Island, Skeletons, Clay art
- Patriotic American flag design
- Torn paper art Christmas
- Consider the Face
- Things artists design
- Monet, Seurat; pointillism
- Japanese printing; Gyotaku
- Mosaic Crosses
- Folk art Mexico
- Realism, Impressionism, cubism, & Surrealism
- Abstract art



Physical Education

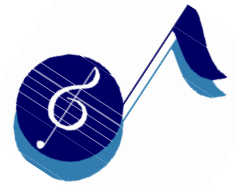
All students travel to the gym for P.E. activities daily.

- Daily fitness activities
- Push ups, sit ups, and shuttle run drills
- SOCCER: rules, positions, dribbling, passing, kicking, defense, trapping, goal tending
- FOOTBALL: rules, positions, throwing, catching, punting, hiking
- VOLLEYBALL: rules, positions, passing, serving
- DANCE: Square dance, line dance, swing dancing
- GYMNASTICS: Balances appropriate to individual skill level; inverted positions, rolling skills, weight transferring skills



Music

Students travel to the Morriss Building twice weekly for a 25 minute music class with the music teacher.



Music concepts and activities consist of:

- Correct breathing
- Listen to and identify musical forms: AB, ABA, AABA, Rondo, Theme & Variation
- Sing simple 2 part harmony
- Identify program music and absolute music
- Clap a simple rhythmic pattern
- Recall major events from the lives of composers studied in class
- Echo melodic patterns after hearing
- Recognize solo instruments in recordings
- Identify characteristics from the classical and romantic periods of music
- Recognize major musical works such as:
 - Eine Kleine Nachmusik*
 - Four Seasons*
 - Clock Symphony*
 - Carman*
- Rhythmic dictation
- Melodic dictation
- Understand musical terms: opera, oratorio, symphony, concerto, string quartet, suite, theme, variation, & rondo
- Candlelight Performance
- Recognize letter names of notes on the staff
- Orff instruments-play simple harmonic accompaniments
- Musical performance
- Recognize names & music of composers studied in class

