

Hilltop Montessori School - Seventh Grade Readiness Profile

Student _____ DOB _____ School Year _____

MATH

- Uses appropriate math vocabulary (quotient, dividend, divisor, product, multiplier, etc.)
- Knows addition, subtraction, multiplication, and division facts for 1 – 12
- Abstractly computes dynamic addition and subtraction
- Multiplies and divides large numbers abstractly
- Adds and subtracts fractions and mixed numbers with like and unlike denominators
- Converts between mixed numbers and improper fractions
- Multiplies and divides fractions and mixed numbers; appropriately utilizes reciprocals and fractional forms of one whole
- Adds, subtracts, multiplies and divides decimal numbers with correct placement of decimal point
- Calculates perimeter and area of geometric plane figures
- Identifies similar, congruent, and equivalent figures
- Calculates circumference and area of circles
- Constructs circle graphs using percentages and data tables
- Plots points on a coordinate plane (all four quadrants); connects points to form figures
- Calculates volume and surface area of polygon-based prisms, regular polyhedrons, and closed quadratic surfaces
- Measures geometric angles using a protractor, identifies angles by name
- Converts between units of conventional measurement for length, area, volume, and mass
- Converts between units of metric measurement for length, area, volume, and mass
- Calculates elapsed time to one minute intervals and specifies AM or PM
- Measures with ruler to nearest 1/8 inch and to nearest centimeter
- Solves simple equations with hands-on algebra kit
- Solves word problems with two or more steps and identifies operations required
- Introduced to squares, cubes, square roots, and cube roots
- Introduced to operations with integers

LANGUAGE ARTS and LITERATURE

- Independently reads on grade level or above
- Appropriately discusses literature in a small group; references literature for support
- Completes literature comprehension exercises independently; makes inferences; answers questions thoughtfully
- Recognizes similes, metaphors, alliteration, and symbolism in poetry and literature
- Has completed studies of character, setting, theme, and plot mapping
- Writes legibly in both print and cursive lettering
- Writes complete sentences with appropriate capitalization and punctuation
- Writes paragraphs with recognizable topic sentence, supporting sentences, and conclusion
- Writes essays with recognizable thesis statement, support, and conclusion; utilizes parallel structure effectively
- Writes in all four modes: narrative, expository, descriptive, and persuasive
- Writes friendly letters and business letters in the appropriate formats
- Writes poetry in a variety of formats utilizing rhythm, meter, syllabication, and rhyme
- Revises and edits writing using proofreading symbols; submits writing for publication
- Uses appropriate reference materials: dictionary, thesaurus, rhyming dictionary, atlas, internet
- Completes research projects and includes source citation in MLA style
- Identifies all eight parts of speech: noun, verb, article, adjective, adverb, conjunction, preposition, interjection
- Analyses sentence structure (direct object, indirect object, predicate noun, predicate adjective, etc.)
- Introduced to advanced grammar including gerund, participle, infinitive, etc.
- Introduced to sentence diagramming, including transitive and intransitive verbs, linking verbs, etc.

SCIENCE

- Makes scientific predictions
- Completes simple experiments independently with provided materials
- Is able to independently research and assemble a science fair project
- Is familiar with parts of a microscope and independently adjusts focus
- Has completed study of botany, photosynthesis, nitrogen cycle, carbon cycle, and organic chemistry
- Has completed study of the periodic table (including atoms, electrons, protons, neutrons, etc)
- Has completed study of changes in matter (physical and chemical)
- Has completed study of Vital Functions of Animals (14 species, 6 functions) and optional dissections
- Has completed study of taxonomy, five kingdoms classification, timeline of life, and tree of life
- Has completed study of the hydrosphere, water cycle, and weather/meteorology
- Has completed study of astronomy, seasons, and time
- Has completed study of planetary geology, plate tectonics, rocks and minerals, and rock cycle
- Has completed study of simple machines
- Introduced to batteries, circuits, magnetism and simple motors
- Introduced to concepts of friction and inertia
- Introduced to concepts of flight

CULTURAL STUDIES

- Completes world and US states pin maps using an atlas or key
- Identifies states, capitals, and major land and water forms of US geography
- Identifies countries, capitals, and major land and water forms of world geography
- Reads maps proficiently including use of map legends
- Calculates location-based time differences involving time zones
- Has completed study of advanced land forms
- Has completed study of human pre-history and archaeology
- Has completed study of ancient civilizations (Mesopotamia, Egypt, China, India and at least two additional)
- Has completed overview of the Middle Ages and Renaissance
- Has completed study of Pre-Columbian America, Native Peoples of Alabama, and Native Peoples of America
- Has completed study of the Age of Exploration and famous explorers, triangle trade, and the Revolutionary War
- Has completed study of US and relevant Alabama history 1776 – present
- Has completed study of important American documents (Constitution, Bill of Rights, Emancipation Proclamation, etc.)
- Conducts research and presents findings to others
- Creates collaborative timelines in various scales

TECHNOLOGY

- Knows keyboarding basics; uses all ten fingers for typing
- Types at a measured speed of 20 WPM or better
- Creates or opens a Google document, types, and saves work
- Sets font in a document and adjusts formatting
- Uses shift for capital letters and tab for beginning paragraphs
- Introduced to advanced features of Google Documents (Page Layout, Suggesting Edits, References)
- Independently creates slideshows in Google Slides (add slides, change background, add text, add graphics, save)
- Introduced to advanced features of Google Slides (animations, transitions, sound, etc.)
- Introduced to Google spreadsheets and using formulas to make calculations
- Has studied internet safety and proper use of technology
- Conducts searches using keywords
- Evaluates websites for reliability of information
- Cites internet sources using MLA format
- Introduced to video filming and editing techniques
- Works with robotics, draws flow charts, arranges “drag and drop” programs
- Introduced to javascript

WORK ETHIC AND RESPONSIBILITY

- Independently manages time and consistently completes both class work and homework
- Is able to work independently, with a partner, or with a group on an assigned task
- Completes a cycle of work without reminders or redirection from teachers
- Works neatly and appropriately; heads papers with job title and date
- Is attentive and respectful in lessons up to twenty-five minutes in duration
- Participates actively in lessons and is eager to learn
- Respects self, others, environment, and classroom materials
- Exhibits physical self-control on a regular basis
- Exhibits verbal self-control on a regular basis
- Follows oral and written directions
- Can be trusted to self-check work
- Is self-directed and self-motivated at school
- Transitions easily (i.e. between Spanish and work time)
- Is able to independently lead/present a lesson
- Solves interpersonal issues using conflict resolution skills