

Waterford Montessori Academy

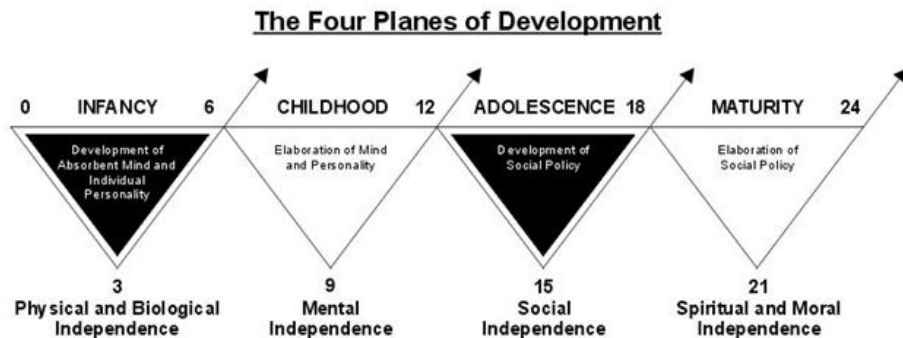
5th Grade Curriculum

These courses in this guide may be offered in school, virtually or blended.

The Second Plane: Ages 6–12 (Childhood) “Conscious Imagination”

According to Maria Montessori, in the second plane of development, children begin to display the ability to reason and use abstract thinking. This period is characterized by a craving for mental or intellectual independence. Your child begins to search for a sense of moral order, in addition to physical order. Children begin to take charge of their learning, based on their interests and desires. Common sensitivities in this plane include:

- Abstraction and imagination
- Morality and justice
- Culture
- Peer/social interactions



EXTRACURRICULAR

Technology

- Demonstrate the proper care of technological systems and components.
- Interpret, analyze, and evaluate information with the assistance of technology.
- Use Google Apps for Education to produce products.
- Show examples of how technology affects and impacts one's current life.
- Use age appropriate vocabulary related to technology.

Art

- Students explore a variety of techniques and media ranging from painting, drawing, printmaking, sculpting and mixed media.
- The art curriculum is designed to expose students to art history, visual arts vocabulary, art criticism, self-expression through artmaking and art-related careers.
- Students experience the art-making process through brainstorming, creating preliminary sketches, exchanging ideas with their peers, using and caring for art materials, producing final projects and evaluating artwork.
- Art exhibitions are mounted in each building throughout the school year.
- The skills and knowledge acquired by elementary art students will lay the foundation for their studies in art at the secondary level and beyond.

Physical Education

- Demonstrate sport-specific skills in individual, and team sports, and recreational games.
- Perform and understand fitness activities that develop and maintain cardiorespiratory endurance, muscular strength, and endurance of large muscle groups, and flexibility of major joints.
- Identify physical activities that can be used to improve health related fitness components and contribute to feeling good.
- Demonstrate on a daily basis, good personal/social character traits at least 75% of the time.

MATHEMATICS

Numeracy

Operations and Algebraic Thinking

- Write and interpret numerical expressions.
- Analyze patterns and relationships.

Number and Operations in Base Ten

- Understand the place value system.
- Perform operations with multi-digit whole numbers and with decimals to hundredths
- Solve real world problems using manipulatives, calculators and models.

Number and Operations—Fractions

- Use equivalent fractions as a strategy to add and subtract fractions.
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Measurement and Data

- Convert like measurement units within a given measurement system.
- Represent and interpret data.
- Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

Geometry

- Graph points on the coordinate plane to solve real-world and mathematical problems.
- Classify two-dimensional figures into categories based on their properties.

ENGLISH/LANGUAGE ARTS

Writing

Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.

With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

- Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose.

- Provide logically ordered reasons that are supported by facts and details.
- Link ideas using words, phrases, and clauses (e.g., consequently, specifically, in contrast).
- Provide a concluding statement or section related to the information or explanation presented
- Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
- Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.
- Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.
- Use a variety of transitional words, phrases, and clauses to manage the sequence of events.
- Use concrete words and phrases and sensory details to convey experiences and events precisely.

Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

Conduct short research projects that build knowledge through investigation

Phonics and Word Recognition:

- Know and apply grade-level phonics and word analysis skills in decoding words.
- Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Reading: Literature

- Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
- Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem.
- Describe how a narrator's or speaker's point of view influences how events are described.

Reading: Informational Text

- Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
- Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts.
- Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
- Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

Language

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

- Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences.
- Form and use the perfect (e.g., I had walked; I have walked; I will have walked) verb tenses.
- Use verb tense to convey various times, sequences, states, and conditions.
- Recognize and correct inappropriate shifts in verb tense.
- Use correlative conjunctions (e.g., either/or, neither/nor).

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

- Use commas correctly.
- Use underlining, quotation marks, or italics to indicate titles of works.
- Spell grade-appropriate words correctly, consulting references as needed.

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies.

- Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.
- Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).
- Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover, in addition).

Fluency

- Read grade level texts with sufficient accuracy and fluency to support comprehension with purpose and understanding.
- Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.

Speaking and Listening

- Engage effectively in a range of collaborative discussions on *grade 5 topics and texts*, building on others' ideas and expressing their own clearly.
- Follow agreed-upon rules for discussions and carry out assigned roles.
- Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
- Summarize information, read or presented, in diverse media and formats, including visually, quantitatively, and orally supporting claims with reasons and evidence.

- Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
- Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation

SCIENCE

- Scientific Method – observe/predict/collect data/ analyze/draw conclusions/communicates findings

Earth Science

- Develop a model describing how the geosphere, biosphere, hydrosphere and atmosphere interact
- Describe/graph the distribution of water/fresh water on Earth
- Obtain and combine information about ways individual communities use science ideas to protect Earth's resources/environment
- Support an argument that diff. in the apparent brightness of the sun compared to other stars is due to their relative distances from Earth
- Graph data displaying patterns of daily changes in length/direction of shadows, day/night, and seasonal appearance of some stars

Energy

- Develop a model to describe that matter is made of particles too small to be seen
- Measure/graph quant. to provide evidence that total wt. of matter is conserved when heating/cooling/mixing substance.
- Conduct an investigation to determine whether the mixing of 2 or more substances. results in new substances
- Support an argument that gravitational force exerted by Earth on objects is directed down
- Use models to describe that energy in animals' food was once energy from the sun

Ecosystems

- Support an argument that plants get the materials they need for growth chiefly from air and water
- Develop a model to describe the movement of matter among plants, animals, decomposers and the environment

SOCIAL STUDIES

Beginnings to Colonization

- Human migration of the Americas
- Describe the life of peoples living in North America before European exploration.
- Identify causes and consequences of European exploration and colonization.
- Describe environmental, political and cultural consequences of the convergence of Europeans, Native Americans and Africans in North America in the late 15th century through the 17th century.
- Describe European impact on Native American culture
- Describe developments in the three regions of colonies including settlement patterns and daily life.
- Describe the life of enslaved/free Africans in the colonies.

American Revolution

- Identify the major political, economic, and ideological reasons for the American Revolution.
- Explain the multi-faceted nature of the American Revolution and its consequences.
- Explain some of the challenges faced by the new nation under the Articles of Confederation, and analyze the development of the Constitution as a new plan for governing.

Continent and Cultural Units

Each year, 1st – 5th grade students focus on a study of 2 continents throughout the school year. This includes a study of political and physical maps, identifying countries, cities, capitals, land and water features, using an atlas, and making maps as well as a study of the history and people of the countries. Research and a creation of a presentation for the class is included as well.