

## Science Course Purpose

Your child will engage in scientific inquiry using scientific literacy. Students will apply a range of thinking processes, such as recalling facts, applying knowledge, analyzing, experimenting evaluating and creating.

### Grade Level Expectations

#### **PROPERTIES OF MATTER**

Students will know that materials can be classified as pure substances or mixtures, depending on their chemical and physical properties. Students will explain that mixtures are made of combinations of elements and/or compounds, and how using a variety of physical means can separate them. Students will explain that pure substances can be either elements or compounds, and they cannot be broken down by physical means.

#### **STRUCTURE AND FUNCTION**

Students will analyze the many organisms, including humans, and explain their specialized organ systems that interact with each other to maintain dynamic internal balance. Students will explain that all organisms are composed of one or more cells; each cell carries on life- sustaining functions. Students will illustrate and describe in writing the multi-cellular organisms need specialized structures and systems to perform basic life functions.

#### **EARTH IN THE SOLAR SYSTEMS**

Students will develop models that show how the solar system is composed of planets and other objects that orbit the sun, and explain that gravity is the force that governs the motions of objects in the solar system (Gravitational Force).

#### **SCIENCE AND TECHNOLOGY IN SOCIETY**

Students will analyze and explain how technology allows us to improve food production and preservation, thus improving our ability to meet the nutritional needs of growing populations.

## Social Studies Course Purpose

Your child will discuss information from history and social studies to enhance their understanding of our nation and our world using literacy, inquiry and research skills to analyze, evaluate and present history and social studies information. Civic competence in addressing historical issues and current problems requires the use of information, skills and empathy.

Your child will be prepared to compete in the globalized 21st century.

### Grade Level Expectation

#### **CONTENT KNOWLEDGE**

##### **Global Studies, Eastern Hemisphere Geographical Location**

Students will demonstrate an understanding of significant events of World History. Students will compare and contrast influence of cultures and leaders on their country's development. Students will be expected to compare this knowledge with the United States, Connecticut and other areas of the world.

#### **HISTORY AND SOCIAL STUDIES LITERACY**

##### **Historical Research and Evaluation**

Students will demonstrate competence in literacy, inquiry and research skills in order to analyze, evaluate and present history and social studies information. Students will infer from primary and secondary resources as they gather information from thematic maps.

#### **HISTORICAL APPLICATION**

##### **Historical Perspective**

Students will evaluate historical issues and current problems that require evidence to describe or predict impact of history. Students will compare, contrast and evaluate views of a national issue.

## Unified Arts Course Purpose

#### **Music and Visual Arts**

Your child will gain an understanding and appreciation of the arts, as well as the ability to participate in creating and performing the Arts, as they are essential attributes of an educated person. Your child will understand and use the materials, techniques, forms, language, notation, literature/ repertoire, and diverse cultural and historical contexts of each art form. Students will participate in art criticism with teachers and peers.

#### **Physical Education**

Your child will take responsibility for protecting their health. Students will learn about nutrition and physical activity, and apply this knowledge by making healthy choices for themselves. Your child will have opportunities to:

- Set personal goals for healthy eating and physical activity, and make healthy choices;
- Actively engage in physical education and enjoy physical activity;
- Advocate for nutrition education and physical activity options at school;
- Take an active role in advocating for healthy food choices at school, not only in the cafeteria, but in vending machines, school stores and fundraising activities; and
- Serve as role models for younger children.

#### **Educational Technology**

Your child will incorporate technology across all curriculum areas in order to respond to complex problems and broaden content mastery. Students will use technology in order to communicate information and ideas, conduct research, organize data, solve problems and create original work.

## Grade Seven



## Curriculum

### East Windsor Public Schools

#### ***Mission:***

The East Windsor Middle School is a community of educators, parents, and townspeople that recognize that each child is a unique individual possessing different abilities, interests and needs. It is our mission that each child will reach his or her full potential by setting high expectations for achievement and citizenship, and providing the necessary resources and supports to ensure student success. Our goal is to be an exemplary middle school that promotes a sense of optimism in each student's future.

#### ***Student Profile:***

Seventh graders are concrete and abstract thinkers. Students at this age are increasingly able to memorize and think logically about concepts. They engage in introspection and probing into own thinking, as they begin to plan realistically for the future. They may begin to read a great deal. Seventh graders need to feel important in the world and believe in something. They will face decisions that require sophisticated cognitive and social-emotional skills.

# Grade Seven Course Purposes and Expectations

## Language Arts Course Purpose

Your child will engage in the workshop instructional model to read, think, analyze, question and converse about books on a daily basis, so that every student will be highly skilled in reading, writing, listening, speaking, viewing and presenting across all content areas.

## Grade Level Expectations

### WRITING

Students will express, develop and substantiate ideas and experiences through their own writing and artistic and technical presentations. Students will write descriptive, narrative fiction, content specific expository, persuasive, and poetic pieces through the writing process incorporating capitalization, punctuation, and usage rules from previous grades.

#### Writing Process

Students will communicate with others by applying English Language Conventions through the writing process of *Plan, Draft, Revise, Edit, Publish, and Reflect*

Students will write using story structure of beginning, middle and end. They will read their writing, confer with peers or teacher to add, delete or rearrange words and sentences and check for fluency.

### READING

Students comprehend and respond in literal, critical and evaluative ways to various texts that are read, viewed and heard.

#### Reading Comprehension

Students will independently accomplish all before, during and after comprehension grade-level expectations. Students will evaluate text for story meaning, and connections to the author's life.

- Students will read, view, listen to and write about a variety of fiction and nonfiction contemporary, classical, multicultural and culturally relevant texts in all content areas.
- Students will use appropriate strategies before, during and after reading in order to construct meaning.
- Students will use information from the text to make predictions based on what is read.
- Students interpret, analyze and evaluate text in order to extend understanding and appreciation.
- Students will use context clues to determine meanings of unknown or multiple-meaning words or figurative language.

#### Reading and Responding

- Students will provide evidence from the text to support all oral, written and presented responses about the text, as they demonstrate a general understanding, develop an interpretation, make reader text connections, and analyze content and structure.

#### Reading Reflection / Behaviors

- Students will choose a variety of genres to read, hear, view and write for personal enjoyment.
- Students will recommend books to others and explain the reason for the recommendation.
- Pose questions, listen to the ideas of others, and contribute own information and ideas in group discussions, panel discussions and interviews.
- Students will set reading goals, create a plan to meet those goals, and monitor their progress.

## Mathematics Course Purpose

Your child will use mathematical literacy to understand major mathematic concepts. They will apply these understandings to situations in daily life. Making connections between mathematics and other disciplines is a key to the appropriate application of mathematics skills and concepts to solve problems.

## Grade Level Expectations

### ALGEBRAIC REASONING:

#### Patterns and Functions

Students will represent and analyze patterns and functional relationships using a variety of strategies, tools and technologies.

- Students will understand and describe patterns and functional relationships (variables).
- Students will represent and analyze quantitative relationships in a variety of ways (expressions, inequalities, formulas).
- Students will use operations, properties and algebraic symbols to determine equivalence and solve problems (Algebraic expressions).

### NUMERICAL AND PROPORTIONAL REASONING

Students will express quantitative relationships numerically in multiple ways in order to make connections and simplify calculations using a variety of strategies, tools and technologies

- Students will understand that a variety of numerical representations can be used to describe quantitative relationships (Magnitude of numbers).
- Students will use numbers and their properties to compute flexibly and fluently and to reasonably estimate measures and quantities (Estimate solutions to problems and justify reasonableness).

### GEOMETRY AND MEASUREMENT

Students will recognize that shapes and structures can be analyzed, visualized, measured and transformed using a variety of strategies, tools and technologies.

- Students will use properties and characteristics of two- and three- dimensional shapes and geometric theorems to describe relationships, communicate ideas and solve problems (Compare and describe in writing).
- Students will use spatial reasoning, location and geometric relationships to solve problems.
- Students will develop and apply units, systems, formulas and appropriate tools to estimate and measure (Geometric Solids).

### WORKING WITH DATA:

#### Probability and Statistics

Students will analyze data to make informed decisions using a variety of strategies, tools and technologies.

- Students will collect, organize and display data using appropriate statistical and graphical methods (Formulate questions, design studies and surveys).
- Students will analyze data sets to form hypotheses and make predictions (Defend in writing patterns and trends).
- Students will understand and apply basic concepts of probability while designing probability experiments. Students will identify possible outcomes using models, tree diagrams, tables and organized lists to determine theoretical probabilities.