South Windsor Public Schools

Eli Terry Elementary School
Orchard Hill Elementary School
Philip R. Smith Elementary School
Pleasant Valley Elementary School

Curriculum Guide
4th Grade

South Windsor Public Schools
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LITERACY

Unit Name	Skills/Student Outcomes	
Reading Literature and Informational Text	• Determine a theme of a story, drama, or poem from details in the text; summarize the text	RL.2
	• Describe in depth a character, setting, or event, drawing on specific details in the text	RL.3
	• Determine the meaning of words and phrases as they are used in a text including those that allude to significant characters found in mythology	RL.4
	• Explain major differences between poems, drama, and prose and refer to the structural elements of poems and drama when writing or speaking about a text	RL.5
	• Compare and contrast the point of view from which different stories are narrated	RL.6
	• Compare and contrast the treatment of similar themes and topics and patterns of events in stories, myths, and traditional literature from different cultures	RL.9
	• Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text	RI.1
	• Determine the main idea of a text and explain how it is supported by key details; summarize text	RI.2
	• Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided	RI.6
	• Explain how an author uses reasons and evidence to support particular points in a text	RI.8
	• Integrate information from two texts on the same topic to write or speak knowledgeably	RI.9
	• By the end of the year, read and comprehend literature and informational text in the grades 4–5 text complexity band proficiently, with scaffolding as needed at high end of range	RL/ RI.10
Writing	• Write opinion pieces on topics or texts, supporting a point of view with reasons and information	W.1
	• Write informative/explanatory texts to examine a topic and convey ideas and information clearly	W.2
	• Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences	W.3
	• Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience	W.4
	• Conduct short research projects that build knowledge through investigation of different aspects of a topic	W.7
	• Draw evidence from literary or informational texts to support analysis, reflection, and research, and provide a list of sources	W.9
	• Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences	W.10
Speaking and Listening	• Identify the reasons and evidence a speaker provides to support particular points	SL.3
	• Pose and respond to specific questions to clarify or follow up on information and make comments that contribute to the discussion and link to the remarks of others	SL.1.c
	• Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion	SL.1.a
	• Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes	SL.5
Language and Foundational Skills in Reading	• Know and apply grade-level phonics and word analysis skills in decoding words	RF.3
	• Read with sufficient accuracy and fluency to support comprehension	RF.4
	• Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons	L.1.f
	• Correctly use frequently confused words	L.1.g
	• Use a comma before a coordinating conjunction in a compound sentence	L.2.c
	• Use correct capitalization	L.2.a
	• Choose words and phrases to convey ideas precisely	L.3.a
	• Choose punctuation for effect	L.3.b
	• Recognize and explain the meaning of common idioms, adages, and proverbs	L.5.b
	• Explain the meaning of simple similes and metaphors (e.g., *as pretty as a picture*) in context	L.5.a
	• Use common Greek and Latin affixes and roots as clues to the meaning of a word	L.4.b

MATHEMATICS

Domain Name	Skills/Student Outcomes	
Operations and Algebraic Thinking	*Use the four operations with whole numbers to solve problems*	
	• Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations	4.OA.A.1
	• Multiply or divide to solve word problems involving multiplicative comparison	4.OA.A.2
	• Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted; assess the reasonableness of answers using mental computation and estimation strategies including rounding	4.OA.A.3
	Gain familiarity with factors and multiples	
	• Find all factor pairs for a whole number in the range 1-100; recognize that a whole number is a multiple of each of its factors; determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number; determine whether a given whole number in the range 1-100 is prime or composite	4.OA.B.4
	Generate and analyze patterns	
	• Generate a number or shape pattern that follows a given rule; identify apparent features of the pattern that were not explicit in the rule itself	4.OA.C.5
Number and Operations in Base Ten	*Generalize place value understanding for multi-digit whole numbers*	
	• Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right	4.NBT.A.1
	• Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form; compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < to record the results of comparisons	4.NBT.A.2
	Use place value understanding and properties of operations to perform multi-digit arithmetic	
	• Use place value understanding to round multi-digit whole numbers to any place	4.NBT.A.3
	• Fluently add and subtract multi-digit whole numbers using the standard algorithm	4.NBT.B.4
	• Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models	4.NBT.B.5
	• Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models	4.NBT.B.6
Number and Operations in Fractions	*Extend understanding of fraction equivalence and ordering*	
	• Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size	4.NF.A.1
	• Compare two fractions with different numerators and different denominators. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions	4.NF.A.2
	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers	
	• Understand a fraction a/b with a > 1 as a sum of fractions 1/b	4.NF.B.3
	• Apply and extend previous understandings of multiplication to multiply a fraction by a whole number	4.NF.B.4
	Understand decimal notations for fractions and compare decimal fractions	
	• Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100	4.NF.C.5
	• Use decimal notation for fractions with denominators 10 or 100	4.NF.C.6
	• Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions	4.NF.C.7

MATHEMATICS (continued)

Domain Name	Skills/Student Outcomes	
Measurement and Data	*Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit*	
	• Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec	4.MD.A.1
	• Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit	4.MD.A.2
	• Apply the area and perimeter formulas for rectangles in real world and mathematical problems	4.MD.A.3
	Represent and interpret data	
	• Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8); solve problems involving addition and subtraction of fractions by using information presented in line plots	4.MD.B.4
	Geometric measurement: understand concepts of angle and measure angles	
	• Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement	4.MD.C.5
	• Measure angles in whole-number degrees using a protractor; sketch angles of specified measure	4.MD.C.6
	• Recognize angle measure as additive; solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems	4.MD.C.7
Geometry	*Draw and identify lines and angles, and classify shapes by properties of their lines and angles*	
	• Draw points, lines, line segments, rays, angles, and perpendicular and parallel lines; identify these in two-dimensional figures	4.G.A.1
	• Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size; recognize right triangles as a category, and identify right triangles	4.G.A.2
	• Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts; identify line-symmetric figures and draw lines of symmetry	4.G.A.3

SCIENCE

Unit Name	Skills/Student Outcomes	
Food Chains and Food Webs	• Describe how different plants and animals are adapted to obtain air, water, food and protection in specific land habitats	B.3
	• Describe how different plants and animals are adapted to obtain air, water, food and protection in water habitats	B.4
	• Describe how animals, directly or indirectly, depend on plants to provide the food and energy they need to grow and survive	B.10
	• Describe how natural phenomena and some human activities may cause changes to habitats and their inhabitants	B.11
Electricity and Magnetism	• Describe how batteries and wires can transfer energy to light a light bulb	B.14
	• Explain how simple electrical circuits can be used to determine which materials conduct electricity	B.15
	• Describe the properties of magnets, and how they can be used to identify and separate mixtures of solid materials	B.16
Processes that Shape Earth	• Develop a model of ways to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move	4-PS4-1
	• Identify evidence from patterns in rock formations and fossils in rock layers to explain changes in a landscape over time	4-ESS1-1
	• Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind or vegetation	4-ESS2-1
	• Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem	3-5-ETS1-2
Human Impact	• Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment	4-ESS3-1
	• Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.	4-ESS3-2

SOCIAL STUDIES

Unit Name	Skills/Student Outcomes	
Geography	• Construct maps and other graphic representations of both familiar and unfamiliar places	GEO.4.1
	• Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their environmental characteristics	GEO.4.2
	• Describe how environmental and cultural characteristics influence population distribution in specific places or regions	GEO.4.5
	• Explain how culture influences the way people modify and adapt to their environments	GEO.4.3
	• Explain how cultural and environmental characteristics affect the distribution and movement of people, goods, and ideas	GEO.4.6
	• Identify examples of the variety of resources (human capital, physical capital, and natural resources) that are used to produce goods and services	ECO.4.3
	• Analyze the effects of catastrophic environmental and technological events on human settlements and migration	GEO.4.8
	• Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and their environmental characteristics	GEO.5.1
	• Explain how culture influences the way people modify and adapt to their environments	GEO.5.2
The 13 Colonies Connecticut Colony (Part 1)	• Create and use a chronological sequence of related events to compare developments that happened at the same time	HIST.5.1
	• Compare life in specific historical periods to life today	HIST.5.2
	• Use information about a historical source (including the maker, date, place of origin, intended audience, and purpose) to judge the extent to which the source is useful for studying a particular topic	HIST.5.3
	• Explain why individuals and groups during the same historical period differed in their perspectives	HIST.5.4
	• Explain connections among historical contexts and people's perspectives at the time	HIST.5.5
	• Explain how groups of people make rules to create responsibilities and protect freedoms	CIV.5.1
	• Describe ways in which people benefit from and are challenged by working together, including through government, workplaces, voluntary organizations, and families	CIV.5.2
	• Identify core civic virtues and democratic principles that guide government, society, and communities	CIV.5.3
	• Identify positive and negative incentives that influence the decisions people make	ECO.5.1
	• Explain why individuals and businesses specialize and trade	ECO.5.3
	• Identify examples of the variety of resources (human capital, physical capital, and natural resources) that are used to produce goods and services	ECO.5.2
American Revolution	• Explain probable causes and effects of events and developments	HIST.5.9
	• Use evidence to develop a claim about the past	HIST.5.10
	• Identify core civic virtues and democratic principles that guide government, society, and communities	CIV.5.3
	• Explain how policies are developed to address public problems	CIV.5.4
	• Explain how human settlements and movements relate to the locations and use of various natural resources	GEO.5.3
	• Present a summary of arguments and explanations to others outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, and reports) and digital technologies (e.g., internet, social media, and digital documentary)	INQ 3–5.12
	• Explain why individuals and groups during the same historical period differed in their perspectives	HIST.5.4
	• Explain connections among historical contexts and people's perspectives at the time	HIST.5.5
Connecticut History (Part 2)	• Explain connections among historical contexts and people's perspectives at the time	HIST.3.4
	• Create and use a chronological sequence of related events to compare developments that happened at the same time	HIST.3.1
	• Compare life in specific historical time periods to life today	HIST.3.2
	• Use information/technology about a historical source (including the maker, date, place of origin, intended audience, and purpose) to judge the extent to which the source is useful for studying a particular topic	HIST.3.10
	• Create and use a chronological sequence of related events to compare developments that happened at the same time	HIST.5.1
	• Present a summary of arguments and explanations to others outside the classroom using print and oral technologies (e.g., posters, essays, letters, debates, speeches, and reports) and digital technologies (e.g., Internet, social media, and digital documentary)	INQ 3–5.11
	• Describe how people's perspectives shaped the historical sources they created	HIST.3.5

S.T.E.M.

Module Name	Skills/Student Outcomes
Energy: Collisions	• Evaluate a problem in a new and novel situation • Apply a step by step design process to solve a problem • Predict the effects of a collision
Input/Output: Computer Systems	• Apply general understanding of computer systems to make sense of human-made machines • Apply technology to solve age-appropriate challenges by creating digital artifacts such as games or tools • Develop efficient solutions to computational problems by breaking into sub-problems and identifying parts that can be abstracted and modularized

HEALTH EDUCATION

Unit Name	Skills/Student Outcomes
Nutrition	• Analyze the components of My Plate • Create a healthy eating journal
Substance Abuse	• Examine effects of nicotine on the body • Identify short and long term effects of alcohol • Demonstrate appropriate decision making skills
Growth and Development	• Describe the physical and emotional changes that occur during puberty • Discuss ways to obtain information about human growth and development from family, school personnel, health professionals, and other responsible adults • Identify and explain how the media may influence messages one may receive about body image • Define the terms communicable (infectious) and non-communicable (non-infectious) diseases and identify ways to help prevent disease (e.g. HIV/AIDS, diabetes, cancer, heart disease) • Compare behaviors that are safe with those that are risky or harmful

PHYSICAL EDUCATION

Unit Name	Skills/Student Outcomes
Manipulative *Units may include: Volleyball, Basketball, Throwing/Catching (Football, Frisbee, etc.)*	• Demonstrate an understanding of what the body does, where the body moves, how the body performs the movement and relationships that occur in increasingly more complex movement and game forms • Demonstrate proper technique • Establish rules for unit and exhibit fair and safe playing procedures • Apply the understanding of physical activity concepts to developing movement sequences and game strategies
Striking *Units may include: Soccer, Tennis, Floor Hockey, Badminton, Baseball/Softball*	• Utilize the concept of a dominant hand/foot for throwing/striking/kicking patterns • Effective movement and preparation of hands, arms and legs are key to performance and success • Apply the understanding of physical activity concepts to developing movement sequences and game strategies
Fitness	• Demonstrate a variety of activities that increase heart rate, stretch and strengthen muscles • Demonstrate understanding of the relationship between activities and physical fitness components (e.g., cardiorespiratory endurance, muscular strength, and endurance flexibility) • Assess current fitness level • Identify activities that will utilize/improve the different components of fitness
Cooperative Games	• Develop strategies for including all persons, despite individual differences, in physical activity settings • Use physical activity as a positive opportunity for social and group interaction and development of leadership skills

VISUAL ARTS

Unit Name	Skills/Student Outcomes
Claywork	- Continuation and refinement of hand building techniques (pinch/pull, coil building, slab building to scoring and slipping and carving/layering) - Glazing process - Use of clay tools
Drawing	- Continuation and refinement of use and care of drawing materials - Continuation and refinement of use of pencils, crayons, colored pencils, pens, markers, chalk, pastels, etc. - Refining mark making - Exploration of pictorial space and realistic rendering - Drawing from memory, imagination or observation
Painting	- Color identification (primary/secondary to warm/cool and complementary, analogous, monochromatic, neutrals) - Color mixing primaries, tints/shades to tones/shading - Review use and care of painting tools - Review palette use - Review/continued exploration of tempera and water color paints - Review/continued exploration of paint application techniques - Introduction to acrylic paint
Printmaking	- Use and care of printing tools and materials - Development and exploration of the printing process, techniques and tools (impression/repetition) - Understanding process of creating a series
Responding *(embedded throughout all projects as well as VTS)*	- Review/continue looking at and talking about artwork; describe and examine details - Looking at and talking about art heritage and cultures from around the world - Continuation/refinement of listening/discussion skills; consider and respect the thoughts and ideas of others "Art detectives" (hunting for clues) - Use art vocabulary in expressing thoughts and opinions - Introduction/begin to understand difference between artist intent and viewer interpretation - Supporting inferences with visual evidence and prior knowledge
Fabrics/Textiles	- Continuation of creating with fabrics/textiles using collage and application techniques - Introduction to weaving on simple looms: warp/weft, over/under, patterns, etc. - Creating 3D art forms with fabrics
Sculpture	- Review 2D vs 3D concepts - Continuation of creating 3D artwork using a variety of materials and methods - Continue creating moving sculptures: mobiles, etc. - Introduction to use of tools/armatures - Introduction to concepts of sculpture vs base, as well as shallow relief to free standing sculptural forms from realistic to abstract

MUSIC

Unit Name	Skills/Student Outcomes	
General Music	- Sing independently, on pitch and in rhythm, with appropriate timbre, diction and posture and maintain a steady tempo - Sing in groups, blending vocal timbres, matching dynamic levels and responding to the cues of a conductor - Create a theme and variation using specific guidelines	
Beginning Band	- Read and perform 5 notes using standard musical print notation - Enroll in and navigate SMART Music - Develop good practice habits - Develop skills needed to contribute positively to ensemble	- Follow the cues of the conductor - Proper playing position, posture and hand position - Develop proper embouchure - Display proper care and maintenance of instrument
Beginning Orchestra	- Display proper care/maintenance/preparation of instrument - Display correct playing position and posture - Echo open D and open A string patterns - Display proper left hand position - Learn/memorize/perform various songs using D Major scale - Develop good practice habits	- Read and perform standard notation of musical print - Right hand bow hold, bowing and bow direction - Independent tuning 1st and 2nd endings - Follow the cues of the conductor - Perform Ode to Joy (melody and parts, in ensemble setting)