Curriculum Overview

Sussex Montessori School

Based on Montessori Curriculum Albums First State Montessori Academy Curriculum Delaware Department of Education Guidelines

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The following charts are meant to provide an overview of the Integrated First State Montessori Academy Curriculum. They provide a quick reference for teachers as they plan units that begin with the major concepts of the Montessori Great Lessons and lead to evidence that children are accomplishing the goals of the State of Delaware Content/National Core Standards in each content area.

The Montessori curriculum in an integrated curriculum requiring that teachers have knowledge of —over-arching big ideas and thought processes, related to their course areas. They also need tools to assess when students demonstrate the development of the big ideas, human potentials, and thought processes as they work within various integrated projects and classroom experiences. Teachers also need a clear understanding of the knowledge goals for thinking within the various content strands of Language Arts, Mathematics, Science and Social Studies. The SMS Curriculum framework provides teachers with the goals for each of these strands at each multi-age stage of development (5-7, 7-9, and 9-12 year olds). Consistent with the goals of the Delaware Recommended Curriculum (2006), the framework is designed to support a learning environment in which students will:

- Be engaged in integrated and meaningful communication;
- Be assessed through ongoing instructional activities which require them to solve problems, gather and use resources, work collaboratively, and assume responsibility for their learning.
- Access, organize, and communicate information using modern technology.
- Experience a multicultural perspective.
- Reflect on their own development and set goals for their learning.
- Be constructive and critical members of a community of life- long learners.
- Be active participants in gathering information from a variety of sources.
- Be instructed using materials appropriate to their individual and developmental needs.
- Be engaged in authentic and purposeful activities.

Teachers use **Understanding by Design (UbD)** model of instructional planning to develop specific long-term studies connected around enduring understandings of the Montessori Curriculum. These are explained on the charts that follow, and include the unity of humans, the unity of all living things on earth, and the unity of the earth itself. These enduring understandings align with the enduring understandings of the Delaware Science and Social Studies Content Standards. For the K-1st (ages 5-7) and the 2nd-

3rd (ages 7-9) multi-age programs, the children focus on two essential questions that arise from these three enduring understandings. This creates two-year-long cycles for each two-year multi-age program integrating science and social studies content standards together under each essential question. This integration extends to the Mathematics and English Language Arts standards as children use these tools to communicate and evaluate their understandings of the world.

The first year, is devoted to the concept of —What does it mean to be Human? The second year, to —How does the World Work? During the K-3 years, students study these questions within the context of continent studies. In other words, they explore what it means to be human and how the world works through the lens of various cultures on each continent. In the 4th-6th (ages 9-12) multi-age program, the children focus on three cycles, adding a third essential question, —What is Culture? Children learn to use language, mathematics, scientific inquiry, and research to develop their inquiry-based studies.

The complete SMS Curriculum Framework provides the teacher with the standards that must be addressed within the context of the unit developed and the projects in which the children engage. Small group lessons, individual lessons, and projects provide opportunities for teachers to observe children and to evaluate their progress towards the goals for learning across each strand of the language arts, mathematics, science, and social studies curriculum, as well as their understanding and demonstration of the over-arching big ideas and thought processes. The Framework provides various formative and summative assessment tools for teachers to confirm their observations and to make adjustments in instruction of those observations. The RTI model of assessment/instruction allows teachers to adjust instructional strategies and follow more closely the progress of children who are off-track learners.

The development of the child in the Montessori classroom is embedded within the context of a classroom that supports the best educational practices. It is generally accepted that the work-force of the future will require skills such as creative and innovative thinking, comfort with ideas and abstraction, as well as a global worldview and vibrant imagination. Research (Adams, 2005) shows that children develop these skills in classrooms designed to promote:

- Collaborative learning and community service leading to mutual respect of others and the development of the child's global perspective.
- Academic development supported by an emphasis on the social/emotional development of the child within a multi-age community of learners.

- A focus on big ideas and essential questions with extended work periods that allow for depth of understanding and development of habits of mind.
- **Child- centered inclusive** learning environments that utilize **differentiated instruction** and **flexible grouping** to meet individual children's learning needs.
- Classroom-based assessment and observation that informs instructional decision making as the basis for RTI.
- Hands-on interactive curricular materials and classroom environment that supports children developing from concrete to abstract thinking.

This document is designed to provide a map of the complete SMS Curriculum Framework providing a starting place for teachers as they develop units that support the concepts addressed in this introduction.

Adams, K. (2005). "Sources of innovation and creativity". A paper commissioned by the National Center on Education and the Economy. Accessed 10/26/2011 at http://www.fpspi.org/Pdf/InnovCreativity.pdf.

Montessori Great Lessons

The Montessori Great lessons are impressionistic lessons which provide a —whole for the integrated academic curriculum. These lessons are shared each year with various levels of detail according to the children's development. Particular emphasis should be given to the parts of the story that reinforce the content standards being developed in a given year.

The First Great Lesson - Coming of the Universe and the Earth

The First Great Lesson focuses on the origins of the universe and our own planet. Using impressionistic charts and experiments directly related to the basic physical properties of matter, a foundation is made for the future study of physics, chemistry, astronomy and geology.

This lesson leads to the study of:

- Astronomy: solar system, stars, galaxies, comets, constellations
- Meteorology: wind, currents, weather, fronts, erosion, water cycle, clouds, glaciers
- Chemistry: states of matter, changes, mixtures, reactions, elements, atoms, periodic table, compounds, molecules, chemical formulas, equations, lab work, experimentation
- Physics: magnetism, electricity, gravity, energy, light, sound, heat, friction, motion, experimentation
- Geology: types of rocks, minerals, land forms, volcanoes, earthquakes, plate tectonics, ice ages, eras of the earth
- Geography: maps, globes, latitude/longitude, climates, land/water form names, continent and country research

The Second Great Lesson: Coming of Life

The Second Great Lesson involves the coming of life. This lesson revolves around the Timeline of Life, a long chart with pictures and information about microorganisms, plants, and animals that have lived (or now live) on the earth. The great diversity and interconnectedness of various organisms is emphasized.

This lesson leads to the study of:

- Biology: cells, organized groups, five kingdoms, specimens, dissection, observation, use of microscope
- Botany: study of plants, classification, functions, parts of plants (seed, fruit, leaf, stem, root, flower), types of plants
- Habitats: location, characteristics, food chains/webs, symbiosis, adaptation, ecosystems, conservation
- Ancient Life: eras of the earth, evolution, extinction, fossil records, excavation
- Animals: classification, needs, similarities/differences, human systems, nutrition, hygiene

The Third Great Lesson: Coming of Human Beings

The next Great Lesson is the Coming of Human Beings. This focuses on the three gifts that make humans special: a mind to imagine, a hand to do work, and a heart that can love. This lesson will lead children to explore the beginning of civilizations and the needs of early humans.

This lesson leads to the study of:

- History: timelines, prehistory, ancient civilizations, world history, history of specific countries and continents
- Culture: art, artists, music, composers, dance, drama, architecture, design, philosophy, religion, grace and courtesy
- Social Studies: current events, government, economics, commerce, volunteering & charity
- Discovery & Invention: scientists, inventors, scientific method, inventions, simple machines

The Fourth Great Lesson: The Story of Writing—The Fourth Great Lesson is the Story of Writing, sometimes called Communication in Signs. In this lesson, the story of the development of the written alphabet is told, with an emphasis on the incredible ability that humans have of committing their thoughts to pa-per. Included in the story are pictographs, symbols, hieroglyphs, early alphabets, and the invention of the printing press.

This lesson leads to the study of:

- Reading: literature, poetry, non-fiction, myths and folk tales, authors, reading comprehension, reading analysis, literary terms
- Writing: elements of style, function, voice, composition, letter writing, research, study skills
- Language: origins of spoken language, foreign languages, history of languages, speech, drama
- Structure: alphabets, bookmaking, grammar, punctuation, sentence analysis, word study, figures of speech

The Fifth Great Lesson: The Story of Numbers—The last of the lessons is the Fifth Great Lesson: The Story of Numbers, also called the History of Mathematics. This lesson begins with the earliest civilizations, who often only had "one", "two", and "more than two" as their numeric system. It continues with a look at different numbering systems throughout the centuries, culminating in the decimal system that we use today.

This lesson leads to the study of:

- Mathematics: operations, fractions, decimals, multiples, squares, cubes, percentages, ratio, probability, intro to algebra
- Numbers: origins of numbers and systems, bases, types of numbers, scientific notation, mathematicians
- Geometry: congruency, similarity, nomenclature of lines, angles, shapes, solids, measurement, theorems
- Application: story problems, measurement, estimation, graphs, patterning, rounding, money concepts

Clearly, these five stories encompass an enormous amount of information about the origins of the world around us. When each story is shared, it is never left alone - the story becomes the springboard to further study but not the focus. The stories are referred to throughout the year when new topics are introduced, as a way of providing unity and cohesion to such a wide variety of studies. More information may be found on the Montessori For Everyone Website: http://www.montessoriforeveryone.com/The-Five-Great-Lessons ep 66-1.html

Interdisciplinary Curriculum Transfer Knowledge

Transfer knowledge in the general Montessori Curriculum, are not based on the transfer of a specific body of knowledge, but rather of key conceptual understandings and the development of what Maria Montessori called the human potential. These understandings are potentials transfer throughout the child's school and later life experience. These skills are described in the following chart. Please see the complete curriculum guide for transfer knowledge related to each content area.

Montessori Great Lessons tied to what it means to live in the world.	Human Potentials	Research Skills	Self-Expression
• Unity of Human Beings: Students understand the similarities and differences of cultures across the world; that people interact with the natural world in distinct ways that produce cultural uniqueness; that people, places, and environments are integrated; that life involves producing and consuming. • Unity of all Living Things on Earth: Students will show respect for the beauty and wonder of nature.	Students will: Understand the role the human potentials play in both their school community and their everyday lives. • Character – Students are trustworthy, compassionate, and demonstrate integrity. • Leadership – Students combine vision, ethics, and courage to empower others to make a difference in the community. • Thinking Skills – Students develop flexibility, perseverance,	 Students will: Understand what makes a question which leads to inquiry and investigation. Plan investigations to address a question or problem. Use mathematics, reading, writing, and technology when conducting an investigation and communicating the results. Synthesize information from various resources and experiences to develop inquiries about the world around them. 	Students will: Discover and express ideas, feelings, beliefs and values. Reflect on how these ideas effect the way they interact with the world. Acquire the skills necessary to successfully participate in groups, which includes defining the objective, dividing responsibilities, and working cooperatively. Demonstrate cooperation, assertion, responsibility, empathy

They develop an understanding of how, through science, we learn how nature works. They understand that all people use natural resources to meet a variety of human needs. This use of resources defines many cross cultural human interactions.

- Unity of the Universe Itself: Students develop an understanding of their relationship and place in the development of the universe, how the earth has changed over time through physical, chemical, and geological processes.
- curiosity, imagination, inventiveness, wonder, and the ability to reflect on process and product which support lifelong and collaborative learning in order to address real life challenges.
- Life Management Students develop self-awareness so that in the long run they make responsible, healthy and balanced life/ work choices.
- Creative and Artistic Students discover and develop creative gifts so that in the long run they will be able to express themselves creatively and artistically, recognize and respect creativity in others, utilize the creativity of others, and preserve flexibility of thought and openmindedness to look at and meet challenges.
- Service and Responsibility Students learn the value of service and responsibility so that in the long run they will be able to demonstrate empathy, compassion, social responsibility, and

- Determine ways to gather data and use various tools (experiments, surveys, logs, journals, etc.).
- Understand what constitutes evidence.
- Understand when you have enough evidence.
- Interpret evidence and present logical inferences and conclusions to others from the evidence.

- and self-control when communicating with others.
- Utilize and explore their own creativity.
- Learn to appreciate the aesthetic
- Use various technology tools to gather, organize, and communicate with others.
- Use various visual print and artistic mediums to communicate with others.
- Adapt presentation style and speech for the audience.
- Present claims and findings in a logically sequenced way, developing concepts to support a position.

Sussex Montessori School		Attachment 4B, Curriculum Ove			
	appreciation for others and the world around them.				

Big Ideas and Concepts Addressed in SMS Montessori Integrated Curriculum Units K-1

	K/1 - Year 1 - What Does It Mean to be Human	K/1 - Year Two - How Does the World Work?
September, October, November, December	Membership in Groups Children understand that everyone holds membership in a variety of groups, beginning with the family. They consider how groups shape our lives, how we, in turn, can shape groups, and they develop a sense of civic and social responsibility. Through this study, children will see themselves as holding membership in a variety of groups from their family, to the classroom, to the larger community. Diversity and Continuity of Living Things As children explore the diversity and continuity of all living things, they understand that all species belong to groups based on their characteristics; these characteristics are hereditary. All species, including humans, have a cycle of life.	Man's Impact on Life Cycles and Systems The natural world works in a series of cycles and systems. Children understand that human life has a beginning, a time of growth, and an ending. They acquire a basic knowledge of the body's needs and its functions and adopt personal habits that promote wellness. Extending this concept, children learn that species within an ecosystem have unique structures that allow them to survive in that ecosystem. Children will see the cycle of life around them in nature. This understanding extends to an understanding that all organisms are all connected as a part of the larger ecosystem. Children develop an understanding that man's decisions can impact the balance of the larger ecosystems and the sustainability of resources. Beginning with their families and classrooms, children understand that people have a civic and global responsibility to use the earth's resources wisely.

January, February, March

April, May, June

Fundamental Wants

All species, including humans have basic fundamental wants. Children distinguish wants from wants, and understand that due to scarcity, individuals, families, classrooms, must make choices in their activities and consumption of their goods and services. Science has provided ways that humans can better meet their wants. As humans use natural resources to meet their wants, they may have long term impacts on the environment and the future availability of resources. Children discover the importance of carefully using the precious resources of our earth, becoming responsible producers, consumers, and conservers.

Earth Systems and Human Interactions Weather/Soils

Children discover that the flow of energy drives processes of change and all biological, chemical, physical and geological systems. Earth's dynamic systems are made up of the solid earth (geosphere), the oceans, lakes, rivers, glaciers and ice sheets (hydrosphere), the atmosphere, and organisms. Interactions and changes in these spheres have resulted in ongoing changes to the system. These changes also impact human groups and their survival. Some of the changes can be measured on a human time scale, but others occur so slowly that they must be inferred from geological evidence.

Place in Time and Space

Humans have always had a capacity to place themselves in time and space. Students explore the intergenerational connections of the various groups they belong to. They learn about the history and traditions of their own cultures. They gain perspective about where they are located spatially on the planet and in the universe

The Flow of Energy and Human Wants

Children discover that the flow of energy drives processes of change and all biological, chemical, physical and geological systems. In this study, children understand that energy takes many forms. People use energy to do work. There are various sources of energy that people can harness to use. Some are renewable sources and others will be depleted at some point. People also seek to understand materials and their properties. The transfer of energy can change materials into different forms (water, ice, steam). Different materials are best suited to various uses by man because of their properties.

Big Ideas and Concepts Addressed in SMS Montessori Integrated Curriculum Units Grades 2 / 3

	2 / 3 - Year 1 - What does it mean to be human?	2 / 3 Year 2 - How does the World Work?
September, October, November, December		Life Cycles and Systems/ Historian's perspective The natural world works in a series of cycles and systems. This understanding extends to an understanding that we are all connected as a part of the larger ecosystem. This ecosystem depends on a system of consumers and producers. Species within an ecosystem have unique structures that allow them to survive in that ecosystem. As one part of the ecosystem changes, other parts will be affected. Children develop an understanding that man's decisions can impact the balance of the larger ecosystems and the sustainability of resources. The perspective of the historian can help us to understand how man has impacted the regions around them and how the resulting changes in ecosystems have impacted communities.

lanuary, February, March

April, May, June

Economics of wants and fundamental wants

Children identify human wants, and understand that due to scarcity, individuals, families, communities, and societies as a whole, must make choices in their activities and consumption of their goods and services. People make decisions about production and consumption by considering the costs and benefits of various choices. Science has provided ways that humans can better meet their wants. As humans use natural resources to meet their wants, they may have long term impacts on the environment and the future availability of resources. Children discover the importance of carefully using the precious resources of our earth, becoming responsible producers, consumers, and conservers.

Producing and Consuming

All people engage in making and using things. Children recognize the value and dignity of work. They learn that human economic systems serve to provide a method for people to distribute goods and services to meet their wants. They understand that due to scarcity, individuals, families, and communities and societies as a whole must make choices in their activities and consumption of their goods and services. Life for all of us involves producing and consuming. Knowledge of materials and their properties helps man to match materials to products for consumption.

Study Three—Place in Time and Space Geological History, Human History

Humans have always had a capacity to place themselves in time and space. Students develop an understanding of the concept of regions, how regions and places are defined both by land forms and by human interactions and characteristics (cultures, linguistics, etc.). Students understand that they are part of a larger history of humanity and the geological history of the earth.

Earth's Energy and Geological Systems

Children discover that the flow of energy drives processes of change and all biological, chemical, physical and geological systems. Earth's dynamic systems are made up of the solid earth (geosphere), the oceans, lakes, rivers, glaciers and ice sheets (hydrosphere), the atmosphere, and organisms. Interactions and changes in these spheres have resulted in ongoing changes to the system. Some of the changes can be measured on a human time scale, but others occur so slowly that they must be inferred from geological evidence. These changes also impact human groups and the energy and mineral resources in various regions available to humans to meet their wants.

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Big Ideas and Concepts Addressed in SMS Montessori Integrated Curriculum Units 4/5/6 Grades

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The Purpose of Governments/ Scientific Advances

This study builds on the understandings of group functioning, rights and responsibilities from the 5-9 (K-3rd grade) program. The study focuses specifically on civic responsibility. Children learn the various ways that governments are structured and develop an understanding of the principles of a representative democracy and the responsibilities they have as a citizen holding both rights and responsibilities in society. They are challenged to be a good citizen in their school and beyond and to understand that citizenship in groups and the U.S. means having responsibilities as well as rights. Children explore various scientific advances, laws that have been instituted related to scientific knowledge, and how government influences the uses of our natural resources.

Energy exchanges and Systems The Historical Perspective Science

Children discover that the flow of energy drives processes of change and all biological, chemical, and physical systems. In this study children learn that energy stored in a variety of systems can be transformed into their energy forms, which influence many facets of daily life. People use a variety of resources to meet the basic energy wants of life. Some of these resources cannot be replaced and others exist in vast quantities. The structure of materials influences their physical properties, chemical reactivity, and use. The exchange of energy can change matter from one form to another making a material more suitable for a specific purpose. Many Scientists have contributed to our understanding the biological, chemical and physical nature of energy. Historians contribute to our understanding of how these scientists worked, their culture, society's responses to their work, and the resources they had for their work.

The diversity of life and life processes/ cycles across nature and human cultures

The natural living world is composed of a diverse group of organisms and species. Man seeks to understand the similarities and differences between them including structure of species, life cycles, and the interdependency between them. Some scientists view some animal groups as having cultures or norms, e.g. Jane Goodall and her study of chimpanzees. Man uses this knowledge to improve his own life experience. Like the organisms in the natural world around us, people of various cultures have a life cycle and traditions that go with various stages of their life cycles. Children come to appreciate the diversity across cultures, understanding that cultures address childhood, adolescence, adulthood and aging in similar and different ways.

Place in Time and Space - The Universe through the eyes of science and history

Building on the concept that humans seek to place themselves in time and space, children will develop an appreciation for the earth in relationship to the universe. Humans have always sought to explore and understand our place in the universe. Combining scientific thinking and the lens of the historian, children will develop an understanding of the solar system and track the history of human discovery related to space exploration beginning with the earliest scientist and moving to man's most recent explorations.

Producing and Consuming – in Nature and Human Interactions

Production and consumption occurs as a human interaction among humans and as a natural interaction in ecosystems. All people engage in making and using things. Children learn the various ways that different cultures produce goods, what they value for production, how they structure economic systems that support production and consumption, and how cultures use the regional resources and trade globally to meet various wants of different societies. They understand that due to scarcity, communities and societies must make choices in their activities and consumption of goods and services. Various aspects of science contribute to decisions about production and consumption. The ecosystem is dependent on the concept of producers and consumers. When man utilizes the natural resources around him, he may impact the balance of the ecosystem impacting his long-term ability to meet man's wants. The production and consumption of energy impacts the ability of a society to produce goods and services to meet their wants. Knowledge of materials and their properties helps man to match

Earth's Dynamic Systems/Earth Regions/

and the Impact on Culture Earth's dynamic systems are made up of the solid earth (geosphere), the oceans, lakes, rivers, glaciers and ice sheets (hydrosphere), the atmosphere, and organisms. Interactions and changes in these spheres have resulted in ongoing changes to the system. Some of the changes can be measured on a human time scale, but others occur so slowly that they must be inferred from Geological evidence. These changes also impact human groups, their resources, the cultures that develop and interactions and exchanges between cultures. Groups may choose to settle in particular areas because of the various geological aspects of the region providing for such things as good trade routes, protection from others, and ease of communication. The history of a region helps us to understand the development of cultural uniqueness and the impact of natural events on the people living in a region.

	materials to products.	

Unit Map - SMS Integrated Curriculum Grades K/1 (5-7 Year Olds)

IE of Two Year Cycle	Over-Arching Question What does it mean to be Human? Continent Study North and South America	Montessori Great Lesson	Timing / Big Ideas Framing Unit Content	Social Studies Unit Delaware Recommend ed Units Teacher Created Units	Science Units Science Coalition Kits Teacher Created Units	Language Arts - Each Unit is approximately 6 weeks	Mathematics - Scope and Seq timing of units	uence for
K/1 (5-7 Year Olds) Yea	Over-arching Question Children understand that humans think in various ways through their use of language, mathematics, scientific inquiry and research. Thinking like a scientist,	 Coming of the Universe and Earth Coming of Life 	September to November Membership in Groups Diversity and Continuity of Living Things	Participating in a Group Group Leadership and Citizenship	Five Senses	People use symbols to communicate People tell, read, and write stories and poetry	Kindergarten Counting Counting and Measure- ment 2-D	Number and Operations 2-D Geometry
		 Coming of Humans 			Trees	People take	Geometry	Addition, Subtraction

scientist, a mathematician or a writer, they use methods of inquiry and research tools to learn about the natural and human world around them within the context of the specific study of the North and South American	 Story of Language Story of Numbers 	December to March Fundamenta I Wants of Humans Diversity and Continuity of Living Things	Location impacts Resources Thinking about Maps and Globes	Wood and Paper	care of the earth All about Trees	Counting and Measurement 2 3-D Geometry Addition, Subtraction, and the Number	and the Number System 2 Measure- ment and Fractions Addition, Subtraction and the
continents		March to June Place in Time and Space Diversity and Continuity of Living Things	Schedules	Measuremen t	People's Traditions Family Histories	Modeling with Data Addition, Subtraction and the Number System 2	Subtraction

K/1 (5-7 Year Olds) Year TWO of Two Year Cycle	Over-Arching Question How Does the World Work? Continent Study Africa and Australia	Montessori Great Lesson	Timing / Big Ideas Framing Unit Content	Social Studies Unit Delaware Recommend ed Units Teacher Created Units	Science Units Science Coalition Kits Teacher Created Units	Language Arts - Each Unit is about 6 weeks	Mathematics - S Scope and Sequ timing of units	
	Over-arching Question Children understand that humans think in various ways through their use of language, mathematics, scientific inquiry and research.	of the Universe and Earth Coming	September to December Man's impact on Life Cycles and Systems	Membership in Groups (2) Participating in a Group	Organisms	Families, friends, communities Animals, Animals	Kindergarten Counting Counting and Measurement 2-D Geometry	First Number and Operations 2-D Geometry
	Humans have various ways of understanding how the world works. Thinking like a scientist, or a geographer, a historian or a social	Coming of HumansStory of Language	December to March Earth Systems and Human Interactions	Schedules Thinking about Maps and Globes	Weather and Me Air and Weather Pebbles and	Exploring the Earth today Weather/We ather	Counting and Measurement 2 3-D Geometry	Addition, Subtraction, and the Number System 2

scientist, a mathematician or a writer, they use methods of inquiry and research tools to learn how the natural and human world around them works. They do this study within the context of the specific study of the Africa and Australia.	Story of Numbers	Weather/ Soils Time and Earth Systems – recording of dynamic earth system events Place and Earth Systems		Sand		Addition, Subtraction, and the Number System 1 Modeling with Data Addition, Subtraction and the	Measureme nt and Fractions Addition, Subtraction and the Number System 3 Modeling with Data
		March to June The Flow of Energy and Human Wants	Group decision making about using resources for energy Participating in a Group	Solids and Liquids	Energy/Energ y Discoveries	System 2	Addition, Subtraction and the Number System 4 3-D Geometry

Unit Map - SMS Integrated Curriculum 2/3 (7-9 Year Olds)

2/3 (7-9 Year Olds) Year ONE of Two Year Cycle	Over-Arching Question What does it mean to be human? Continent Study Europe and Antarctica	Montessori Great Lesson	Timing / Big Ideas Framing Unit Content	Social Studies Unit Delaware Recommend ed Units Teacher Created Units	Science Units Science Coalition Kits Teacher Created Units	Language Arts - Each Unit is approximatel y 6 weeks	Mathematics - See Math Scope and Sequence for timing of units	
	Over-arching Question Children understand that humans think in various ways through their use of language, mathematics, scientific inquiry and research. Thinking like a	 Coming of the Universe and Earth Coming of Life Coming of Humans Story of Language 	September to November Membershi p in Groups Diversity and Continuity of Living Things	Group Membership and Responsibility Group Leadership Respect in Civil Society Citizenopoly	The Human Body Physics of Sound	People as citizens Leaders in our world	2nd Grade Addition, Subtraction, and the Number System 1 2-D Geometry Addition, Subtraction,	3rd Grade Understand-ing Equal Groups, Multiplica-tion and Division I Graphs and Line Plots, Modeling with Data Addition, Subtraction, and the Number
	scientist, or a geographer, a	• Story of	December to March	Scarcity and Wants	Balance and Weighing	Trading, sharing, and conserving	,	the Number System 1

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historian or a social scientist, a mathematician or a writer, they use methods of inquir and research tool to learn about the natural and huma	y S n	Economics of Wants and Fundament al Needs	Fundamental Wants Resources and Production Scarcity and Wants	Chemical Tests	Shapes, sizes, and color	Number System 2 Measuremen t and Fractions Addition,	Perimeter, Area, and Polygons, 2-D Geometry and Measurement Cube Patterns, Arrays, and Multiples of 10,
world around the within the contex of the specific study of the continents of Europe and Antarctica.		March to June Place in Time and Space, Geological History, Human History	Geological History Using Maps and Globes Regions	Water Earth's Materials	Places we live Water/water everywhere	Subtraction and the Number System 3 Modeling with Data Addition, Subtraction and the Number System 4 Addition, Subtraction, and the Number System 5	Multiplication and Division II Fair Shares and Fractions on Number Lines How Many Miles? Addition, Subtraction, and the Number System 2 Large Numbers and Multi-Step Problems: Multiplication and Division III

Two Year Cycle	Over-Arching Question How Does the World Work? Continent Study Asia	Montessori Great Lesson The Montessori Great Lessons provide a context leading to the development of the Big Ideas and Unit Content.	Timing / Big Ideas Framing Unit Content	Social Studies Unit Delaware Recommend ed Units Teacher Created Units	Science Units Science Coalition Kits Teacher Created Units	Language Arts - Each Unit is approximatel y 6 weeks	Mathematics Scope and Se timing of unit	quence for
2/3 (7-9 Year Olds) Year TWO of Two Year Cycle	Over-arching Question Children understand that humans think in various ways through their use of language, mathematics, scientific inquiry and research. Humans have various ways of	 Coming of the Universe and Earth Coming of Life Coming of Humans 	September to December Life Cycles and Systems Historian's perspective	Historical Perspective of Man's impact on regions and environment s. Writing the Story of the Past	Insects Butterflies	Unit 1 Exploring Nature Unit 2 Our Relationship with the Environment	Subtraction, and the Groups, Number Multiplication System 1 n and Division I 2-D Geometry Graphs and Line Plots, Addition, Subtraction, and the Addition,	Understandin g Equal Groups, Multiplicatio n and Division I Graphs and Line Plots,
	understanding how the world works. Thinking like a scientist, or a geographer, a	Story of LanguageStory of Numbers	December to March	Human Systems of Production and Consumption	Earth's Materials	Unit 3 Making Choices – a study of characters		with Data Addition, Subtraction,

historian or a social scientist, a mathematician or a writer, they use methods of inquiry and research tools to learn how the natural and human world around them works. They do this study within the context of the specific study of	Producing and Consuming Connecting ideas: Using the Earth's Materials Plant related industries	Trading Partners Economic Exchange	Plant Growth and Development	Unit 4 The Art of Persuasion	Measuremen t and Fractions Addition, Subtraction and the Number System 3	Number System 1 Perimeter, Area, and Polygons, 2-D Geometry and Measure- ment
the Asia.	March to April Earth's Energy and Geological Systems Connecting theme – soils and impact on how people live in various regions.	Geology influences region and place Places Regions	Soils	Unit 5 Change – Characters and Settings Unit 6 Connections between people and places	Addition, Subtraction and the Number System 4 Addition, Subtraction, and the Number System 5	Cube Patterns, Arrays, and Multiples of 10, Multiplicatio n and Division II Fair Shares and Fractions on Number Lines How Many Miles? Addition, Subtraction,

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Attachment 4B, Curriculum Overview

			and the Number System 2
			Large Numbers and Multi-Step Problems: Multiplicatio n and Division III

Unit Map - SMS Integrated Curriculum Grades 4th, 5th, 6th (9-12 Year Olds)

of Three Years	Over-Arching Question What does it mean to be Human?	Montessori Great Lessons	Timing / Big Ideas Framing Unit Content	Social Studies Unit Delaware Recommended Units Teacher Created Units	Science Units Science Coalition Kits Teacher Created Unit	Language Arts - Each unit is approximately 8 weeks	Mathematics - See Math Scope and Sequence for timing of Investigations units.
4/5/6 (9-12 Year olds) Year ONE of Ti	Children understand that humans think in various ways through their use of language, mathematics, scientific inquiry and research. Thinking like a scientist, or a geographer, a historian or a social scientist, a mathematician or a writer, they use methods of inquiry and research tools to learn about the natural and human world around them.	 Coming of the Universe and Earth Coming of Life Coming of Humans Story of Language Story of 	September to January The Purpose of Governments/ Scientific Advances Connector – The relationship between scientific advances in areas studied and	DRU 4 th / 5 th /6 th Grades Democratic Methods Liberty & Citizenship Bill of Rights Due Process Mock Elections	Variables Food and Nutrition – Connect to Government Requirements	A study of presidents - biography Taking a Stand - characters who believe in a cause	Grade 4 Arrays, Factors, and Multiplicative Comparison. Generating and Representing Measurement Data Multiple Towers and Cluster Problems Grade 5

Num	hers gove	rnment		Puzzles,
Num	decis			Clusters, and
	decis	310113		Towers
				Rectangles,
				Clocks and
				Tracks
				How Many
				People and
				Teams?
				Temperature,
				Height, and
				Growth
				Grade 6
				Factors and
				multiples
				Estimating and
				Ordering
				Rational
				Numbers
				Understand-ing
				fractions and
				operations
				T
				Two Dimensional
				Measurement

	February to June Place in Time and Space Universe through the eyes of historians and Scientists	DRU – 4 th /5 th /6 th Grades Thinking Chronologically reformatted for space study	Sky Watchers Solar Systems Measuring Time Earth History	Space Exploration Stories of the Earth and Sky (CCS Unit)	Grade 4 Measuring and Classifying Shapes Large Numbers and Landmarks Fraction Cards and Decimal Grids How Many Packages and Groups Grade 5 Penny Jars and Towers Between 0 and 1 Races, Arrays and Grids Properties of Polygons Grade 6 Computing with decimals and percents
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			Introducing Algebra
			Statistics and Data Analysis

TWO of Three Year Cycle	Over-Arching Question What does it mean to be Human?	Montessori Great Lessons	Timing / Big Ideas Framing Unit Content	Social Studies Unit DRU - Delaware Recommended Units TCU - Teacher Created Units	Science Units SCK - Science Coalition Kits TCU - Teacher Created Unit	Language Arts	Mathematics
4/5/6 (9-12 Year olds) Year	Over-arching Question Children understand that humans think in various ways through their use of language, mathematics, scientific inquiry and research. Humans have various ways of	 Coming of the Universe and Earth Coming of Life Coming of Humans 	September to January Energy Exchanges and Systems The Historian's Perspective of Science —	DRU 4 th /5 th /6 th Grades Thinking Chronologically restructured for history in science	Magnetism and Electricity Magnets and motors Electric Circuits	Unit 1 – Biographies – Creative, Innovative scientists Unit 2 –	Grade 4 Arrays, Factors, and Multiplicative Comparison. Generating and Representing Measurement Data

understanding how the world works. Thinking like a scientist, or a geographer, a historian or a social scientist, a mathematician or a writer, they use methods of inquiry and research tools to learn how the natural and human world around them works.	 Story of Language Story of Numbers 	Discoveries about Electricity	Interpreting the Past: Dueling Documents restructured for history in science		Author Study – comparing/con trasting	Multiple Towers and Cluster Problems Grade 5 Puzzles, Clusters, and Towers Rectangles, Clocks and Tracks How Many People and Teams? Temperature, Height, and Growth Grade 6 Factors and multiples Estimating and Ordering Rational Numbers
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					Understand-ing fractions and operations Two Dimensional Measurement
	February to June Producing and Consuming Influence of Place on Production and Consumption Man's Decisions related to production and consumption Connecting theme – how do scientific advances influence	DRU – 4 th /5 th /6 th Grades Reasons for Banks Thinking Economically Economic Systems	Motion and Design Floating and Sinking Levers and Pulley	Unit 3 – My own business Unit 4 – Conflicts- Decisions in literature	Grade 4 Measuring and Classifying Shapes Large Numbers and Landmarks Fraction Cards and Decimal Grids How Many Packages and Groups Grade 5 Penny Jars and Towers Between 0 and 1 Races, Arrays and Grids

	production and consumption?		Properties of Polygons
			Grade 6 Computing with decimals and percents
			Introducing Algebra
			Statistics and Data Analysis

4/5/6 (9-12 Year olds) Year THREE	Montessori Great Lessons	Timing / Big Ideas Framing Unit Content	Social Studies Unit DRU - Delaware Recommended Units TCU - Teacher Created Units	Science Units SCK - Science Coalition Kits TCU - Teacher Created Unit	Language Arts	Mathematics
	 Coming of the Universe and Earth 	September to January	DRU 4 th , 5 th , 6 th , Grades	Structure of Life	Unit 1 – Cultures and Heroes	Grade 4 Arrays, Factors, and

influenced by history, geography, and economics. It is also impacted by scientific discoveries, mathematical understandings and the ways that humans • Co H St La St La	Coming of Life Coming of Humans Story of Language Story of Numbers Diversity of Life and Life processes Cycles in nature and in studies of human cultures The impact of human culture on the environment	Our Community: Profiles and Connections Culture and Civilization TCU – Human Life Cycles and Cultural norms	Ecosystems	Unit 2 – Literature – a window to cultures (part 1)	Multiplicative Comparison. Generating and Representing Measurement Data Multiple Towers and Cluster Problems Grade 5 Puzzles, Clusters, and Towers Rectangles, Clocks and Tracks How Many People and Teams? Temperature, Height, and Growth Grade 6 Factors and multiples
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					Estimating and Ordering Rational Numbers Understand-ing fractions and operations Two Dimensional Measurement
	February to June Earth's Dynamic Systems Earth Regions The Impact of earth systems cultures Impact of Geography on Human Cultures	DRU – 4 th , 5 th , 6 th Grades Reasons for Regions Building Global Mental Maps Culture and Civilization	Land and Water Mixtures and Solutions Earth History	Unit 3 – Literature a window to cultures. (part 2) Unit 5 – Earth Studies through Poetry and Literature	Grade 4 Measuring and Classifying Shapes Large Numbers and Landmarks Fraction Cards and Decimal Grids How Many Packages and Groups Grade 5

	Group functioning and cultures		Penny Jars and Towers Between 0 and 1 Races, Arrays and Grids Properties of Polygons Grade 6 Computing
			with decimals and percent
			Algebra Statistics and Data Analysis