

# MIDDLETON PLACE

## NATIONAL HISTORIC LANDMARK

### Standard Alignment of Programs

#### Tour/Activity Option

- Standard for the grade
  - How Middleton Place meets standard
- **Kindergarten** – **Social Studies K-1.1:** Identify the location of his or her home, school, neighborhood, and city or town on a map.  
**Social Studies K-1.3:** Identify his or her personal connections to places, including home, school, neighborhood, and city or town.
  - Pre-visit materials: Help students find Middleton Place on a map of the Charleston Area and its location relative to Downtown Charleston and to their own home and school**Social Studies K-1.4:** Recognize natural features of his or her environment (e.g. mountains and bodies of water).
  - Plantation Overview Tour: View the Ashley River and explain its location relative to the Middleton Place and Downtown Charleston. Explain its importance in linking the two during the seventeenth and eighteenth centuries
  - Plantation Overview Tour: Explain the elevation of Middleton Place and how its height above sea level makes it unique to the South Carolina Low Country**Science K-1.1:** Identify observed objects or events by using the senses.
  - Plantation Overview Tour, Garden Tour, Meet the Breeds Tour, Horse Carriage Tour, Organic Heritage Crop Farm: Have the students use their senses to identify objects around the property (What sounds do you hear? What colors do you see? Etc)**Social Studies K-2.1:** Explain the purpose of rules and laws and the consequences of breaking them.  
**Social Studies K-2.3:** Identify authority figures in the school and the community who enforce rules and laws that keep people safe, including crossing guards, bus drivers, firefighters, and police officers.
  - All tours: Explain rules for the tour, including consequences for breaking the rules; explain that the interpreter is like the teacher or any other authority figure.**Social Studies K-2.4:** Explain how following rules and obeying authority figures reflect qualities of good citizenship, including honesty, responsibility, respect, fairness, and patriotism.
  - All tours: Emphasize that they need to practice good citizenship by making sure that their behavior does not interfere with the ability of the group to learn from the interpreter.**Science K-2.1:** Recognize what organisms need to stay alive (including air, water, food, and shelter).  
**Science K-2.2:** Identify examples of organisms and nonliving things.  
**Science K-2.3:** Match parents with their offspring to show that plants and animals closely resemble their parents.

**Science K-2.4:** Compare individual examples of a particular type of plant or animal to determine that there are differences among individuals.

**Science K-2.5:** Recognize that all organisms go through stages of growth and change called life cycles.

- Plantation Overview Tour, Garden Tour, Meet the Breeds Tour, Horse Carriage Tour, Organic Heritage Crop Farm: Plants need air, water, nutrients, space, and light to survive and grow. Animals need food, water, and space to survive.
- Identify living things and compare them to non-living things. (Plants and animals are living. Bricks are non-living)
- Point out the differences between different plants of the same species (ex. Camellias)
- Mention the life cycle of plants (seeds to mature plant) including rice.
- Compare and contrast full grown animals with their offspring.

**Social Studies K-3.2:** Identify the reasons for our celebrating national holidays, including Veterans Day, Thanksgiving, Martin Luther King Jr. Day, President's Day, Memorial Day, and Independence Day.

**Social Studies K-3.3:** Describe the actions of important figures that reflect the values of American democracy, including George Washington, Abraham Lincoln, Susan B. Anthony, Rosa Parks, and Martin Luther King Jr.

- Plantation Overview Tour, House Museum Tour: Explain how Henry and Arthur Middleton's contributions to our democracy made them respected friends of George Washington, Thomas Jefferson, etc.
- Plantation Overview Tour, House Museum Tour: Arthur Middleton and his father Henry were leaders in the Revolutionary movement. Henry was president of the First Continental Congress. Arthur signed the Declaration of Independence.

**Math K-3.4:** Classify objects according to one or more attributes (such as color, size, shape, and thickness).

**Math K-4.1:** Identify two-dimensional (circle, square, triangle, rectangle) and three dimensional (sphere, cube, cylinder) geometric shapes.

**Math K-4.3:** Use positional words to describe the location of an object. (*near, far, below, above, beside, next to, across from, between*).

**Math K-4.4:** Use directional words to describe movement. (*left, right*)

- Plantation Overview Tour, Garden Tour: Examine the shapes of the formal gardens. Many of the rooms in the gardens are designed in specific shapes (ex. the Octagonal Garden) while symmetry was vitally important to the design of the gardens as a whole. In fact, the entire formal garden was designed to form a right triangle.
- Examine the Middleton Oak. How tall is it? How many feet around is it? Where is it in relation to the Ashley River?
- Examine the Butterfly Lakes. Can the students determine what shape the lakes are constructed in?
- Stableyards: Examine tools used in the artisan shops in the Stableyards. (ex. Potter and Blacksmith's tools). What shape are they? What shapes are the objects that these tools are used to make?

**Social Studies K-4.1:** Compare the daily lives of children and their families in the past and in the present.

- House Museum Tour, Outdoor Education Center, Beyond the Fields Tour: Explain to students the differences between the lives of Middleton children and the lives of slave children. Describe the duties expected of both groups. Contrast the lives of both to the lives of children today.

**Social Studies K-4.2:** Explain how changes in modes of transportation and communication have affected the way families live and work together.

- Plantation Overview Tour, Stableyards Tour, Horse Carriage Tour: Explain the difficulty of reaching Downtown Charleston from Middleton Place using overland means (horses). Explain the importance of travel via waterways (Ashley River) and the changes brought on by the Industrial Revolution and new technologies

**Social Studies K-4.3:** Recognize the ways that community businesses have provided goods and services for families in the past and do so in the present.

- Stableyards Tour, Outdoor Education Center, Organic Heritage Crop Farm: Examine the jobs done on the plantation by skilled slave artisans and the goods and services produced for use by the Middleton family and the slaves

**Science K-4.1:** Identify weather changes that occur from day to day.

**Science K-4.2:** Compare the weather patterns that occur from season to season.

**Science K-4.3:** Summarize ways that the seasons affect plants and animals.

- Meet the Breeds Tour, Outdoor Education Center, Organic Heritage Crop Farm, Plantation Overview Tour, Garden Tour, Horse Carriage Tour, House Museum Tour, Beyond the Fields Tour: Examine the weather on the day students visit Middleton Place.
- Examine which plants bloom in which seasons. Examine which crops are harvested in which seasons.
- Discuss the effects of the different seasons on the animals present at Middleton Place
- Examine the Winter and Summer bedrooms in the House Museum. How was life different for the Middleton family during these 2 seasons?

**Science K-5.1:** Classify objects by observable properties (including size, color, shape, magnetic attraction, heaviness, texture, and the ability to float in water).

**Science K-5.2:** Compare the properties of different types of materials (including wood, plastic, metal, cloth, and paper) from which objects are made.

- Stableyards Tour: Blacksmiths use metal (iron or steel) which has necessary qualities. The group can talk about what they observe about the metal.
- Potters use clay which is different from the steel used by the blacksmith and wood used by the Cooper.
- Compare wool, cotton and flax. Compare the different fabric weaves. Compare woven and knitted fabric.
- Coopers used wood of different kinds.

**Math K-5.4:** Identify measuring devices used to measure length (rulers, yardsticks, tape measures), weight (scales, balances), time (calendar, clock – digital and analog), and temperature (thermometer—digital and standard).

- Garden Tour, Plantation Overview Tour: Examine the sundial in the Rose Garden. How is it the precursor to a modern clock? Is it accurate?

**Visual Arts K-IV-A:** Begin to identify specific artworks and styles as belonging to particular artists, cultures, periods, and places.

**Visual Arts VA-V-A:** Identify some purposes for creating artworks.

- Stableyards Tour: Visit the skilled artisans. How does their work qualify as art? How do the styles that the Potter, the Cooper, the Seamstress and the Blacksmith work in reflect African art?
- How does their work differ from pottery, woodwork, ironwork, and clothing from the present day?
- How does their work qualify as both art and as utilitarian?
- **Grade 1 – Social Studies 1-1.3:** Identify various natural resources (e.g., water, animals, plants, minerals) around the world.
  - Plantation Overview Tour, Garden Tour, Meet the Breeds Tour, Beyond the Fields Tour: Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)

**Social Studies 1-1.4:** Compare the ways that people use land and natural resources in different settings around the world.

- Plantation Overview Tour, Garden Tour: Explore European influence on the use of land to construct formal gardens
- Meet the Breeds Tour, Beyond the Fields Tour, Organic Heritage Crop Farm Tour: discuss non-native animals and plants (esp. West African) and the differences in their use in West Africa and in the South Carolina Low Country

**Social Studies 1-2.1:** Explain the making and enforcing of laws as a basic function of government.

**Social Studies 1-2.2:** Summarize the concept of authority and give examples of people in authority, including school officials, public safety officers, and government officials.

**Social Studies 1-2.3:** Illustrate ways that government affects the lives of individuals and families, including taxation that provides services such as public education and health, roads, and security.

**Science 1-2.1:** Recall the basic needs of plants (including air, water, nutrients, space, and light) for energy and growth.

**Science 1-2.2:** Illustrate the major structures of plants (including stems, roots, leaves, flowers, fruits, and seeds).

**Science 1-2.3:** Classify plants according to their characteristics (including what specific type of environment they live in, whether they have edible parts, and what particular kinds of physical traits they have).

**Science 1-2.4:** Summarize the life cycle of plants (including germination, growth, and the production of flowers and seeds).

**Science 1-2.5:** Explain how distinct environments throughout the world support the life of different types of plants.

**Science 1-2.6:** Identify characteristics of plants (including types of stems, roots, leaves, flowers, and seeds) that help them survive in their own distinct environments.

- Plantation Overview Tour, Garden Tour, Horse Carriage Tour, Organic Heritage Crop Farm: Plants need air, water, nutrients, space, and light to survive and grow.
- Point out the differences between different plants of the same species (ex. Camellias)
- Mention the life cycle of plants (seeds to mature plant) including rice.

- Examine the similarities between the climates of SC and those of West Africa. These similarities allowed SC plantation owners to grow rice once the slaves taught them how.
- Examine the differences in structure of edible and non-edible plants.
- Point out the differences between the way land is used. Some land is left natural and some land is cultivated.

**Social Studies 1-3.1:** Describe the fundamental principles of American **democracy**, including respect for the rights, opinions, and property of others; fair treatment for all; and respect for the rules by which we live.

**Social Studies 1-3.2:** Identify ways that all citizens can serve the common good, including serving as public officials and participating in the election process.

**Social Studies 1-3.3:** Summarize the contributions to **democracy** that have been made by historic and political figures in the United States, including Benjamin Franklin, Thomas Jefferson, Dorothea Dix, Frederick Douglass, Mary McLeod Bethune, and Franklin D. Roosevelt.

- House Museum Tour, Horse Carriage Tour: Examine the political contributions of the Middletons. Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war. Arthur Middleton was a delegate to the Second Continental Congress and signed the Declaration of Independence. He also helped frame SC's first state constitution and served in the SC General Assembly following the war. Arthur's son Henry (Gov. Henry) served in both houses of the SC Legislature. He was appointed to several committees dealing with important issues like the incorporation of the state bank, curtailing the slave trade, and legislative reapportionment to reflect the growing upcountry population. As the 43<sup>rd</sup> Governor of SC he passed a law establishing free public schools. He served as the Minister Plenipotentiary (known as an ambassador today) to Russia from 1820-1830. Upon his return to the US, he served as the leader of the Unionist Party during the Nullification Crisis of the 1830's, supporting protective tariffs as constitutional. Gov. Henry's son Williams, along with his brother John, was a delegate to the Secession Convention in December 1860 and was a signer of SC's Ordinance of Secession.

**Social Studies 1-4.1:** Illustrate different elements of community life, including typical jobs; the interdependence of family, school, and the community; and the common methods of transportation and communication

**Social Studies 1-4.2:** Compare the daily lives of families together in America and across the world, including the roles of family members; typical food, clothing, and shelter; and the ways that families earn a living.

**Social Studies 1-4.3:** Identify the ways that families and communities in America and around the world cooperate and compromise with one another in order to obtain goods and services to meet their needs and wants.

**Social Studies 1-4.4:** Explain the concept of scarcity and the way it forces individuals and families to make choices about which goods and services they can obtain.

- Stabeyards Tour, House Museum Tour, Beyond the Fields Tour, Outdoor Education Center, Organic Heritage Crop Farm: Compare and contrast the family

life of the Middletons and those of the slaves and how they both fit into community life in Charleston.

- Explore the work done by slaves to produce goods and the acquisition of products, by the Middletons, that could not be produced on site.
- Compare and contrast the family life of the Middletons and the family life of European households
- Compare and contrast the family life of Middleton slaves and the family life of West African households

**Science 1-4.1:** Recognize the composition of Earth (including rocks, sand, soil, and water).

**Science 1-4.2:** Classify rocks and sand by their physical appearance.

**Science 1-4.3:** Compare soil samples by sorting them according to properties (including color, texture, and the capacity to nourish growing plants).

**Science 1-4.4:** Recognize the observable properties of water (including the fact that it takes the shape of its container, flows downhill, and feels wet).

**Science 1-4.6:** Exemplify Earth materials that are used for building structures or for growing plants.

- Stableyards Tour, Outdoor Education Center, Organic Heritage Crop Farm, Garden Tour, Plantation Overview Tour, Beyond the Fields Tour: Discuss the properties of soil in the SC Low Country. What type of soil occurs naturally? What modifications are needed to grow edible plants?
- View the Ashley River. Explain its classification as a brackish river. What does the presence of salt water in the river mean as far as using it for crops and rice fields?
- Explain the elevation of Middleton Place and how its height above sea level makes it unique to the South Carolina Low Country. Examine the Spring House (a cold water spring that flows out of the hillside) and its uses.
- Discuss the use of organic pesticides and fertilizers on the Organic Heritage Crop Farm
- Discuss the properties of clay-filled soil and its uses for pottery.

**Math 1-4.4:** Identify a line of symmetry.

**Math 1-4.5:** Use positional and directional words (*north, south, east, west*) to describe location and movement.

- Garden Tour, Plantation Overview Tour: View the Mirror Gardens. How do they qualify as symmetrical? Where is the line of symmetry that divides them?
- View the Ashley River. Where on the river does the Middleton Place fall in relation to Downtown Charleston and to Summerville? Where is it in relation to the Atlantic Ocean?

**Science 1-5.2:** Explain the importance of pushing and pulling to the motion of an object.

**Science 1-5.4:** Illustrate ways in which objects can move in terms of direction and speed (including straight forward, back and forth, fast or slow, zigzag, and circular).

- Horse Carriage Tour: Examine the draft horses that pull the carriage. Discuss their being bred to be larger than average horses. How much do they weigh? How much weight can they pull? How long would it take to reach downtown Charleston from Middleton Place on a horse-drawn carriage?

**Visual Arts 1 & 2-II.A:** Identify elements and principles of design that are found in nature and those that have been created by human beings.

**Visual Arts 1 & 2-II.B:** Use various elements and principles of design to communicate ideas through their artworks.

- Stableyards Tour: Visit the Cooper's shop. How does the wood he works with reflect natural design? How does he change the design as he processes the wood? How does his work qualify as art? How does his work differ from the work of the Seamstress, Potter, and Blacksmith?
- Garden Tour, Plantation Overview Tour: How do specific rooms in the gardens (Octagonal, Rose, Mirror, Secret, Mount gardens) qualify as art? What principles of design are present in the formal gardens? (ex La Notre)
- View the Butterfly Lakes and discuss how they qualify as art

**Visual Arts 1 & 2-IV.A:** Identify specific artworks and styles as belonging to particular artists, cultures, periods, and places.

**Visual Arts 1 & 2-IV.B:** Identify a variety of artworks, artists, and visual arts materials that exist in their community.

**Visual Arts 1 & 2-V.A:** Identify various purposes for creating artworks.

**Visual Arts 1 & 2-VI.A:** Distinguish between utilitarian and nonutilitarian art.

- Stableyards Tour: Visit the skilled artisans. How does their work qualify as art? How do the styles that the Potter, the Seamstress, the Cooper, and the Blacksmith work in reflect African art?
  - How does their work differ from pottery, ironwork, and clothing from the present day?
  - How does their work qualify as both art and as utilitarian?
  - Do students recognize similar items and methods in their community today? How are these items different in the present than they were in the past? How are they similar? (ex. Dishes made by the Potter and dishes purchased today)
- **Grade 2 – Social Studies 2-1.1:** Identify on a map the location of places and geographic features of the local community (e.g., landforms, bodies of water, parks) using the legend and the cardinal directions.

**Social Studies 2-1.2:** Recognize characteristics of the local region, including its geographic features and natural resources.

- Plantation Overview Tour: View the Ashley River and explain its location relative to the Middleton Place and Downtown Charleston. Explain its importance in linking the two during the seventeenth and eighteenth centuries
- Plantation Overview Tour: Explain the elevation of Middleton Place and how its height above sea level makes it unique to the South Carolina Low Country
- Plantation Overview Tour, Garden Tour, Meet the Breeds Tour, Beyond the Fields Tour: Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)

**Social Studies 2-1.3:** Recognize the features of urban, suburban, and rural areas of the local region

- Plantation Overview Tour, House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Organic Heritage Crop Farm, Garden Tour: Discuss the

transformation from a rural area on the Ashley River to a functioning plantation with formal gardens and crop fields

- Explore the similarities and differences in lifestyles of slave holders and slaves in an urban setting like Charleston and the lifestyles of slave holders and slaves in a plantation setting like Middleton Place

**Social Studies 2-1.4:** Summarize changes that have occurred in the local community over time, including changes in the use of land and in the way people earn their living.

- Plantation Overview Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour: Examine the new methods employed by the Middletons after the Civil War to continue to earn a living, including Phosphate mining, lumbering, and tourism.
- Examine the changes to the lives of former slaves following the Civil War.

**Math 2-1.8:** Use multiple, informal representations to convey mathematical ideas.

- Horse Carriage Tour, Meet the Breeds Tour: Discuss units of measurement that apply to horses (ex. How many “hands” tall are the horses?)

**Social Studies 2-2.1:** Identify the basic functions of government, including making and enforcing laws, protecting citizens, and collecting taxes.

**Social Studies 2-2.2:** Recognize different types of laws and those people who have the power and authority to enforce them.

**Social Studies 2-2.3:** Identify the roles of leaders and officials in government, including law enforcement and public safety officials.

**Social Studies 2-2.4:** Explain the role of elected leaders, including mayor, governor, and president.

- House Museum Tour, Horse Carriage Tour: Examine the political contributions of the Middletons. Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war. Arthur Middleton was a delegate to the Second Continental Congress and signed the Declaration of Independence. He also helped frame SC’s first state constitution and served in the SC General Assembly following the war. Arthur’s son Henry (Gov. Henry) served in both houses of the SC Legislature. He was appointed to several committees dealing with important issues like the incorporation of the state bank, curtailing the slave trade, and legislative reapportionment to reflect the growing upcountry population. As the 43<sup>rd</sup> Governor of SC he passed a law establishing free public schools. He served as the Minister Plenipotentiary (known as an ambassador today) to Russia from 1820-1830. Upon his return to the US, he served as the leader of the Unionist Party during the Nullification Crisis of the 1830’s, supporting protective tariffs as constitutional. Gov. Henry’s son Williams, along with his brother John, was a delegate to the Secession Convention in December 1860 and was a signer of SC’s Ordinance of Secession.

**Science 2-2.1:** Recall the basic needs of animals (including air, water, food, and shelter) for energy, growth, and protection.

**Science 2-2.2:** Classify animals (including mammals, birds, amphibians, reptiles, fish, and insects) according to their physical characteristics.

**Science 2-2.3:** Explain how distinct environments throughout the world support the life of different types of animals.

**Science 2-2.4:** Summarize the interdependence between animals and plants as sources of food and shelter.

**Science 2-2.5:** Illustrate the various life cycles of animals (including birth and the stages of development).

- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past
- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
- Classify wild and domesticated species present at Middleton Place. Are they mammals, birds, fish, amphibians, reptiles or insects?
- What are the needs of wild and domesticated species? Examine the diet, the needs as far as shelter and space, and their interaction with each other and with people
- Examine the ways species from around the world have adapted to the SC environment (ex Gulf Coast Sheep)
- Examine the similarities and differences between the lifecycles of various species (similarities between birds and reptiles and their differences from mammals)

**Social Studies 2-3.2:** Explain how people's choices about what to buy will determine what goods and services are produced.

**Social Studies 2-3.3:** Explain ways that people may obtain goods and services that they do not produce, including the use of barter and money.

**Social Studies 2-3.4:** Identify examples of markets and price in the local community and explain the roles of buyers and sellers in creating markets and pricing.

**Social Studies 2-3.5:** Explain the effects of supply and demand on the price of goods and services.

- Outdoor Education Center, Horse Carriage Tour, Beyond the Fields Tour, Stableyards Tour, Organic Heritage Crop Farm: Examine the importance of rice as rations for European armies and the increase in demand and price because of this
- Examine the production of goods on the plantation for consumption and production of goods (besides rice) for sale
- Examine the goods that had to be purchased for use on the plantation because they were not produced on site
- Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery and the increase in rice purchased by Europe from other parts of the world (India, China)

**Science 2-3.1:** Explain the effects of moving air as it interacts with objects.

**Science 2-3.2:** Recall weather terminology (including temperature, wind direction, wind speed, and precipitation as rain, snow, sleet, and hail).

**Science 2-3.3:** Illustrate the weather conditions of different seasons.

**Science 2-3.6:** Identify safety precautions that one should take during severe weather conditions.

- Meet the Breeds Tour, Outdoor Education Center, Organic Heritage Crop Farm, Plantation Overview Tour, Garden Tour, Horse Carriage Tour, House Museum Tour, Beyond the Fields Tour: Examine the weather on the day students visit Middleton Place.

- Examine which plants bloom in which seasons. Examine which crops are harvested in which seasons.
- Discuss the effects of the different seasons on the animals present at Middleton Place
- Examine the Winter and Summer bedrooms in the House Museum. How was life different for the Middleton family during these 2 seasons?
- Examine the effect of weather and the changing seasons on the life of slaves at Middleton Place
- Examine the dangers of severe weather (hurricanes) to the residents of Middleton Place (past & present)

**Social Studies 2-4.1:** Recognize the basic elements that make up a cultural region in the United States, including language, beliefs, customs, art, and literature.

**Social Studies 2-4.2:** Compare the historic and cultural traditions of various regions in the United States and recognize the ways that these elements have been and continue to be passed across generations.

**Social Studies 2-4.3:** Recognize the cultural contributions of Native American tribal groups, African Americans, and immigrant groups.

**Social Studies 2-4.4:** Recall stories and songs that reflect the cultural history of various regions in the United States, including stories of regional folk figures, Native American legends, and African American folktales.

- Outdoor Education Center, Horse Carriage Tour, Beyond the Fields Tour, Stableyards Tour, Organic Heritage Crop Farm, House Museum Tour: Examine the contributions of Low Country rice planters like the Middletons, who helped define the rice culture of the southern US. Explain the differences between the European culture from which they came and the rice culture in the US that they helped to form. Compare and contrast with slaves, who contributed to the Gullah culture still found in SC today, and without whose knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC
- The two cultures were passed from one generation to the next. Today Low Country food and the Low Country way of life still reflect both of these cultures.
- Explore African American songs, art, and folktales and their use in helping slaves distribute knowledge to each other and their use in resistance (Underground Railroad)

**Science 2-4.1:** Recall the properties of solids and liquids.

**Science 2-4.3:** Explain how matter can be changed in ways such as heating or cooling, cutting or tearing, bending or stretching.

- Stableyards Tour: Examine the properties of clay at the Potter's shop. How can it be shaped by adding water, force, and pressure? How does it change when heat is added?
- Examine the properties of iron at the Blacksmith's shop. How does the presence of heat change the properties of iron? Show the ways it can be shaped when hot

**Math 2-4.2:** Identify multiple lines of symmetry.

- Garden Tour, Plantation Overview Tour: Examine the garden pathways. How are they used to divide the gardens symmetrically?

- **Grade 3 – Social Studies 3-1.1:** Categorize the six landform regions of South Carolina—the Blue Ridge, the Piedmont, the Sand Hills, the Inner Coastal Plain, the Outer Coastal Plain, and the Coastal Zone—according to their climate, physical features, and natural resources.

**Social Studies 3-1.2:** Describe the location and characteristics of significant features of South Carolina, including landforms; river systems such as the Pee Dee River Basin, the Santee River Basin, the Edisto River Basin, and the Savannah River Basin; major cities; and climate regions.

**Social Studies 3-1.3:** Explain interactions between the people and the physical landscape of South Carolina over time, including the effects on population distribution, patterns of migration, access to natural resources, and economic development.

- Plantation Overview Tour, Garden Tour, Horse Carriage Tour, Outdoor Education Center, Beyond the Fields Tour: View the Ashley River and explain its location relative to the Middleton Place and Downtown Charleston. Explain its importance in linking the two during the seventeenth and eighteenth centuries
- Explain the elevation of Middleton Place and how its height above sea level makes it unique to the South Carolina Low Country
- Explain the difficulty of reaching Downtown Charleston from Middleton Place using overland means (horses). Explain the importance of travel via waterways (Ashley River) and the changes brought on by the Industrial Revolution and new technologies
- Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)
- Discuss the transformation from a rural area on the Ashley River to a functioning plantation with formal gardens and crop fields
- Examine the contributions of slaves to the knowledge of how to grow rice in SC. Explore what Europeans did to make a profit in SC before the advent of rice growing and after the Civil War, including the new methods employed by the Middletons after the Civil War to continue to earn a living, such as Phosphate mining and lumbering.

**Science 3-1.3:** Generate questions such as “what if?” or “how?” about objects, organisms, and events in the environment and use those questions to conduct a simple scientific investigation.

- Meet the Breeds Tour, Plantation Overview Tour, Beyond the Fields Tour: Examine effects of changing conditions on plants and animals at Middleton Place. What effect did the presence of water in a rice field have on animals? Why could only certain animals provide labor in a rice field? What effect would salt water have on a rice field? What effect did changes in weather have on plants and animals at Middleton Place?

**Social Studies 3-2.2:** Summarize the motives, activities, and accomplishments of the exploration of South Carolina by the Spanish, French, and English.

**Social Studies 3-2.4:** Summarize the development of the Carolina colony under the Lords Proprietors and the royal colonial government, including settlement by and trade with the people of Barbados and the influence of other immigrant groups.

- House Museum Tour, Horse Carriage Tour: Discuss the contributions of the Middletons to the settlement of SC (they had nearly 20 plantations under cultivation) and their connections to Barbados, including the first two Middletons to settle in SC, brothers Arthur and Edward, who came here from Barbados.
- Explore the ties of Henry Middleton and his son Arthur to the SC royal government and the factors that pushed them to support independence.

**Social Studies 3-2.5:** Explain the role of Africans in developing the culture and economy of South Carolina, including the growth of the slave trade; slave contributions to the plantation economy; the daily lives of the enslaved people; the development of the Gullah culture; and their resistance to slavery.

- Beyond the Fields Tour: Examine the contributions of slaves to the knowledge of how to grow rice in SC.
- Examine African American folktales, songs, and stories and their use in helping slaves distribute knowledge to each other and their use in resistance (Underground Railroad)
- Compare and contrast the family life of the Middletons and those of the slaves and how they both fit into community life in Charleston.
- Examine elements of slave culture that can still be found in SC today as part of Gullah culture

**Science 3-2.1:** Illustrate the life cycles of seed plants and various animals and summarize how they grow and are adapted to conditions within their habitats.

**Science 3-2.2:** Explain how physical and behavioral adaptations allow organisms to survive (including hibernation, defense, locomotion, movement, food obtainment, and camouflage for animals and seed dispersal, color, and response to light for plants).

**Science 3-2.3:** Recall the characteristics of an organism's habitat that allow the organism to survive there.

**Science 3-2.4:** Explain how changes in the habitats of plants and animals affect their survival.

**Science 3-2.5:** Summarize the organization of simple food chains (including the roles of producers, consumers, and decomposers).

- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past
- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
- What are the needs of wild and domesticated species? Examine the diet, the needs as far as shelter and space, and their interaction with each other and with people
- Examine the ways species from around the world have adapted to the SC environment (ex Gulf Coast Sheep)
- Examine the similarities and differences between the lifecycles of various species (similarities between birds and reptiles and their differences from mammals)
- Plantation Overview Tour, Garden Tour, Horse Carriage Tour, Organic Heritage Crop Farm: Plants need air, water, nutrients, space, and light to survive and grow.
- Point out the differences between different plants of the same species (ex. Camellias)
- Mention the life cycle of plants (seeds to mature plant) including rice.

- Examine the similarities between the climates of SC and those of West Africa. These similarities allowed SC plantation owners to grow rice once the slaves taught them how.
- Examine the differences in structure of edible and non-edible plants.
- Point out the differences between the way land is used. Some land is left natural and some land is cultivated.

**Math 3-2.5:** Understand fractions as parts of a whole.

**Math 3-2.6:** Represent fractional parts greater than or equal to one.

- Beyond the Fields Tour: Discuss the Task System of slavery utilized on Middleton Plantations in the past. A good example of fractions involves the cultivation of rice. A typical task for one day would be for one person to cultivate a quarter acre of rice by hand. The Demonstration Rice Field present at Middleton Place today is a quarter acre

**Social Studies 3-3.1:** Summarize the causes of the American Revolution, including Britain's passage of the Stamp Act, the Tea Act, and the Intolerable Acts; the rebellion of the colonists; and the writing of the Declaration of Independence.

**Social Studies 3-3.2:** Compare the perspectives of South Carolinians during the American Revolution, including Patriots, Loyalists, women, enslaved and free Africans, and Native Americans.

**Social Studies 3-3.3:** Summarize the course of the American Revolution in South Carolina, including the role of William Jasper and Fort Moultrie; the occupation of Charles Town by the British; the partisan warfare of Thomas Sumter, Andrew Pickens, and Francis Marion; and the battles of Cowpens, Kings Mountain, and Eutaw Springs.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour: Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war.
- Arthur Middleton was a fervent patriot. He supported confiscation of land belonging to Loyalists leading up to and during the Revolution. He was a delegate to the Second Continental Congress and signed the Declaration of Independence.
- Arthur Middleton served in the defense of Charleston during the Revolution. He was taken prisoner and was later part of a POW exchange.
- General Nathaniel Greene was stationed with his men on part of what is now Middleton Place Foundation property. He and his men were stationed here for several weeks while waiting for the British to evacuate their troops from Charleston so they could reoccupy the city.
- Examine the offer from the British of freedom for any slave that served in the British army during the Revolution. Examine the effect this had on American strategy, including the same offer being issued by the Continental Army.

**Social Studies 3-3.4:** Summarize the effects of the American Revolution, including the establishment of state and national governments.

**Social Studies 3-3.5:** Outline the structure of state government, including the branches of government (legislative, executive, and judicial), the representative bodies of each branch (general assembly, governor, and Supreme Court), and the basic powers of each branch.

- House Museum Tour, Horse Carriage Tour: Examine Arthur Middleton's contributions to SC government following the Revolution. He helped frame SC's first state constitution and served in the SC General Assembly following the war.

**Science 3-3.5:** Illustrate Earth's saltwater and freshwater features (including oceans, seas, rivers, lakes, ponds, streams, and glaciers).

- Plantation Overview Tour, Beyond the Fields Tour: View the Ashley River and explain its location relative to the Middleton Place and Downtown Charleston. Explain its importance in linking the two during the seventeenth and eighteenth centuries. Discuss the natural resources available on the Middleton Place property including the Ashley River and the limits on its use (it is brackish)

**Science 3-3.6:** Illustrate Earth's land features (including volcanoes, mountains, valleys, canyons, caverns, and islands) by using models, pictures, diagrams, and maps.

- Plantation Overview Tour: Explain the elevation of Middleton Place and how its height above sea level makes it unique to the South Carolina Low Country. View Spring House and explain how the cold water spring present there is made possible by the elevation present behind it.

**Social Studies 3-4.1:** Compare the economic conditions for various classes of people in South Carolina, including the elite, the middle class, the lower class, the independent farmers, and the enslaved and free African Americans.

**Social Studies 3-4.2:** Summarize the development of slavery in antebellum South Carolina, including the invention of the cotton gin and the subsequent expansion of and economic dependence on slavery.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Compare and contrast the family life of the Middletons and those of the slaves and how they both fit into community life in Charleston.
- Examine the Task System and how it differed from the system used on other types of plantations (cotton, tobacco, grain)
- Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)
- Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC

**Social Studies 3-4.3:** Explain the reasons for South Carolina's secession from the Union, including the abolitionist movement and the concept of states' rights.

**Social Studies 3-4.4:** Summarize the course of the Civil War in South Carolina, including the Secession Convention, the firing on Fort Sumter, the Union blockade of Charleston, the significance of the *Hunley* submarine; the exploits of Robert Smalls; and General William T. Sherman's march through the state.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour: Explore the problems that led SC to secede from the Union, including states' rights and abolition
- Williams Middleton, along with his brother John, was a delegate to the Secession Convention in December 1860 and was a signer of SC's Ordinance of Secession.

- Williams was a fervent supporter of the Confederacy, though he was over the age limit for military service. He helped fill sandbags and provided barbed wire for the defense of Fort Sumter. He also allowed his Charleston city home, 1 Meeting Street, to be used as officers' quarters and as barracks for Confederate Marines
- Examine the path of William T. Sherman's army as it moved into SC. Explain the arrival of the 56<sup>th</sup> New York Volunteer Regiment to Middleton Place and the aftermath of their actions here, including the destruction of rice fields, the burning of the family home, slave quarters, and other buildings, and the looting of Middleton Place, including the seizure of the Middleton water buffaloes.

**Social Studies 3-4.5:** Explain how the destruction caused by the Civil War affected the economy and daily lives of South Carolinians, including the scarcity of food, clothing, and living essentials and the continuing racial tensions.

**Social Studies 3-4.6:** Summarize the positive and negative effects of Reconstruction in South Carolina, including the development of public education; the establishment of sharecropping; racial advancements and tensions; and the attempts to rebuild towns, factories, and farms.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Explore the survival of Middleton Place following the Civil War, including the new methods employed by the Middletons to continue to earn a living, including Phosphate mining and lumbering.
- Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery and the increase in rice purchased by Europe from other parts of the world (India, China)
- Examine the contributions of Eliza Middleton Fisher, sister of Williams, in helping to keep Middleton Place under the ownership of the Middleton family based on her financial contributions
- Examine the changes to the lives of former slaves in SC in general and at Middleton Place in particular
- View a Freedman's Cabin constructed following the Civil War for former Middleton slaves and the differences with living conditions from before the war

**Science 3-4.4:** Identify sources of heat and exemplify ways that heat can be produced (including rubbing, burning, and using electricity).

- Stabeyards Tour: Visit Blacksmith's shop and examine the methods used for getting fire to burn much hotter than usual. How does this extremely high temperature affect the iron used by the Blacksmith?
- Examine the effects of heat on the materials used by the Potter. Describe the changes in the clay after it has been fired in the kiln.

**Math 3-4.1:** Identify attributes of circles. (center, radius, circumference, diameter)

- Garden Tour, Plantation Overview Tour: View the Middleton Oak. It is a 1000 year old tree. Discuss the circumference of the trunk (roughly 35 feet). How many of the students would it take to go around the circumference of the tree if they join hands?

**Math 3-4.2:** Classify polygons by number of sides. (triangles, quadrilaterals, pentagons, hexagons, octagons)

**Math 3-4.3:** Classify lines and line segments (parallel, perpendicular, intersecting) and angles (right, acute, obtuse).

**Math 3.4.4:** Classify triangles by lengths of side (scalene, isosceles, equilateral) and by sizes of angles. (acute, obtuse, right)

- Garden Tour, Plantation Overview Tour: View the Octagonal Garden and the Rose Garden. Can the students guess the shape of the two gardens? Discuss the use of symmetrical and asymmetrical shapes used in the construction of the Gardens.
- Discuss the allées that run throughout the gardens. Discuss the use of parallel and perpendicular lines that they form.
- Discuss the design of the Gardens as a whole. They form a right triangle with the path leading from the front gate forming a side, the Reflection Pool forming the base, and the hypotenuse running through the Rose and Octagonal Gardens.

**Social Studies 3-5.6:** Describe the growth of tourism and its impact on the economy of South Carolina, including the development of historic sites, state parks, and resorts and the expanding transportation systems that allow for greater access to our state.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour: Explain the difficulty of reaching Downtown Charleston from Middleton Place using overland means (horses). Explain the importance of travel via waterways (Ashley River) and the changes brought on by the Industrial Revolution and new technologies
- Middleton Place doesn't grow rice anymore but still uses the land to earn a living. Today's industry at Middleton Place is tourism.
- The Digital Age has vastly expanded the avenues for disseminating information about the history of the Middleton Place and the programming available to guests who visit the plantation

**Science 3-5.3:** Explain how the motion of an object is affected by the strength of a push or pull and the mass of the object.

- Horse Carriage Tour: Examine the draft horses that pull the carriage. Discuss their being bred to be larger than average horses. How much do they weigh? How much weight can they pull? How long would it take to reach downtown Charleston from Middleton Place on a horse-drawn carriage?

**Math 3-5.6:** Use clocks (digital and analog) to tell time to the nearest minute.

- Garden Tour, Plantation Overview Tour: Examine the sundial in the Rose Garden. How is it the precursor to a modern clock? Is it accurate?

**Visual Arts 3-5-III.A:** Select and use subject matter, symbols, and ideas to communicate meaning through their artworks.

**Visual Arts 3-5-III.B:** Evaluate how particular choices of subject matter, symbols, and ideas function to communicate meaning in their own artworks and those of others.

- Stableyards Tour: Examine the Face Jugs at the Potter's shop. Why are they designed with frightening images? What was the design trying to convey? What was the practical purpose for the jugs and what was the purpose of the design?
- Garden Tour, Plantation Overview Tour: How do specific rooms in the gardens (Octagonal, Rose garden, etc) qualify as art? What principles of design are present in the formal gardens? What feeling were the different garden rooms trying to convey? (ex. The Bosque is meant to be the quiet, contemplative garden room, which differs from many other garden rooms)
- View the Butterfly Lakes and discuss how they qualify as art

**Visual Arts 3-5-IV.A:** Identify specific artworks and styles as belonging to particular artists, cultures, periods, and places.

**Visual Arts 3-5-IV.B:** Identify a variety of artworks, artists, and visual arts materials that exist in South Carolina.

**Visual Arts 3-5-IV.C:** Describe how history, culture, and the visual arts can influence one another.

- Stableyards Tour: Visit the skilled artisans. How does their work qualify as art? How do the styles that the Potter, the Seamstress, the Cooper, and the Blacksmith work in reflect African art?
- How does their work differ from pottery, woodwork, ironwork, and clothing from the present day?
- How are styles used by the artisans unique to SC? Are any of the materials they are working with unique to SC?
- Which styles and principles of their work represent European influences? Which reflect African influences?
- **Grade 4-Social Studies 4-1.3:** Explain the political, economic, and technological factors that led to the exploration of the New World by Spain, Portugal, France, the Netherlands, and England, including the competition between nations, the expansion of international trade, and the technological advances in shipbuilding and navigation.
  - House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the settlement of South Carolina by the Lord's Proprietors, representing the English Crown. Concentrate on the need to keep pace with the explorations of other European Powers, the need for natural resources, and the desires that drove other parts of the English population to settle in the New World (religious freedom, economic pressures, & population pressures)
  - Examine the dominance of the British Navy and the need for lumber to support it. Live Oak lumber was one of the first major exports for the Carolina colony
  - Examine the need for a southern British colony as a buffer between Virginia and the Spanish colonies of Florida

**Social Studies 4-2.1:** Summarize the cause-and-effect relationships of the Columbian Exchange.

**Social Studies 4-2.2:** Compare the various European settlements in North America in terms of economic activities, religious emphasis, government, and lifestyles.

**Social Studies 4-2.3:** Explain the impact of the triangular trade, indentured servitude, and the enslaved and free Africans on the developing culture and economy of North America.

**Social Studies 4-2.4:** Summarize the relationships among the Native Americans, Europeans, and Africans, including the French and Indian Wars, the slave revolts, and the conduct of trade.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour, Organic Heritage Crop Farm: Explore the exchange of plants and animals between the Old World and the New. Many New World crops were more nutritious and yielded more calories per acre than Old World crops. This led to a population boom around the world. This population growth contributed to the economic and population pressure that

convinced many Europeans to leave their country of origin to come to the New World.

- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Compare and contrast the major British colonial regions (New England, Middle Colonies, and the South). Explore their economies, including the links between the different regions and where most of the exports were being shipped. (ex. Food crops being shipped to the Caribbean, cotton being shipped to New England)
- Explore the shift from indentured servitude to slavery in the British colonies. Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without whose knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC
- Examine the Task System and how it differed from the system used on other types of plantations (cotton, tobacco, grain)
- Explore the effect of the Revolution and the Civil War on slavery in the US, SC in particular. The British offered freedom for any slaves who joined the British army during the Revolution. Though many US leaders did not relish the thought of offering freedom for enlistment, they were forced to match the British offer.
- Examine the rise in emancipation following the Revolution. Explore the reasons this trend was reversed as time went on. Slave revolts (like the Denmark Vesey Revolt in SC) were a major factor in the decline in number of emancipations and in the increased severity of slave laws in the South during the Antebellum Era.
- Explore the effects of the Civil War on the relationship between the North and the South. Explore the survival of Middleton Place following the Civil War, including the new methods employed by the Middletons to continue to earn a living, including Phosphate mining and lumbering.

**Science 4-2.1:** Classify organisms into major groups (including plants or animals, flowering or nonflowering plants, and vertebrates [fish, amphibians, reptiles, birds, and mammals] or invertebrates) according to their physical characteristics.

**Science 4-2.2:** Explain how the characteristics of distinct environments (including swamps, rivers and streams, tropical rain forests, deserts, and the polar regions) influence the variety of organisms in each.

**Science 4-2.3:** Explain how humans and other animals use their senses and sensory organs to detect signals from the environment and how their behaviors are influenced by these signals.

**Science 4-2.5:** Explain how an organism's patterns of behavior are related to its environment (including the kinds and the number of other organisms present, the availability of food and other resources, and the physical characteristics of the environment).

- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past

- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
- Classify wild and domesticated species present at Middleton Place. Are they mammals, birds, fish, amphibians, reptiles or insects?
- What are the needs of wild and domesticated species? Examine the diet, the needs as far as shelter and space, and their interaction with each other and with people
- Examine the ways species from around the world have adapted to the SC environment (ex Gulf Coast Sheep)
- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past
- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
- What are the needs of wild and domesticated species? Examine the diet, the needs as far as shelter and space, and their interaction with each other and with people
- Examine the ways species from around the world have adapted to the SC environment
- Examine the similarities and differences between the lifecycles of various species (similarities between birds and reptiles and their differences from mammals)
- Plantation Overview Tour, Garden Tour, Horse Carriage Tour, Organic Heritage Crop Farm: Plants need air, water, nutrients, space, and light to survive and grow.
- Point out the differences between different plants of the same species (ex. Camellias)
- Mention the life cycle of plants (seeds to mature plant) including rice.
- Examine the similarities between the climates of SC and those of West Africa. These similarities allowed SC plantation owners to grow rice once the slaves taught them how.
- Examine the differences in structure of edible and non-edible plants.
- Point out the differences between the way land is used. Some land is left natural and some land is cultivated.

**Science 4-2.6:** Explain how organisms cause changes in their environment.

- Plantation Overview Tour, Horse Carriage Tour: Examine the introduction of invasive species to Middleton Place (bamboo, Chinese parasols) and the effects they have had on the landscape and the local flora and fauna.
- Discuss the transformation from a rural area on the Ashley River to a functioning plantation with formal gardens and crop fields.

**Math 4-2.9:** Compare the relative size of fractions to benchmarks (0, 1/2, 1).

**Math 4-2.10:** Identify common fraction/decimal equivalents. ( $1/2 = .5$ ,  $1/4 = .25$ ,  $3/4 = .75$ , multiples of  $1/10$ , and multiples of  $1/100$ ).

- Beyond the Fields Tour: Discuss the Task System of slavery utilized on Middleton Plantations in the past. A good example of fractions involves the cultivation of rice. A typical task for one day would be for one person to cultivate a quarter acre of rice by hand. The Demonstration Rice Field present at Middleton place today is a quarter acre

**Social Studies 4-3.1:** Explain the major political and economic factors leading to the American Revolution, including the French and Indian War, the Stamp Act, the Tea Act,

and the Intolerable Acts as well as American resistance to these acts through boycotts, petitions, and congresses

**Social Studies 4-3.2:** Explain the significance of major ideas and philosophies of government reflected in the Declaration of Independence.

**Social Studies 4-3.3:** Summarize the importance of the key battles of the Revolutionary War and the reasons for American victories including Lexington and Concord, Bunker (Breed's) Hill, Charleston, Saratoga, Cowpens, and Yorktown.

- House Museum Tour, Horse Carriage Tour, Plantation Overview Tour, Beyond the Fields Tour: Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war.
- Arthur Middleton was a fervent patriot. He supported confiscation of land belonging to Loyalists leading up to and during the Revolution. He was a delegate to the Second Continental Congress and signed the Declaration of Independence.
- Arthur Middleton served in the defense of Charleston during the Revolution. He was taken prisoner and was later part of a POW exchange.
- General Nathaniel Greene was stationed with his men on part of what is now Middleton Place Foundation property. He and his men were stationed here for several weeks while waiting for the British to evacuate their troops from Charleston so they could reoccupy the city.
- Examine the offer from the British of freedom for any slave that served in the British army during the Revolution. Examine the effect this had on American strategy, including the same offer being issued by the Continental Army.

**Social Studies 4-3.4:** Explain how the American Revolution affected attitudes toward and the future of slavery, women, and Native Americans.

- Beyond the Fields Tour: Examine the rise in emancipation following the Revolution. Explore the reasons this trend was reversed as time went on. Slave revolts (like the Denmark Vesey Revolt in SC) were a major factor in the decline in number of emancipations and in the increased severity of slave laws in the South during the Antebellum Era.

**Science 4-4.3:** Compare daily and seasonal changes in weather conditions (including wind speed and direction, precipitation, and temperature) and patterns.

**Science 4-4.4:** Summarize the conditions and effects of severe weather phenomena (including thunderstorms, hurricanes, and tornadoes) and related safety concerns.

- Meet the Breeds Tour, Outdoor Education Center, Organic Heritage Crop Farm, Plantation Overview Tour, Garden Tour, Horse Carriage Tour, House Museum Tour, Beyond the Fields Tour: Examine the weather on the day students visit Middleton Place.
- Examine which plants bloom in which seasons. Examine which crops are harvested in which seasons.
- Discuss the effects of the different seasons on the animals present at Middleton Place
- Examine the Winter and Summer bedrooms in the House Museum. How was life different for the Middleton family during these 2 seasons?
- Examine the effect of weather and the changing seasons on the life of slaves at Middleton Place

- Examine the dangers of severe weather (hurricanes) to the residents of Middleton Place (past & present)

**Social Studies 4-5.5:** Explain how the Missouri Compromise, the fugitive slave laws, the annexation of Texas, the Compromise of 1850, the Kansas-Nebraska Act, and the Dred Scott decision affected the institution of slavery in the United States and its territories.

- Beyond the Fields Tour: Examine African American folktales, songs, and stories and their use in helping slaves distribute knowledge to each other and their use in resistance (Underground Railroad)

**Social Studies 4-6.1:** Explain the significant economic and geographic differences between the North and South.

**Social Studies 4-6.2:** Explain the contributions of abolitionists to the mounting tensions between the North and South over slavery, including William Lloyd Garrison, Sojourner Truth, Frederick Douglass, Harriet Tubman, Harriet Beecher Stowe, and John Brown.

**Social Studies 4-6.3:** Explain the specific events and issues that led to the Civil War, including **sectionalism**, slavery in the territories, states' rights, the presidential election of 1860, and secession.

**Social Studies 4-6.4:** Summarize significant battles, strategies, and turning points of the Civil War, including the battles of Fort Sumter and Gettysburg, the Emancipation Proclamation, the role of African Americans in the war, the surrender at Appomattox, and the assassination of President Lincoln.

**Social Studies 4-6.5:** Explain the social, economic, and political effects of the Civil War on the United States.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour: Explore the problems that led SC to secede from the Union, including states' rights and abolition
- Williams Middleton, along with his brother John, was a delegate to the Secession Convention in December 1860 and was a signer of SC's Ordinance of Secession.
- Williams was a fervent supporter of the Confederacy, though he was over the age limit for military service. He helped fill sandbags and provided barbed wire for the defense of Fort Sumter. He also allowed his Charleston city home, 1 Meeting Street, to be used as officers' quarters and as barracks for Confederate Marines
- Examine the path of William T. Sherman's army as it moved into SC. Explain the arrival of the 56<sup>th</sup> New York Volunteer Regiment to Middleton Place and the aftermath of their actions here, including the destruction of rice fields, the burning of the family home, slave quarters, and other buildings, and the looting of Middleton Place, including the seizure of the Middleton water buffaloes.
- Explore the survival of Middleton Place following the Civil War, including the new methods employed by the Middletons to continue to earn a living, including Phosphate mining and lumbering.
- Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery and the increase in rice purchased by Europe from other parts of the world (India, China)
- Examine the contributions of Eliza Middleton Fisher, sister of Williams, in helping to keep Middleton Place under the ownership of the Middleton family based on her financial contributions

- Examine the changes to the lives of former slaves in SC in general and at Middleton Place in particular
- View a Freedman's Cabin constructed following the Civil War for former Middleton slaves and the differences with living conditions from before the war
- **Grade 5- Social Studies 5-1.1:** Summarize the aims and course of Reconstruction, including the effects of Abraham Lincoln's assassination, Southern resistance to the rights of freedmen, and the agenda of the Radical Republicans.
- Social Studies 5-1.2:** Explain the effects of Reconstruction, including new rights under the thirteenth, fourteenth, and fifteenth amendments; the actions of the Freedmen's Bureau; and the move from a plantation system to sharecropping.
- Social Studies 5-1.4:** Compare the political, economic, and social effects of Reconstruction on different populations in the South and in other regions of the United States.
  - House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Explore the survival of Middleton Place following the Civil War, including the new methods employed by the Middletons to continue to earn a living, including Phosphate mining and lumbering.
  - Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery and the increase in rice purchased by Europe from other parts of the world (India, China)
  - Examine the contributions of Eliza Middleton Fisher, sister of Williams, in helping to keep Middleton Place under the ownership of the Middleton family based on her financial contributions
  - Examine the abandonment of Middleton Place and the factors that led to it. Examine what allowed the re-establishment of the Middleton Place by Middleton descendants during the 20<sup>th</sup> century
  - Examine the changes to the lives of former slaves in SC in general and at Middleton Place in particular
  - View a Freedman's Cabin constructed following the Civil War for former Middleton slaves and the differences with living conditions from before the war
- Science 5-1.7:** Use a simple technological design process to develop a solution or a product, communicating the design by using descriptions, models, and drawings.
  - Beyond the Fields Tour: Examine the contributions of slaves to the methods, innovations, and products used on a Low Country Plantation. These included the method for growing rice in SC, the use of indigo as a dye, and unique uses of plants and animals. Examine how these innovations were discovered over time through a combination of inherited knowledge and a trial and error basis.
- Science 5-2.2:** Summarize the composition of an ecosystem, considering both biotic factors (including populations to the level of microorganisms and communities) and abiotic factors.
- Science 5-2.3:** Compare the characteristics of different ecosystems (including estuaries/salt marshes, oceans, lakes and ponds, forests, and grasslands).
- Science 5-2.4:** Identify the roles of organisms as they interact and depend on one another through food chains and food webs in an ecosystem, considering producers and consumers (herbivores, carnivores, and omnivores), decomposers (microorganisms, termites, worms, and fungi), predators and prey, and parasites and hosts.

**Science 5-2.5:** Explain how limiting factors (including food, water, space, and shelter) affect populations in ecosystems.

- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past
- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
- What are the needs of wild and domesticated species? Examine the diet, the needs as far as shelter and space, and their interaction with each other and with people
- Examine the ways species from around the world have adapted to the SC environment
- Examine the similarities between the climates of SC and those of West Africa. These similarities allowed SC plantation owners to grow rice once the slaves taught them how.
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)

**Science 5-3.5:** Compare the movement of water by waves, currents, and tides.

- Plantation Overview Tour: View the Ashley River. Discuss the tidal nature of the river, including the brackish quality of the water. How does the tide affect the salinity of the water?

**Math 5-4.6:** Analyze shapes to determine line symmetry and/or rotational symmetry.

- Garden Tour, Plantation Overview Tour: View the Octagonal Garden and the Rose Garden. Can the students guess the shape of the two gardens? Discuss the use of symmetrical and asymmetrical shapes used in the construction of the Gardens.

**Science 5-5.1:** Illustrate the affects of force (including magnetism, gravity, and friction) on motion.

**Science 5-5.2:** Summarize the motion of an object in terms of position, direction, and speed.

**Science 5-5.6:** Explain how a change of force or a change in mass affects the motion of an object.

- Horse Carriage Tour: Examine the draft horses that pull the carriage. Discuss their being bred to be larger than average horses. How much do they weigh? How much weight can they pull? How long would it take to reach downtown Charleston from Middleton Place on a horse-drawn carriage?

**Social Studies 5-6.6:** Identify issues related to the use of natural resources by the United States, including recycling, climate change, environmental hazards, and depletion that require our reliance on foreign resources.

- Organic Heritage Crop Farm: Explore the spread of Local First Movement and the increased popularity of organic produce. The Organic Heritage Crop Farm at

Middleton Place represents crops grown on the plantation long ago but also represents the new organic, local foods movement. All produce is used in the Restaurant at Middleton Place. Pesticides and fertilizers are also organic (for the Formal Gardens and the Organic Field)

- **Grade 6- Social Studies 6-1.2:** Explain the emergence of agriculture and its effect on early human communities, including the domestication of plants and animals, the impact of irrigation techniques, and subsequent food surpluses.
  - Garden Tour, Plantation Overview Tour, Beyond the Fields Tour, Horse Carriage Tour, Outdoor Education Center: Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)
  - Plantation Overview Tour, Garden Tour,: Explore European influence on the use of land to construct formal gardens
  - Meet the Breeds Tour, Beyond the Fields Tour, Organic Heritage Crop Farm Tour: discuss non-native animals and plants (esp. West African) and the differences in their use in West Africa and in the South Carolina Low Country
  - Examine the contributions of slaves to the knowledge of how to grow rice in SC.

**Science 6-2.1:** Summarize the characteristics that all organisms share (including the obtainment and use of resources for energy, the response to stimuli, the ability to reproduce, and process of physical growth and development).

**Science 6-2.3:** Compare the characteristic structures of various groups of plants (including vascular or nonvascular, seed or spore-producing, flowering or cone-bearing, and monocot or dicot).

**Science 6-2.4:** Summarize the basic functions of the structures of a flowering plant for defense, survival, and reproduction.

**Science 6-2.5:** Summarize each process in the life cycle of flowering plants (including germination, plant development, fertilization, and seed production).

**Science 6-2.6:** Differentiate between the processes of sexual and asexual reproduction of flowering plants.

**Science 6-2.7:** Summarize the processes required for plant survival (including photosynthesis, respiration, and transpiration).

**Science 6-2.8:** Explain how plants respond to external stimuli (including dormancy and the forms of tropism known as phototropism, gravitropism, hydrotropism, and thigmotropism).

- Plantation Overview Tour, Garden Tour, Horse Carriage Tour, Organic Heritage Crop Farm: Plants need air, water, nutrients, space, and light to survive and grow.
- Point out the differences between different plants of the same species (ex. Camellias)
- Mention the life cycle of plants (seeds to mature plant) including rice.
- Examine the similarities between the climates of SC and those of West Africa. These similarities allowed SC plantation owners to grow rice once the slaves taught them how.
- Examine the differences in structure of edible and non-edible plants.
- Point out the differences between the way land is used. Some land is left natural and some land is cultivated.
- Examine Resurrection Fern and its use of dormancy

- Examine Spanish Moss and its use of spores

**Science 6-3.1:** Compare the characteristic structures of invertebrate animals (including sponges, segmented worms, echinoderms, mollusks, and arthropods) and vertebrate animals (fish, amphibians, reptiles, birds, and mammals).

**Science 6-3.2:** Summarize the basic functions of the structures of animals that allow them to defend themselves, to move, and to obtain resources.

**Science 6-3.3:** Compare the response that a warm-blooded (endothermic) animal makes to a fluctuation in environmental temperature with the response that a cold-blooded (ectothermic) animal makes to such a fluctuation.

**Science 6-3.4:** Explain how environmental stimuli cause physical responses in animals (including shedding, blinking, shivering, sweating, panting, and food gathering)

**Science 6-3.5:** Illustrate animal behavioral responses (including hibernation, migration, defense, and courtship) to environmental stimuli.

**Science 6-3.6:** Summarize how the internal stimuli (including hunger, thirst, and sleep) of animals ensure their survival.

**Science 6-3.7:** Compare learned to inherited behaviors in animals.

- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past
- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
- Classify wild and domesticated species present at Middleton Place. Are they mammals, birds, fish, amphibians, reptiles or insects?
- What are the needs of wild and domesticated species? Examine the diet, the needs as far as shelter and space, and their interaction with each other and with people
- Examine the ways species from around the world have adapted to the SC environment
- Examine the similarities and differences between the lifecycles of various species (similarities between birds and reptiles and their differences from mammals)
- Horse Carriage Tour: Examine the draft horses that pull the carriage. Discuss their being bred to be larger than average horses. How much do they weigh? How much weight can they pull? How long would it take to reach downtown Charleston from Middleton Place on a horse-drawn carriage? How does the manner that horses sleep differ from other animals
- Explain the courtship of peafowl. Describe the differences in peacocks during the mating season compared to other times of year
- Discuss the differences in the manner that warm and cold-blooded animals respond to environmental stimuli (ex. Alligators basking in the sun)

**Social Studies 6-4.1:** Compare the major contributions of the African civilizations of Ghana, Mali, and Songhai, including the impact of Islam on the **cultures** of these kingdoms.

**Social Studies 6-4.2:** Describe the influence of geography on trade in the African kingdoms, including the salt and gold trades.

- Beyond the Fields Tour: Examine West African society prior to the arrival of Europeans. Explore the goods offered for trade by both sides (including slaves)
- Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC.

Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC

**Science 6-4.4:** Summarize the relationship of the movement of air masses, high and low pressure systems, and frontal boundaries to storms (including thunderstorms, hurricanes, and tornadoes) and other weather conditions.

- Plantation Overview Tour: Examine the dangers of severe weather (hurricanes) to the residents of Middleton Place (past & present)

**Science 6-5.7:** Explain how the design of simple machines (including levers, pulleys, and inclined planes) helps reduce the amount of force required to do work.

**Science 5-5.8:** Illustrate ways that simple machines exist in common tools and in complex machines.

- Horse Carriage Tour: Examine the draft horses that pull the carriage. Discuss their being bred to be larger than average horses. How much do they weigh? How much weight can they pull? How long would it take to reach downtown Charleston from Middleton Place on a horse-drawn carriage?
- Stableyards Tour: Examine machines used at Middleton Place in the past (working examples are still present on the plantation). How complex were they and how did they work? How did they reduce the amount of human labor needed to complete an activity?

**Social Studies 6-6.4:** Compare the economic, political, and religious incentives of the various European countries to explore and settle new lands.

**Social Studies 6-6.5:** Identify the origin and destinations of the voyages of major European explorers.

**Social Studies 6-6.6:** Explain the effects of the exchange of plants, animals, diseases, and technology throughout Europe, Asia, Africa, and the Americas (known as the Columbian Exchange).

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour, Organic Heritage Crop Farm: Explore the exchange of plants and animals between the Old World and the New. Many New World crops were more nutritious and yielded more calories per acre than Old World crops. This led to a population boom around the world. This population growth contributed to the economic and population pressure that convinced many Europeans to leave their country of origin to come to the New World.
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the settlement of South Carolina by the Lord's Proprietors, representing the English Crown. Concentrate on the need to keep pace with the explorations of other European Powers, the need for natural resources, and the desires that drove other parts of the English population to settle in the New World (religious freedom, economic pressures, & population pressures)
- Examine the dominance of the British Navy and the need for lumber to support it. Live Oak lumber was one of the first major exports for the Carolina colony

- Examine the need for a southern British colony as a buffer between Virginia and the Spanish colonies of Florida

**Visual Arts 6-8-II.A:** Analyze and describe, using the appropriate vocabulary, the composition of a particular artwork with regard to the elements and principles of design that it manifests.

- Garden Tour, Plantation Overview Tour: Visit different garden rooms (Octagonal, Mount, Rose, Mirror, & Secret gardens, Bosque). What elements of design are present? How did the Middletons use those elements to construct the formal gardens? How did they change those elements to suit their own needs?

**Visual Arts 6-8-III.A:** Use visual metaphors and symbols in an artwork to convey meaning.

- Stableyards Tour: Examine the Face Jugs at the Potter's shop. Why are they designed with frightening images? What was the design trying to convey? What was the practical purpose for the jugs and what was the purpose of the design?

**Visual Arts 6-8-IV.A:** Compare and contrast the characteristics of artworks from various cultures and historical periods.

**Visual Arts 6-8-IV.B:** Compare and contrast a variety of artworks, artists, and visual arts materials that exist in South Carolina.

**Visual Arts 6-8-IV.C:** Analyze, describe, and demonstrate how factors of time and place such as climate, resources, ideas, and technology influence visual characteristics that give meaning and value to a work of art.

- Stableyards Tour: Visit the skilled artisans. How does their work qualify as art? How do the styles that the Potter, the Seamstress, the Cooper, and the Blacksmith work in reflect African art?
- How does their work differ from pottery, woodwork, ironwork, and clothing from the present day?
- How are styles used by the artisans unique to SC? Are any of the materials they are working with unique to SC?
- Which styles and principles of their work represent European influences? Which reflect African influences?

**Visual Arts 6-8-V.A:** Compare various purposes for creating artworks.

- Stableyards Tour: Visit the skilled artisans' shops. How does their work qualify as both art and as utilitarian?
- Garden Tour, Plantation Overview Tour: How do specific rooms in the gardens (Octagonal, Rose garden, etc) qualify as art? What principles of design are present in the formal gardens? What feeling were the different garden rooms trying to convey? (ex. The Bosque is meant to be the quiet contemplative garden room, which differs from many other garden rooms)
- View the Butterfly Lakes and discuss how they qualify as art

- **Grade 7- Social Studies 7-1.1:** Compare the colonial claims and the expansion of European powers through 1770.

**Social Studies 7-1.3:** Summarize the policy of mercantilism as a way of building a nation's wealth, including government policies to control trade.

**Social Studies 7-1.4:** Analyze the beginnings of capitalism and the ways that it was affected by mercantilism, the developing market economy, international trade, and the rise of the middle class.

**Social Studies 7-1.5:** Compare the differing ways that European nations developed political and economic influences, including trade and settlement patterns, on the continents of Asia, Africa, and the Americas.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour, Organic Heritage Crop Farm: Explore the exchange of plants and animals between the Old World and the New. Many New World crops were more nutritious and yielded more calories per acre than Old World crops. This led to a population boom around the world. This population growth contributed to the economic and population pressure that convinced many Europeans to leave their country of origin to come to the New World.
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Compare and contrast the major British colonial regions (New England, Middle Colonies, and the South). Explore their economies, including the links between the different regions and where most of the exports were being shipped. (ex. Food crops being shipped to the Caribbean, cotton being shipped to New England)
- Explore the shift from indentured servitude to slavery in the British colonies. Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the settlement of South Carolina by the Lord's Proprietors, representing the English Crown. Concentrate on the need to keep pace with the explorations of other European Powers, the need for natural resources, and the desires that drove other parts of the English population to settle in the New World (religious freedom, economic pressures, & population pressures)
- Examine the dominance of the British Navy and the need for lumber to support it. Live Oak lumber was one of the first major exports for the Carolina colony
- Examine the need for a southern British colony as a buffer between Virginia and the Spanish colonies of Florida
- Outdoor Education Center, Horse Carriage Tour, Beyond the Fields Tour, Stableyards Tour, Organic Heritage Crop Farm: Examine the importance of rice as rations for European armies and the increase in demand and price because of this
- Examine the production of goods on the plantation for consumption and production of goods (besides rice) for sale
- Examine the goods that had to be purchased for use on the plantation because they were not produced on site
- Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery and the increase in rice purchased by Europe from other parts of the world (India, China)

**Science 7-1.2:** Generate questions that can be answered through scientific investigation.

- Beyond the Fields Tour: Examine the contributions of slaves to the methods, innovations, and products used on a Low Country Plantation. These included the method for growing rice in SC, the use of indigo as a dye, and unique uses of plants and animals. Examine how these innovations were discovered over time through a combination of inherited knowledge and a trial and error basis.

**Social Studies 7-2.5:** Explain how the Enlightenment influenced the American and French revolutions leading to the formation of limited forms of government, including the relationship between people and their government, the role of constitutions, the characteristics of shared powers, the protection of individual rights, and the promotion of the common good.

- Plantation Overview Tour, Garden Tour, House Museum Tour: Explain how Henry and Arthur Middleton's contributions to our democracy made them respected friends of George Washington, Thomas Jefferson, etc.
- Examine the political contributions of the Middletons. Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war. Arthur Middleton was a delegate to the Second Continental Congress and signed the Declaration of Independence. He also helped frame SC's first state constitution and served in the SC General Assembly following the war.

**Science 7-4.3:** Explain the interaction among changes in the environment due to natural hazards (including landslides, wildfires, and floods), changes in populations, and limiting factors (including climate and the availability of food and water, space, and shelter).

**Science 7-4.4:** Explain the effects of soil quality on the characteristics of an ecosystem.

**Science 7-4.5:** Summarize how the location and movement of water on Earth's surface through groundwater zones and surface-water drainage basins, called watersheds, are important to ecosystems and to human activities.

**Science 7-4.6:** Classify resources as renewable or nonrenewable and explain the implications of their depletion and the importance of conservation.

- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past
- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
- What are the needs of wild and domesticated species? Examine the diet, the needs as far as shelter and space, and their interaction with each other and with people
- Examine the ways species from around the world have adapted to the SC environment
- Examine the similarities between the climates of SC and those of West Africa. These similarities allowed SC plantation owners to grow rice once the slaves taught them how.
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.

- Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)
- Discuss Phosphate mining at Middleton Place in the past. How did this process affect the environment on the plantation? Discuss the non-renewable nature of the phosphate and the damage the mining caused

**Science 7-5.3:** Compare the physical properties of metals and nonmetals.

**Science 7-5.9:** Compare physical properties of matter (including melting or boiling point, density, and color) to the chemical property of reactivity with a certain substance (including the ability to burn or to rust).

- Stabeyards Tour: Examine the properties of iron at the Blacksmith's shop. How does the presence of heat change the properties of iron? Show the ways it can be shaped when hot. Explain the process of iron implements rusting and the conditions that cause it.

**Social Studies 7-6.5:** Explain the significance and impact of the information, technological, and communications revolutions, including the role of television, satellites, computers, and the Internet.

- Outdoor Education Center, Pre & Post-visit materials: The Digital Age has vastly expanded the avenues for disseminating information about the history of the Middleton Place and the programming available to guests who visit the plantation

**Social Studies 7-6.6:** Summarize the dangers to the natural environment that are posed by population growth, urbanization, and industrialization, including global influences on the environment and the efforts by citizens and governments to protect the natural environment.

- Organic Heritage Crop Farm: Explore the spread of Local First Movement and the increased popularity of organic produce. The Organic Heritage Crop Farm at Middleton Place represents crops grown on the plantation long ago but also represents the new organic, local foods movement. All produce is used in the Restaurant at Middleton Place. Pesticides and fertilizers are also organic (for the Formal Gardens and the Organic Farm)

- **Grade 8 - Social Studies 8-1.2:** Compare the motives, activities, and accomplishments of the exploration of South Carolina and North America by the Spanish, French, and English.

**Social Studies 8-1.3:** Summarize the history of English settlement in New England, the mid-Atlantic region, and the South, with an emphasis on South Carolina as an example of a distinctly southern colony.

- House Museum Tour, Horse Carriage Tour: Discuss the contributions of the Middletons to the settlement of SC (they had nearly 20 plantations under cultivation) and their connections to Barbados, including the first two Middletons to settle in SC, brothers Arthur and Edward, who came here from Barbados.
- Explore the ties of Henry Middleton and his son Arthur to the SC royal government and the factors that pushed them to support independence.
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the settlement of South Carolina by the Lord's Proprietors, representing the English Crown. Concentrate on the need to keep pace with the explorations of other European Powers, the need for natural

resources, and the desires that drove other parts of the English population to settle in the New World (religious freedom, economic pressures, & population pressures)

- Examine the dominance of the British Navy and the need for lumber to support it. Live Oak lumber was one of the first major exports for the Carolina colony
- Examine the need for a southern British colony as a buffer between Virginia and the Spanish colonies of Florida
- Compare and contrast the major British colonial regions (New England, Middle Colonies, and the South). Explore their economies, including the links between the different regions and where most of the exports were being shipped. (ex. Food crops being shipped to the Caribbean, cotton being shipped to New England)

**Social Studies 8-1.4:** Explain the significance of enslaved and free Africans in the developing culture and economy of the South and South Carolina, including the growth of the slave trade and resulting population imbalance between African and European settlers; African contributions to agricultural development; and resistance to slavery, including the Stono Rebellion and subsequent laws to control slaves.

- Beyond the Fields Tour, Outdoor Education Center: Explore the shift from indentured servitude to slavery in the British colonies. Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC
- Outdoor Education Center, Horse Carriage Tour, Beyond the Fields Tour, Stableyards Tour, Organic Heritage Crop Farm: Examine the importance of rice as rations for European armies and the increase in demand and price because of this
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Meet the Breeds Tour, Beyond the Fields Tour, Organic Heritage Crop Farm Tour: discuss non-native animals and plants (esp. West African) and the differences in their use in West Africa and in the South Carolina Low Country
- Examine African American folktales, songs, and stories and their use in helping slaves distribute knowledge to each other and their use in resistance (Underground Railroad)
- Examine the rise in emancipation following the Revolution. Explore the reasons this trend was reversed as time went on. Slave revolts (like the Denmark Vesey Revolt in SC) were a major factor in the decline in number of emancipations and in the increased severity of slave laws in the South during the Antebellum Era.

**Social Studies 8 1.5:** Explain how South Carolinians used their natural, human, and political resources uniquely to gain economic prosperity, including settlement by and trade with the people of Barbados, rice and indigo planting, and the practice of mercantilism.

- Garden Tour, Plantation Overview Tour, Beyond the Fields Tour, Horse Carriage Tour, Outdoor Education Center: Discuss the natural resources available on the

Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)

- Examine the production of goods on the plantation for consumption and production of goods (besides rice) for sale
- Examine the goods that had to be purchased for use on the plantation because they were not produced on site
- House Museum Tour, Horse Carriage Tour: Discuss the contributions of the Middletons to the settlement of SC (they had nearly 20 plantations under cultivation) and their connections to Barbados, including the first two Middletons to settle in SC, brothers Arthur and Edward, who came here from Barbados.

**Social Studies 8-1.6:** Compare the development of representative government in South Carolina to representative government in the other colonial regions, including the proprietary regime, the period of royal government, and South Carolina's Regulator Movement.

- House Museum Tour, Horse Carriage Tour: Examine the political contributions of the Middletons. Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war. Arthur Middleton was a delegate to the Second Continental Congress and signed the Declaration of Independence. He also helped frame SC's first state constitution and served in the SC General Assembly following the war.

**Science 8-1.4:** Generate questions for further study on the basis of prior investigations.

- Beyond the Fields Tour: Examine the contributions of slaves to the methods, innovations, and products used on a Low Country Plantation. These included the method for growing rice in SC, the use of indigo as a dye, and unique uses of plants and animals. Examine how these innovations were discovered over time through a combination of inherited knowledge and a trial and error basis.

**Social Studies 8-2.2:** Summarize the response of South Carolina to events leading to the American Revolution, including the Stamp Act, the Tea Acts, and the Sons of Liberty.

**Social Studies 8-2.3:** Explain the roles of South Carolinians in the adoption of the Declaration of Independence.

**Social Studies 8-2.4:** Compare the perspectives of different groups of South Carolinians during the American Revolution, including Patriots, Tories/Loyalists, women, enslaved and free Africans, and Native Americans.

**Social Studies 8-2.5:** Summarize the role of South Carolinians in the course of the American Revolution, including the use of partisan warfare and the battles of Charleston, Camden, Cowpens, Kings Mountain and Eutaw Springs

**Social Studies 8-2.6:** Explain the role of South Carolinians in the establishment of their new state government and the national government after the American Revolution.

- House Museum Tour, Horse Carriage Tour, Plantation Overview Tour, Beyond the Fields Tour: Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war.

- Arthur Middleton was a fervent patriot. He supported confiscation of land belonging to Loyalists leading up to and during the Revolution. He was a delegate to the Second Continental Congress and signed the Declaration of Independence.
- Arthur Middleton served in the defense of Charleston during the Revolution. He was taken prisoner and was later part of a POW exchange.
- General Nathaniel Greene was stationed with his men on part of what is now Middleton Place Foundation property. He and his men were stationed here for several weeks while waiting for the British to evacuate their troops from Charleston so they could reoccupy the city.
- Examine the offer from the British of freedom for any slave that served in the British army during the Revolution. Examine the effect this had on American strategy, including the same offer being issued by the Continental Army.

**Science 8-2.1:** Explain how biological adaptations of populations enhance their survival in a particular environment.

- Meet the Breeds Tour: Examine the ways species from around the world have adapted to the SC environment (ex Gulf Coast Sheep adapting to hot, humid conditions of US Southeast)

**Social Studies 8-3.1:** Explain the tensions between the Upcountry and the Low Country of South Carolina, including their economic struggles after the Revolutionary War, their disagreement over representation in the General Assembly, the location of the new capital, and the transformation of the state's economy.

**Social Studies 8-3.4:** Analyze the position of South Carolina on the issues that divided the nation in the early 1800s, including the assumption of state debts, the creation of a national bank, the protective tariff and the role of the United States in the European conflict between France and England and in the War of 1812.

- House Museum Tour, Horse Carriage Tour: Arthur Middleton's son Henry (Gov. Henry) served in both houses of the SC Legislature. He was appointed to several committees dealing with important issues like the incorporation of the state bank, curtailing the slave trade, and legislative reapportionment to reflect the growing upcountry population. As the 43<sup>rd</sup> Governor of SC he passed a law establishing free public schools. He served as the Minister Plenipotentiary (known as an ambassador today) to Russia from 1820-1830. Upon his return to the US, he served as the leader of the Unionist Party during the Nullification Crisis of the 1830's, supporting protective tariffs as constitutional.

**Science 8-3.8:** Explain how earthquakes result from forces inside Earth.

- Plantation Overview Tour, Garden Tour, Horse Carriage Tour, Beyond the Fields Tour, House Museum Tour: Discuss the presence of a major earthquake fault under the Ashley River. Discuss the last major earthquake in the SC Low Country in 1886.
- Examine earthquake bolts in the Rice Mill and Plantation Chapel. Discuss how these help support the structural integrity of the buildings during an earthquake

**Social Studies 8-4.2:** Analyze how sectionalism arose from racial tension, including the Denmark Vesey plot, slave codes and the growth of the abolitionist movement.

**Social Studies 8-4.3:** Analyze key issues that led to South Carolina's secession from the Union, including the nullification controversy and John C. Calhoun, the extension of

slavery and the compromises over westward expansion, the Kansas-Nebraska Act, the Dred Scott decision, and the election of 1860.

**Social Studies 8-4.4:** Evaluate the arguments of unionists, cooperationists, and secessionists on the issues of states' rights and slavery and the ways that these arguments contributed to South Carolina's secession.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour: Explore the problems that led SC to secede from the Union, including states' rights and abolition
- Williams Middleton, along with his brother John, was a delegate to the Secession Convention in December 1860 and was a signer of SC's Ordinance of Secession.
- Williams was a fervent supporter of the Confederacy, though he was over the age limit for military service. He helped fill sandbags and provided barbed wire for the defense of Fort Sumter. He also allowed his Charleston city home, 1 Meeting Street, to be used as officers' quarters and as barracks for Confederate Marines

**Social Studies 8-4.5:** Compare the military strategies of the North and the South during the Civil War and the fulfillment of these strategies in South Carolina and in the South as a whole, including the attack on Fort Sumter, the Union blockade of Charleston and other ports, the early capture of Port Royal, and the development of the *Hunley* submarine; the exploits of Robert Smalls; and General William T. Sherman's march through the state.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the path of William T. Sherman's army as it moved into SC. Explain the arrival of the 56<sup>th</sup> New York Volunteer Regiment to Middleton Place and the aftermath of their actions here, including the destruction of rice fields, the burning of the family home, slave quarters, and other buildings, and the looting of Middleton Place, including the seizure of the Middleton water buffaloes.

**Science 8-4.5:** Explain how the tilt of Earth's axis affects the length of the day and the amount of heating on Earth's surface, thus causing the seasons of the year.

- Meet the Breeds Tour, Outdoor Education Center, Organic Heritage Crop Farm, Plantation Overview Tour, Garden Tour, Horse Carriage Tour, House Museum Tour, Beyond the Fields Tour: Examine which plants bloom in which seasons. Examine which crops are harvested in which seasons.
- Discuss the effects of the different seasons on the animals present at Middleton Place
- Examine the Winter and Summer bedrooms in the House Museum. How was life different for the Middleton family during these 2 seasons?
- Examine the effect of weather and the changing seasons on the life of slaves at Middleton Place

**Science 8-4.7:** Explain the effects of gravity on tides and planetary orbits.

- Plantation Overview Tour: View the Ashley River. Discuss the tidal nature of the river, including the brackish quality of the water. How does the tide affect the salinity of the water?

**Social Studies 8-4.6:** Compare the differing impact of the Civil War on South Carolinians in each of the various social classes, including those groups defined by race, gender, and age.

**Social Studies 8-5.1:** Analyze the development of Reconstruction policy and its impact in South Carolina, including the presidential and the congressional reconstruction plans, the role of black codes, and the Freedmen’s Bureau.

**Social Studies 8-5.2:** Describe the economic impact of Reconstruction on South Carolinians in each of the various social classes.

**Social Studies 8-5.3:** Summarize the successes and failures of Reconstruction in South Carolina, including the creation of political, educational, and social opportunities for African Americans; the rise of discriminatory groups; and the withdrawal of federal protection.

**Social Studies 8-5.4:** Summarize the policies and actions of South Carolina’s political leadership in implementing discriminatory laws that established a system of racial segregation, intimidation, and violence.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Explore the survival of Middleton Place following the Civil War, including the new methods employed by the Middletons to continue to earn a living, including Phosphate mining and lumbering.
- Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery and the increase in rice purchased by Europe from other parts of the world (India, China)
- Examine the contributions of Eliza Middleton Fisher, sister of Williams, in helping to keep Middleton Place under the ownership of the Middleton family based on her financial contributions
- Examine the changes to the lives of former slaves in SC in general and at Middleton Place in particular
- View a Freedman’s Cabin constructed following the Civil War for former Middleton slaves and the differences with living conditions from before the war

**Social Studies 8-5.5:** Compare industrial development in South Carolina to industrialization in the rest of the United States, including the expansion of railroads, the development of the phosphate and textile industries, and immigration.

- Plantation Overview Tour, Stableyards Tour, Horse Carriage Tour: Explain the difficulty of reaching Downtown Charleston from Middleton Place using overland means (horses). Explain the importance of travel via waterways (Ashley River) and the changes brought on by the Industrial Revolution and new technologies
- Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery, the increase in rice purchased by Europe from other parts of the world (India, China), and the increased use of machinery in rice production in Arkansas, Texas, and California. These machines were not able to be used in SC because of the wet, muddy soil.

**Science 8-5.4:** Predict how varying the amount of force or mass will affect the motion of an object.

- Horse Carriage Tour: Examine the draft horses that pull the carriage. Discuss their being bred to be larger than average horses. How much do they weigh? How much weight can they pull? How long would it take to reach downtown Charleston from Middleton Place on a horse-drawn carriage?

**Social Studies 8-7.4:** Summarize key economic issues in present-day South Carolina, including the decline of the textile industry, the state’s continuing right-to-work status,

the changes in agricultural emphasis, the growing globalization and foreign investment, the influx of immigrants and migrants into the Sunbelt, the increased protection of the environment, the expanding number of cultural offerings, and the changes in tax policy.

- Organic Heritage Crop Farm: Explore the spread of Local First Movement and the increased popularity of organic produce. The Organic Heritage Crop Farm at Middleton Place represents crops grown on the plantation long ago but also represents the new organic, local foods movement. All produce is used in the Restaurant at Middleton Place. Pesticides and fertilizers are also organic (for the Formal Gardens and the Organic Farm)
- Middleton Place doesn't grow rice anymore but still uses the land to earn a living. Today's industry at Middleton Place is tourism.
- The Digital Age has vastly expanded the avenues for disseminating information about the history of the Middleton Place and the programming available to guests who visit the plantation. Digital communication allows for far more cooperation and dialogue between Middleton Place and other historical sites

### **High School Standards (by subject):**

**World Geography WG-1.1:** Analyze physical characteristics of the environment that result in opportunities and obstacles for people (e.g., the role of climate in agriculture, site characteristics that limit development).

- Plantation Overview Tour, Stableyards Tour, Horse Carriage Tour: Explain the difficulty of reaching Downtown Charleston from Middleton Place using overland means (horses). Explain the importance of travel via waterways (Ashley River) and the changes brought on by the Industrial Revolution and new technologies
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour, Organic Heritage Crop Farm: Explore the exchange of plants and animals between the Old World and the New. Many New World crops were more nutritious and yielded more calories per acre than Old World crops. This led to a population boom around the world. This population growth contributed to the economic and population pressure that convinced many Europeans to leave their country of origin to come to the New World.
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Meet the Breeds Tour, Beyond the Fields Tour, Organic Heritage Crop Farm Tour: discuss non-native animals and plants (esp. West African) and the differences in their use in West Africa and in the South Carolina Low Country

**World Geography WG-1.2:** Analyze human characteristics of places, including the ways places change with innovation and the diffusion of people and ideas (e.g., the spread of religion and democracy).

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the settlement of South Carolina by the Lord's Proprietors, representing the English Crown. Concentrate on the need to keep pace with the explorations of other European Powers, the need for natural resources, and the desires that drove other parts of the English population to settle

in the New World (religious freedom, economic pressures, & population pressures)

- Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery, the increase in rice purchased by Europe from other parts of the world (India, China), and the increased use of machinery in rice production in Arkansas, Texas, and California. These machines were not able to be used in SC because of the wet, muddy soil.

**World Geography WG-1.3:** Explain how physical environment and human characteristics can be used to organize a region and how regions change over time (e.g., from heavy manufacturing belts to “rust belts”).

- Compare and contrast the major British colonial regions (New England, Middle Colonies, and the South). Explore their economies, including the links between the different regions and where most of the exports were being shipped. (ex. Food crops being shipped to the Caribbean, cotton being shipped to New England)
- Plantation Overview Tour, Garden Tour,: Explore European influence on the use of land to construct formal gardens
- Meet the Breeds Tour, Beyond the Fields Tour, Organic Heritage Crop Farm Tour: discuss non-native animals and plants (esp. West African) and the differences in their use in West Africa and in the South Carolina Low Country

**World Geography WG-1.4:** Differentiate the ways in which people change their views of places and regions as a result of physical, cultural, economic and political conditions (e.g., views of the Middle East after September 11, 2001).

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Explore the survival of Middleton Place following the Civil War, including the new methods employed by the Middletons to continue to earn a living, including Phosphate mining and lumbering.
- Examine the changes to the lives of former slaves in SC in general and at Middleton Place in particular
- View a Freedman’s Cabin constructed following the Civil War for former Middleton slaves and the differences with living conditions from before the war

**World Geography WG-2.1:** Explain the ways in which Earth’s physical systems and processes (the atmosphere, biosphere, hydrosphere, and lithosphere) are dynamic and interactive (e.g., conditions that cause changes in climate).

**World geography WG-2.3:** Infer the resulting change produced by a specific physical process operating on Earth’s surface (e.g., the role of plate tectonics in mountain building).

**World Geography WG-2.4:** Explain how a physical event or process can influence an ecosystem in terms of its characteristics and its ability to withstand stress (e.g., the response of forest flora to a fire).

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the impact of natural processes on the Middleton Place throughout history. Hurricanes have been a constant danger to SC, and Charleston in particular, throughout history. This threat was especially prevalent during the antebellum period when the SC economy was based primarily on rice. The destruction of the earthen dike system between rice fields and Low Country rivers was devastating. If salt water from a brackish river (like

the Ashley) entered a rice field, that season's crop would be killed and the soil would be ruined for years to come

- Charleston sits on a major fault line and is exposed to earthquakes. The brick walls of the Middleton family home were still standing after the home had been burnt by the Union Army in 1865. It was the major earthquake (estimated at 7.2-7.3 on the Richter scale) of 1886 that brought the walls down.
- Following the Civil War, rice production in SC declined precipitously. As a way to make a living, many plantation owners along the Ashley River (including Williams Middleton) turned to lumbering and phosphate mining. For both of these activities, a large amount of land was clear cut. As a way to fill the land back in and to avoid erosion, many planted non-native crops. At Middleton Place, bamboo and Chinese Parasols were planted because they grew quickly. Many landowners did not consider the problems associated with invasive species.

Controlling these species is an ongoing problem at Middleton Place, even today.

**World Geography WG-4.1:** Identify the characteristics of culture and the impacts of cultural beliefs on gender roles and the perception of race and ethnicity as they vary from one region to another (e.g., legal rights for women in the Middle East and South Asia).

**World Geography WG-4.3:** Compare the roles that cultural factors such as religious, linguistic, and **ethnic** differences play in cooperation and conflict within and among societies.

**World Geography WG-4.4:** Explain the spatial processes of cultural convergence (e.g., American-based fast-food franchises in the developing world).

**World Geography WG-4.5:** Explain how a blending of cultures can alter cultural solidarity (e.g., the blurring sense of nationality stemming from the creation of the European Union).

- Stabeyards Tour, House Museum Tour, Beyond the Fields Tour, Outdoor Education Center, Organic Heritage Crop Farm: Compare and contrast the family life of the Middletons and those of the slaves and how they both fit into community life in Charleston.
- Explore the work done by slaves to produce goods and the acquisition of products, by the Middletons, that could not be produced on site.
- Compare and contrast the family life of the Middletons and the family life of European households
- Compare and contrast the family life of Middleton slaves and the family life of West African households
- Beyond the Fields Tour, Outdoor Education Center: Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC

**World Geography WG-5.3:** Explain the spatial relationships between various economic activities (e.g., the integrated relationship between farms and markets in agriculture).

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour, Organic Heritage Crop Farm: Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European

colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.

- Examine the importance of rice as rations for European armies and the increase in demand and price because of this

**World Geography WG-5.4:** Summarize the factors that influence the location and spatial distribution of economic activities, including the factors of site and situation (e.g., Singapore's deep-water ports and their locations relative to markets).

**World Geography WG-5.6:** Explain the connection between the delivery of goods and services and the transportation and communications networks that are needed to provide them (e.g., the hub-and-spoke systems used by airfreight companies).

- Plantation Overview Tour: View the Ashley River and explain its location relative to the Middleton Place and Downtown Charleston. Explain its importance in linking the two during the seventeenth and eighteenth centuries
- Plantation Overview Tour: Explain the elevation of Middleton Place and how its height above sea level makes it unique to the South Carolina Low Country
- Charleston was an ideal location for a colonial city based on its harbor. It was one of the busiest ports in the Thirteen Colonies

**World Geography WG-7.1:** Explain how cooperation and/or conflict can lead to the control of Earth's surface (e.g., the establishment of new social, political, or economic divisions).

**World Geography WG-7.2:** Explain the causes of boundary conflicts and internal disputes between **culture** groups (e.g., the ongoing Israeli-Palestinian conflict).

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour: Explore the problems that led SC to secede from the Union, including states' rights and abolition

**World Geography WG-8.1:** Evaluate the ways in which technology has expanded the human capability to modify the physical environment both locally and globally (e.g., the risks and benefits associated with how the petroleum industry uses offshore drilling).

**World Geography WG-8.2:** Compare how human modification of the physical environment varies from one region to another and may require different human responses (e.g., the resettlement of Chinese villages in response to the Three Gorges Dam).

**World Geography WG-8.3:** Explain the ways in which individuals and societies mitigate the effects of hazards and adapt to them as part of their environment (e.g., the earthquake and subsequent nuclear disaster in Japan).

**World Geography WG-8.5:** Analyze policy decisions regarding the use of resources in different regions of the world, including how the demand for resources impacts economies, population distribution, and the environment.

- Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery, the increase in rice purchased by Europe from other parts of the world (India, China), and the increased use of machinery in rice production in Arkansas, Texas, and California. These machines were not able to be used in SC because of the wet, muddy soil.

- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Meet the Breeds Tour, Beyond the Fields Tour, Organic Heritage Crop Farm Tour: discuss non-native animals and plants (esp. West African) and the differences in their use in West Africa and in the South Carolina Low Country
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the impact of natural processes on the Middleton Place throughout history. Hurricanes have been a constant danger to SC, and Charleston in particular, throughout history. This threat was especially prevalent during the antebellum period when the SC economy was based primarily on rice. The destruction of the earthen dike system between rice fields and Low Country rivers was devastating. If salt water from a brackish river (like the Ashley) entered a rice field, that season's crop would be killed and the soil would be ruined for years to come
- Charleston sits on a major fault line and is exposed to earthquakes. The brick walls of the Middleton family home were still standing after the home had been burnt by the Union Army in 1865. It was the major earthquake (estimated at 7.2-7.3 on the Richter scale) of 1886 that brought the walls down.
- Following the Civil War, rice production in SC declined precipitously. As a way to make a living, many plantation owners along the Ashley River (including Williams Middleton) turned to lumbering and phosphate mining. For both of these activities, a large amount of land was clear cut. As a way to fill the land back in and to avoid erosion, many planted non-native crops. At Middleton Place, bamboo and Chinese Parasols were planted because they grew fast. Many landowners did not consider the problems associated with invasive species. Controlling these species is an ongoing problem at Middleton Place, even today.
- Plantation Overview Tour, Garden Tour,: Explore European influence on the use of land to construct formal gardens
- Organic Heritage Crop Farm: Explore the spread of Local First Movement and the increased popularity of organic produce. The Organic Heritage Crop Farm at Middleton Place represents crops grown on the plantation long ago but also represents the new organic, local foods movement. All produce is used in the Restaurant at Middleton Place. Pesticides and fertilizers are also organic (for the Formal Gardens and the Organic Farm)
- Middleton Place doesn't grow rice anymore but still uses the land to earn a living. Today's industry at Middleton Place is tourism.
- **Physical Science:**
  - Physical Science PS-3.7:** Explain the processes of phase change in terms of temperature, heat transfer, and particle arrangement.
  - Physical Science PS-4.6:** Distinguish between chemical changes (including the formation of gas or reactivity with acids) and physical changes (including changes in size, shape, color, and/or phase).
  - Physical Science PS-4.11:** Explain the effects of temperature, concentration, surface area, and the presence of a catalyst on reaction rates.

- Stableyards Tour: Examine the properties of iron at the Blacksmith's shop. How does the presence of heat change the properties of iron? Show the ways it can be shaped when hot. Explain the process of iron implements rusting and the conditions that cause it.
- Examine the effects of heat on the materials used by the Potter. Describe the changes in the clay after it has been fired in the kiln.

**Physical Science PS-5.7:** Explain the motion of objects on the basis of Newton's three laws of motion: inertia; the relationship among force, mass, and acceleration; and action and reaction forces.

- Horse Carriage Tour: Examine the draft horses that pull the carriage. Discuss they were bred to be larger than average horses. How much do they weigh? How much weight can they pull? How long would it take to reach downtown Charleston from Middleton Place on a horse-drawn carriage?

- **High School Standards (by subject):**

**World History from 1300: The Making of the Modern World**

**Modern World History MWH-1.1:** Describe the diffusion of people and goods between Europe, Asia, and Africa during the fourteenth and fifteenth centuries to show the networks of economic interdependence and cultural interactions.

**Modern World History MWH-1.3:** Analyze the reasons for European interest in Africa, including the significance of the struggle between Muslim and Christian leaders in the Mediterranean and European interest in finding new trade routes to Asia.

**Modern World History MWH-2.2:** Describe the principle routes of exploration and trade between Europe, Asia, Africa, and the Americas from the late fifteenth century through the sixteenth century.

**Modern World History MWH-2.6:** Describe the impact of the competition among European countries on the various kingdoms of the Americas and Africa, including the Columbian Exchange and the slave trade.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour, Organic Heritage Crop Farm: Explore the exchange of plants and animals between the Old World and the New. Many New World crops were more nutritious and yielded more calories per acre than Old World crops. This led to a population boom around the world. This population growth contributed to the economic and population pressure that convinced many Europeans to leave their country of origin to come to the New World.
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Examine the importance of rice as rations for European armies and the increase in demand and price because of this
- Meet the Breeds Tour, Beyond the Fields Tour, Organic Heritage Crop Farm Tour: discuss non-native animals and plants (esp. West African) and the differences in their use in West Africa and in the South Carolina Low Country
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the settlement of South Carolina by the

Lord's Proprietors, representing the English Crown. Concentrate on the need to keep pace with the explorations of other European Powers, the need for natural resources, and the desires that drove other parts of the English population to settle in the New World (religious freedom, economic pressures, & population pressures)

- House Museum Tour, Horse Carriage Tour: Discuss the contributions of the Middletons to the settlement of SC (they had nearly 20 plantations under cultivation) and their connections to Barbados, including the first two Middletons to settle in SC, brothers Arthur and Edward, who came here from Barbados.
- Beyond the Fields Tour, Outdoor Education Center: Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC
- Compare and contrast the major British colonial regions (New England, Middle Colonies, and the South). Explore their economies, including the links between the different regions and where most of the exports were being shipped. (ex. Food crops being shipped to the Caribbean, cotton being shipped to New England)

**Modern World History MWH-3.6:** Analyze various indigenous religions practiced in Africa and the Americas and their impact on the **culture** of the region, including animism and polytheism.

- Beyond the Fields Tour, Outdoor Education Center: Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC
- Beyond the Fields Tour: Explore the religious life of the slaves at Middleton Place. Explore their conversion to Christianity and the continuing influence of traditional African religion on the version of Christianity practiced by slaves.

**Modern World History MWH-4.7:** Explain the disruption within West African kingdoms as a result of the competition between European countries over slave trade.

- Beyond the Fields Tour: Examine the vast changes to West African society based on the European Slave Trade, including gender imbalance and polygamy, increased warfare and centralization of political power, and increased clearing of land for agriculture to supply slave ships

**Modern World History MWH-5.2:** Analyze the ideas of social equality, democracy, constitutionalism, and nationalism brought about by the Enlightenment and their effects on institutions.

**Modern World History MWH-6.1:** Explain the impact of English political institutions and attitudes on their North American colonies, and the American Revolution.

**Modern World History MWH-6.3:** Analyze various movements for individual rights, including worldwide abolitionism, the end of slave trade movements in England and Latin America, the liberation of serfs in Russia, and the growing movement for women's rights

- House Museum Tour, Horse Carriage Tour: Examine the political contributions of the Middletons. Henry Middleton served in the SC Assembly prior to the

Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war. Arthur Middleton was a delegate to the Second Continental Congress and signed the Declaration of Independence. He also helped frame SC's first state constitution and served in the SC General Assembly following the war. Arthur's son Henry (Gov. Henry) served in both houses of the SC Legislature. He was appointed to several committees dealing with important issues like the incorporation of the state bank, curtailing the slave trade, and legislative reapportionment to reflect the growing upcountry population. As the 43<sup>rd</sup> Governor of SC he passed a law establishing free public schools. He served as the Minister Plenipotentiary (known as an ambassador today) to Russia from 1820-1830. Upon his return to the US, he served as the leader of the Unionist Party during the Nullification Crisis of the 1830's, supporting protective tariffs as constitutional.

- Examine the offer from the British of freedom for any slave that served in the British army during the Revolution. Examine the effect this had on American strategy, including the same offer being issued by the Continental Army.
- Examine the rise in emancipation following the Revolution. Explore the reasons this trend was reversed as time went on. Slave revolts (like the Denmark Vesey Revolt in SC) were a major factor in the decline in number of emancipations and in the increased severity of slave laws in the South during the Antebellum Era.

**Modern World History MWH-6.5:** Analyze the successes and limitations of movements for national unity, including the unification of Germany and Italy and the American Civil War.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour: Explore the problems that led SC to secede from the Union, including states' rights and abolition
- Williams Middleton, along with his brother John, was a delegate to the Secession Convention in December 1860 and was a signer of SC's Ordinance of Secession.
- Williams was a fervent supporter of the Confederacy, though he was over the age limit for military service. He helped fill sandbags and provided barbed wire for the defense of Fort Sumter. He also allowed his Charleston city home, 1 Meeting Street, to be used as officers' quarters and as barracks for Confederate Marines
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the path of William T. Sherman's army as it moved into SC. Explain the arrival of the 56<sup>th</sup> New York Volunteer Regiment to Middleton Place and the aftermath of their actions here, including the destruction of rice fields, the burning of the family home, slave quarters, and other buildings, and the looting of Middleton Place, including the seizure of the Middleton water buffaloes.

**Modern World History MWH-8.7:** Evaluate the benefits and costs of increasing worldwide trade and technological growth, including the movement of people and products, the growth of multi-national corporations, the increase in environmental concerns, and the increase in cultural exchanges.

- Organic Heritage Crop Farm: Explore the spread of Local First Movement and the increased popularity of organic produce. The Organic Heritage Crop Farm at

Middleton Place represents crops grown on the plantation long ago but also represents the new organic, local foods movement. All produce is used in the Restaurant at Middleton Place. Pesticides and fertilizers are also organic (for the Formal Gardens and the Organic Farm)

- Middleton Place doesn't grow rice anymore but still uses the land to earn a living. Today's industry at Middleton Place is tourism.
- The Digital Age has vastly expanded the avenues for disseminating information about the history of the Middleton Place and the programming available to guests who visit the plantation. Digital communication allows for far more cooperation and dialogue between Middleton Place and other historical sites

**Biology:**

**Biology B-3.6:** Illustrate the flow of energy through ecosystems (including food chains, food webs, energy pyramids, number pyramids, and biomass pyramids).

- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past
- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
- What are the needs of wild and domesticated species? Examine the diet, the needs as far as shelter and space, and their interaction with each other and with people
- Examine the ways species from around the world have adapted to the SC environment
- Examine the similarities between the climates of SC and those of West Africa. These similarities allowed SC plantation owners to grow rice once the slaves taught them how.
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)

**Biology B-5.1:** Summarize the process of natural selection.

**Biology B-5.2:** Explain how genetic processes result in the continuity of life-forms over time.

**Biology B-5.3:** Explain how diversity within a species increases the chances of its survival.

**Biology B-5.4:** Explain how genetic variability and environmental factors lead to biological evolution.

**Biology B-6.1:** Explain how the interrelationships among organisms (including predation, competition, parasitism, mutualism, and commensalism) generate stability within ecosystems.

**Biology B-6.2:** Explain how populations are affected by limiting factors (including density-dependent, density-independent, abiotic, and biotic factors).

**Biology B-6.5:** Explain how ecosystems maintain themselves through naturally occurring processes (including maintaining the quality of the atmosphere, generating soils, controlling the hydrologic cycle, disposing of wastes, and recycling nutrients).

**Biology B-6.6:** Explain how human activities (including population growth, technology, and consumption of resources) affect the physical and chemical cycles and processes of Earth.

- Plantation Overview Tour, Horse Carriage Tour, Meet the Breeds Tour: Examine the heritage breeds present at Middleton Place today. Explain their presence and uses at Middleton Place in the past
- Observe wild animals that are present at Middleton Place. How do they differ from domesticated species?
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- Discuss the natural resources available on the Middleton Place property including the Ashley River (and the limits on its use), the local flora & fauna, and the non-native species of flora & fauna that were brought to Middleton Place (concentration on West African species and knowledge of how to use them)

**Geometry:**

**Geometry G-1.9:** Demonstrate an understanding of how geometry applies to real world contexts (including architecture, construction, farming, astronomy).

**Geometry G-2.2:** Apply properties of parallel lines, intersecting lines, and parallel lines cut by a transversal to solve problems.

**Geometry G-2.3:** Use the congruence of line segments and angles to solve problems.

- Plantation Overview Tour, Garden Tour: View the Octagonal Garden and the Rose Garden. Discuss the use of symmetrical and asymmetrical shapes used in the construction of the Gardens and how the construction of the gardens reflects the principles of formal European-style gardens.
- Discuss the allées that run throughout the gardens. Discuss the use of parallel and perpendicular lines that they form.
- Discuss the design of the Gardens as a whole. They form a right triangle with the path leading from the front gate forming a side, the Reflection Pool forming the base, and the hypotenuse running through the Rose and Octagonal Gardens.

**United States History and the Constitution USHC-1.1:** Summarize the distinct characteristics of each colonial region in the settlement and development of British North America, including religious, social, political, and economic differences.

**United States History and the Constitution USHC-1.2:** Analyze the early development of representative government and political rights in the American colonies, including the

influence of the British political system and the **rule of law** as written in the Magna Carta and the English Bill of Rights, and the conflict between the colonial legislatures and the British Parliament over the right to tax that resulted in the American Revolutionary War.

**United States History and the Constitution USHC-1.3:** Analyze the impact of the Declaration of Independence and the American Revolution on establishing the ideals of a democratic republic.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the settlement of South Carolina by the Lord's Proprietors, representing the English Crown. Concentrate on the need to keep pace with the explorations of other European Powers, the need for natural resources, and the desires that drove other parts of the English population to settle in the New World (religious freedom, economic pressures, & population pressures)
- House Museum Tour, Horse Carriage Tour: Discuss the contributions of the Middletons to the settlement of SC (they had nearly 20 plantations under cultivation) and their connections to Barbados, including the first two Middletons to settle in SC, brothers Arthur and Edward, who came here from Barbados.
- Beyond the Fields Tour, Outdoor Education Center: Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC
- Compare and contrast the major British colonial regions (New England, Middle Colonies, and the South). Explore their economies, including the links between the different regions and where most of the exports were being shipped. (ex. Food crops being shipped to the Caribbean, cotton being shipped to New England)
- House Museum Tour, Horse Carriage Tour, Plantation Overview Tour, Beyond the Fields Tour: Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war.
- Arthur Middleton was a fervent patriot. He supported confiscation of land belonging to Loyalists leading up to and during the Revolution. He was a delegate to the Second Continental Congress and signed the Declaration of Independence.
- Arthur Middleton served in the defense of Charleston during the Revolution. He was taken prisoner and was later part of a POW exchange.
- General Nathaniel Greene was stationed with his men on part of what is now Middleton Place Foundation property. He and his men were stationed here for several weeks while waiting for the British to evacuate their troops from Charleston so they could reoccupy the city.
- Examine the offer from the British of freedom for any slave that served in the British army during the Revolution. Examine the effect this had on American strategy, including the same offer being issued by the Continental Army.

**United States History and the Constitution USHC-2.3:** Compare the economic development in different regions (the South, the North, and the West) of the United States

during the early nineteenth century, including ways that economic policy contributed to political controversies.

**United States History and the Constitution USHC-2.4:** Compare the social and cultural characteristics of the North, the South, and the West during the antebellum period, including the lives of African Americans and social reform movements such as abolition and women's rights.

- Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour, Organic Heritage Crop Farm: Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.
- Compare and contrast the major British colonial regions (New England, Middle Colonies, and the South). Explore their economies, including the links between the different regions and where most of the exports were being shipped. (ex. Food crops being shipped to the Caribbean, cotton being shipped to New England)
- Beyond the Fields Tour, Outdoor Education Center: Explore the lives of slaves, who contributed to the Gullah culture still found in SC today, and without who's knowledge, rice would not have been grown in SC. Examine the differences between traditional West African culture and lifestyle and the culture and lifestyles slaves were forced to adopt in SC
- Beyond the Fields Tour: Explore the religious life of the slaves at Middleton Place. Explore their conversion to Christianity and the continuing influence of traditional African religion on the version of Christianity practiced by slaves.
- House Museum Tour, Horse Carriage Tour: Arthur Middleton's son Henry (Gov. Henry) served in both houses of the SC Legislature. He was appointed to several committees dealing with important issues like the incorporation of the state bank, curtailing the slave trade, and legislative reapportionment to reflect the growing upcountry population. As the 43<sup>rd</sup> Governor of SC he passed a law establishing free public schools. He served as the Minister Plenipotentiary (known as an ambassador today) to Russia from 1820-1830. Upon his return to the US, he served as the leader of the Unionist Party during the Nullification Crisis of the 1830's, supporting protective tariffs as constitutional.

**United States History and the Constitution USHC-3.1:** Evaluate the relative importance of political events and issues that divided the nation and led to civil war, including the compromises reached to maintain the balance of free and slave states, the abolitionist movement, the Dred Scott case, conflicting views on states' rights and federal authority, the emergence of the Republican Party, and the formation of the Confederate States of America.

**United States History and the Constitution USHC-3.2:** Summarize the course of the Civil War and its impact on **democracy**, including the major turning points; the impact of the Emancipation Proclamation; the unequal treatment afforded to African American military units; the geographic, economic, and political factors in the defeat of the Confederacy; and the ultimate defeat of the idea of secession.

**United States History and the Constitution USHC-3.3:** Analyze the effects of Reconstruction on the southern states and on the role of the federal government,

including the impact of the thirteenth, fourteenth, and fifteenth amendments on opportunities for African Americans.

**United States History and the Constitution USHC-3.4:** Summarize the end of Reconstruction, including the role of anti-African American factions and competing national interests in undermining support for Reconstruction; the impact of the removal of federal protection for freedmen; and the impact of Jim Crow laws and voter restrictions on African American rights in the post-Reconstruction era.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour: Explore the problems that led SC to secede from the Union, including states' rights and abolition
- Williams Middleton, along with his brother John, was a delegate to the Secession Convention in December 1860 and was a signer of SC's Ordinance of Secession.
- Williams was a fervent supporter of the Confederacy, though he was over the age limit for military service. He helped fill sandbags and provided barbed wire for the defense of Fort Sumter. He also allowed his Charleston city home, 1 Meeting Street, to be used as officers' quarters and as barracks for Confederate Marines
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the path of William T. Sherman's army as it moved into SC. Explain the arrival of the 56<sup>th</sup> New York Volunteer Regiment to Middleton Place and the aftermath of their actions here, including the destruction of rice fields, the burning of the family home, slave quarters, and other buildings, and the looting of Middleton Place, including the seizure of the Middleton water buffaloes.
- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Explore the survival of Middleton Place following the Civil War, including the new methods employed by the Middletons to continue to earn a living, including Phosphate mining and lumbering.
- Examine the decline of rice production in SC and the factors that contributed to it, including the Civil War and the end of slavery and the increase in rice purchased by Europe from other parts of the world (India, China)
- Examine the contributions of Eliza Middleton Fisher, sister of Williams, in helping to keep Middleton Place under the ownership of the Middleton family based on her financial contributions
- Examine the changes to the lives of former slaves in SC in general and at Middleton Place in particular
- View a Freedman's Cabin constructed following the Civil War for former Middleton slaves and the differences with living conditions from before the war

**Chemistry: C-1.7:** Evaluate a technological design or product on the basis of designated criteria.

- Beyond the Fields Tour: Examine the contributions of slaves to the methods, innovations, and products used on a Low Country Plantation. These included the method for growing rice in SC, the use of indigo as a dye, and unique uses of plants and animals. Examine how these innovations were discovered over time through a combination of inherited knowledge and a trial and error basis.

**Chemistry C-4.6:** Explain the role of activation energy and the effects of temperature, particle size, stirring, concentration, and catalysts in reaction rates.

- Stableyards Tour: Examine the properties of iron at the Blacksmith's shop. How does the presence of heat change the properties of iron? Show the ways it can be shaped when hot. Explain the process of iron implements rusting and the conditions that cause it.
- Examine the effects of heat on the materials used by the Potter. Describe the changes in the clay after it has been fired in the kiln.

**Physics P-2.2:** Apply formulas for velocity or speed and acceleration to one and two-dimensional problems.

**Physics P-2.3:** Interpret the velocity or speed and acceleration of one and two-dimensional motion on distance-time, velocity-time or speed-time, and acceleration-time graphs.

**Physics P-2.4:** Interpret the resulting motion of objects by applying Newton's three laws of motion: inertia; the relationship among net force, mass, and acceleration (using  $F = ma$ ); and action and reaction forces.

**Physics P-2.9:** Explain how torque is affected by the magnitude, direction, and point of application of force.

- Horse Carriage Tour: Examine the draft horses that pull the carriage. Discuss they were bred to be larger than average horses. How much do they weigh? How much weight can they pull? How much force is needed to move specific carriages? How long would it take to reach downtown Charleston from Middleton Place on a horse-drawn carriage?

**Earth Science ES-3.4:** Explain how forces due to plate tectonics cause crustal changes as evidenced in earthquake activity, volcanic eruptions, and mountain building.

- Charleston sits on a major fault line and is exposed to earthquakes. The brick walls of the Middleton family home were still standing after the home had been burnt by the Union Army in 1865. It was the major earthquake (estimated at 7.2-7.3 on the Richter scale) of 1886 that brought the walls down.

**Earth Science ES 3.5:** Analyze surface features of Earth in order to identify geologic processes (including weathering, erosion, deposition, and glaciation) that are likely to have been responsible for their formation.

- Plantation Overview Tour: Explain the elevation of Middleton Place and how its height above sea level makes it unique to the South Carolina Low Country. View Spring House and explain how the cold water spring present there is made possible by the elevation present behind it.

**Earth Science ES-4.8:** Predict weather conditions and storms (including thunderstorms, hurricanes, and tornados) on the basis of the relationship among the movement of air masses, high and low pressure systems, and frontal boundaries.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the impact of natural processes on the Middleton Place throughout history. Hurricanes have been a constant danger to SC, and Charleston in particular, throughout history. This threat was especially prevalent during the antebellum period when the SC economy was based primarily on rice. The destruction of the earthen dike system between rice fields and Low Country rivers was devastating. If salt water from a brackish river (like the Ashley) entered a rice field, that season's crop would be killed and the soil would be ruined for years to come

**Earth Science ES-5.1:** Summarize the location, movement, and energy transfers involved in the movement of water on Earth's surface (including lakes, surface-water drainage basins [watersheds], freshwater wetlands, and groundwater zones).

**Earth Science ES-5.2:** Illustrate the characteristics of the succession of river systems.

**Earth Science ES-5.4:** Compare the physical and chemical properties of seawater and freshwater.

- Plantation Overview Tour: View the Ashley River. Discuss the tidal nature of the river, including the brackish quality of the water. How does the tide affect the salinity of the water?

**Economics ECON-2.1:** Illustrate how markets are created when voluntary exchanges occur between buyers and sellers.

- Stableyards Tour, Outdoor Education Center, Plantation Overview Tour: Examine the importance of rice as rations for European armies and the increase in demand and price because of this

**Economics ECON-3.5:** Explain how the federal government regulates the American economy in order to provide economic security, full employment, and economic equity.

- House Museum Tour, Horse Carriage Tour: Arthur Middleton's son Henry (Gov. Henry) served in both houses of the SC Legislature. He was appointed to several committees dealing with important issues like the incorporation of the state bank, curtailing the slave trade, and legislative reapportionment to reflect the growing upcountry population. As the 43<sup>rd</sup> Governor of SC he passed a law establishing free public schools. He served as the Minister Plenipotentiary (known as an ambassador today) to Russia from 1820-1830. Upon his return to the US, he served as the leader of the Unionist Party during the Nullification Crisis of the 1830's, supporting protective tariffs as constitutional.

**Economics ECON-4.1:** Summarize how differing factor endowments—such as geography, the development of technology, and the abundance of labor—affect the goods and services in which a nation specializes.

**Economics ECON-4.2:** Explain how the United States specializes in the production of those goods and services in which it has a comparative advantage.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour, Organic Heritage Crop Farm: Explore the exchange of plants and animals between the Old World and the New. Many New World crops were more nutritious and yielded more calories per acre than Old World crops. This led to a population boom around the world. This population growth contributed to the economic and population pressure that convinced many Europeans to leave their country of origin to come to the New World.
- Many New World climates were ideally suited for growing some Old World crops (rice, sugar, etc) that became major cash crops for European colonies. The expansion of plantation style growing and harvesting contributed to the expansion of the slave trade and slave populations in the New World, including SC.

**Economics ECON-4.3:** Explain how the rise of a global marketplace contributes to the well-being of all societies but the benefits derived from globalization are unequal.

- Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour: Examine the decline of rice production in SC and the factors that

contributed to it, including the Civil War and the end of slavery, the increase in rice purchased by Europe from other parts of the world (India, China), and the increased use of machinery in rice production in Arkansas, Texas, and California.

These machines were not able to be used in SC because of the wet, muddy soil.

**United States Government USG-2.4:** Evaluate significant American founding documents in relation to core political principles, including the Declaration of Independence, the Articles of Confederation, state constitutions, the United States Constitution, *The Federalist* papers, and the Bill of Rights.

- House Museum Tour, Horse Carriage Tour, Plantation Overview Tour, Beyond the Fields Tour: Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war.
- Arthur Middleton was a fervent patriot. He supported confiscation of land belonging to Loyalists leading up to and during the Revolution. He was a delegate to the Second Continental Congress and signed the Declaration of Independence. He also helped frame SC's first state constitution and served in the SC General Assembly following the war.

**United States Government USG-2.5:** Evaluate significant American historical documents in relation to the application of core principles (e.g., the Virginia and Kentucky Resolutions, the Ordinance of Nullification, the Seneca Falls Declaration, the Emancipation Proclamation, Martin Luther King Jr.'s "Letter from a Birmingham Jail"), the eleventh through the twenty-seventh amendments to the Constitution, and critical Supreme Court cases.

- House Museum Tour, Horse Carriage Tour: Arthur Middleton's son Henry (Gov. Henry) served in both houses of the SC Legislature. He was appointed to several committees dealing with important issues like the incorporation of the state bank, curtailing the slave trade, and legislative reapportionment to reflect the growing upcountry population. As the 43<sup>rd</sup> Governor of SC he passed a law establishing free public schools. He served as the Minister Plenipotentiary (known as an ambassador today) to Russia from 1820-1830. Upon his return to the US, he served as the leader of the Unionist Party during the Nullification Crisis of the 1830's, supporting protective tariffs as constitutional.

**United States Government USG-3.3:** Analyze federalism and its application in the United States, including the concepts of enumerated, concurrent, and reserved powers; the meaning of the ninth and tenth amendments; the principle of states' rights; the promotion of limited government; the protection of individual rights; and the potential for conflict among the levels of government.

- House Museum Tour, Horse Carriage Tour, Beyond the Fields Tour, Garden Tour, Plantation Overview Tour, Meet the Breeds Tour: Explore the problems that led SC to secede from the Union, including states' rights and abolition
- Williams Middleton, along with his brother John, was a delegate to the Secession Convention in December 1860 and was a signer of SC's Ordinance of Secession.

**United States Government USG-3.4:** Analyze the organization and responsibilities of local and state governments in the United States federal system, including the role of state constitutions, the limitations on state governments, the typical organization of state

governments, the relationship between state and local governments, and the major responsibilities of state governments.

- House Museum Tour, Horse Carriage Tour, Plantation Overview Tour, Beyond the Fields Tour: Henry Middleton served in the SC Assembly prior to the Revolution. He was the president of the First Continental Congress and helped frame a temporary state constitution and served as a state senator during the war.
- Arthur Middleton was a fervent patriot. He supported confiscation of land belonging to Loyalists leading up to and during the Revolution. He was a delegate to the Second Continental Congress and signed the Declaration of Independence. He also helped frame SC's first state constitution and served in the SC General Assembly following the war.

**Visual Arts:**

**Visual Arts 9-12-II.C:** Evaluate the effectiveness of artworks in terms of structure and function.

**Visual Arts 9-12-V.A:** Analyze the intention of the artist in a particular work and justify their interpretation of that intention.

- Stableyards Tour: Visit the skilled artisans (the Potter, the Seamstress, the Cooper, and the Blacksmith) How does their work qualify as art? How does their work qualify as both art and as utilitarian?
- Stableyards Tour: Examine the Face Jugs at the Potter's shop. Why are they designed with frightening images? What was the design trying to convey? What was the practical purpose for the jugs and what was the purpose of the design?
- Garden Tour, Plantation Overview Tour: How do specific rooms in the gardens (Octagonal, Rose garden, etc) qualify as art? What principles of design are present in the formal gardens? What feeling were the different garden rooms trying to convey? (ex. The Bosque is meant to be the quiet contemplative garden room, which differs from many other garden rooms)
- View the Butterfly Lakes and discuss how they qualify as art
- The Inn at Middleton Place: View the award-winning architecture at the Middleton Inn. What principles of design were utilized when constructing the buildings and the overall layout of the property? What response was the architect hoping to invoke?

**Visual Arts 9-12-IV.A:** Describe how the subject matter, symbols, and ideas in various artworks are related to history and culture.

**Visual Arts 9-12-IV.B:** Explain how a variety of artworks, artists, and visual arts materials represent and reflect the history and culture of South Carolina.

**Visual Arts 9-12-IV.C:** Describe the function and explore the meaning of specific artworks from various cultures, periods, and regions of the world.

- Garden Tour, Plantation Overview Tour: Visit different garden rooms (Octagonal, Mount, Rose, Mirror, & Secret gardens, Bosque). What elements of design are present? (ex those of La Notre) How did the Middletons use those elements to construct the formal gardens? How did they change those elements to suit their own needs?
- Stableyards Tour: Visit the skilled artisans. How does their work qualify as art? How do the styles that the Potter, the Seamstress, the Cooper, and the Blacksmith work in reflect African art?

- How does their work differ from pottery, woodwork, ironwork, and clothing from the present day?
- How are styles used by the artisans unique to SC? Are any of the materials they are working with unique to SC?
- Which styles and principles of their work represent European influences? Which reflect African influences?

# MIDDLETON PLACE

## NATIONAL HISTORIC LANDMARK

### Standard Alignment of Programs

The following is a list of programming available and the SC curriculum standards that each one meets. They are divided by subject (Social Studies, Math, Science, & Visual Arts). For grades K-8, the symbols include the grade level. These are then subdivided (ex. Social Studies 1-2.1). High School curriculum standards are listed by subject and subdivided the same way (ex World Geography WG-1.1). Visual Arts is listed by grade level and subdivided using roman numerals and letters (ex Visual Arts 3-5-V.A) To view the full curriculum standard and how the Middleton Place program meets the standard, refer to the document Standard Alignment of Programs updated.

High School Subjects: World Geography=WG, World History from 1300: The Making of the Modern World=MWH, United States History and the Constitution=USHC, Economics=ECON, United States Government=USG, Physical Science=PS, Biology=B, Chemistry=C, Physics=P, Earth Science=ES, Geometry=G,

**Beyond the Fields Tour:** Social Studies: K-2.1, K-2.3, K-2.4, K-4.1, 1-1.3, 1-1.4, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 2-1.1, 2-1.2, 2-1.3, 2-1.4, 2-3.2, 2-3.3, 2-3.4, 2-3.5, 2-4.1, 2-4.2, 2-4.3, 2-4.4, 3-1.1, 3-1.2, 3-1.3, 3-2.5, 3-3.2, 3-4.1, 3-4.2, 3-4.3, 3-4.4, 3-4.5, 3-4.6, 3-5.6, 4-1.3, 4-2.1, 4-2.2, 4-2.3, 4-2.4, 4-3.3, 4-3.4, 4-5.5, 4-6.1, 4-6.2, 4-6.3, 4-6.4, 4-6.5, 5-1.1, 5-1.2, 5-1.4, 6-1.2, 6-4.1, 6-4.2, 6-6.4, 6-6.5, 6-6.6, 7-1.1, 7-1.3, 7-1.4, 7-1.5, 8-1.3, 8-1.4, 8-1.5, 8-2.4, 8-4.2, 8-4.3, 8-4.4, 8-4.5, 8-4.6, 8-5.1, 8-5.2, 8-5.3, 8-5.4, WG-1.1, WG-1.2, WG-1.3, WG-1.4, WG-2.1, WG-2.2, WG-2.3, WG-4.1, WG-4.3, WG-4.4, WG-4.5, WG-5.3, WG-7.1, WG-7.2, WG-8.1, WG-8.2, WG-8.3, WG-8.5, MWH-1.1, MWH-1.3, MWH-2.2, MWH-2.6, MWH-3.6, MWH-4.7, MWH-5.2, MWH-6.1, MWH-6.3, MWH-6.5, USHC-1.1, USHC-1.3, USHC-2.3, USHC-2.4, USHC-3.1, USHC-3.2, USHC-3.3, USHC-3.4, ECON-4.1, ECON-4.2, ECON-4.3, USG-2.4, USG-3.3, USG-3.4 Science: K-4.1, K-4.2, K-4.3, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 1-4.6, 2-3.1, 2-3.2, 2-3.3, 2-3.6, 3-1.3, 3-3.5, 4-4.3, 4-4.4, 5-1.7, 7-1.2, 8-1.4, 8-3.8, 8-4.5, C-1.7, ES-4.8 Math: 3-2.5, 3-2.6, 4-2.9, 4-2.10

**Garden Tour:** Social Studies: K-2.1, K-2.3, K-2.4, 1-1.3, 1-1.4, 2-1.1, 2-1.2, 2-1.3, 2-1.4, 3-1.1, 3-1.2, 3-1.3, 3-4.1, 3-4.2, 3-4.3, 3-4.4, 3-4.5, 3-4.6, 3-5.6, 4-1.3, 4-2.1, 4-2.2, 4-2.3, 4-2.4, 4-6.1, 4-6.2, 4-6.3, 4-6.4, 4-6.5, 5-1.1, 5-1.2, 5-1.4, 6-1.2, 6-6.4, 6-6.5, 6-6.6, 7-1.5, 7-2.5, 8-1.2, 8-1.3, 8-1.5, 8-4.2, 8-4.3, 8-4.4, 8-4.5, 8-4.6, 8-5.1, 8-5.2, 8-5.3, 8-5.4, 8-WG-1.1, WG-1.2, WG-1.3, WG-1.4, WG-2.1, WG-2.3, WG-2.4, WG-5.3, WG-7.1, WG-7.2, WG-8.1, WG-8.2, WG-8.3, WG-8.5, MWH-1.1, MWH-1.3, MWH-2.2, MWH-2.6, MWH-6.5, USHC-1.1, USHC-1.2, USHC-1.3, USHC-2.3, USHC-2.4, USHC-3.1, USHC-3.2, USHC-3.3, USHC-3.4, ECON-4.1, ECON-4.2, ECON-4.3, USG-3.3 Science: K-1.1, K-2.1, K-2.2, K-2.3, K-2.4, K-2.5, K-4.1, K-4.2, K-4.3, 2-2.1, 2-2.2, 2-2.3, 2-2.4, 2-2.5, K-2.6, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 1-4.6, 2-3.1, 2-3.2, 2-3.3, 2-3.6, 3-2.1, 3-2.2, 3-2.3, 3-2.4, 3-2.5, 4-2.1, 4-2.2, 4-2.5, 4-4.3, 4-4.4, 5-2.2, 5-2.3, 5-2.4, 5-2.5, 6-2.1, 6-2.3, 6-2.4, 6-2.5, 6-2.6, 6-2.7, 6-2.8, 8-3.8, 8-4.5, ES-3.4, ES-4.8 Math: K-3.4, K-4.1, K-4.3, K-4.4, K-5.4, 1-4.4, 1-4.5, 2-4.2, 3-4.1, 3-4.2, 3-4.3, 3-4.4, 3-5.6, 5-4.6, G-1.9, G-

2.2, G-2.3 Visual Arts: 1 & 2-II.A, 1 & 2-II.B, 3-5-III.A, 3-5-III.B, 6-8-II.A, 6-8-V.A, 9-12-II.C, 9-12-V.A, 9-12-IV.A, 9-12-IV.B, 9-12-IV.C

**Horse Carriage Tour:** Social Studies: K-2.1, K-2.3, K-2.4, K-4.2, 1-3.1, 1-3.2, 1-3.3, 2-1.3, 2-1.4, 2-2.1, 2-2.2, 2-2.3, 2-2.4, 2-3.2, 2-3.3, 2-3.4, 2-3.5, 2-4.1, 2-4.2, 2-4.3, 2-4.4, 3-1.1, 3-1.2, 3-1.3, 3-2.2, 3-2.4, 3-3.1, 3-3.2, 3-3.3, 3-3.4, 3-3.5, 3-4.1, 3-4.2, 3-4.3, 3-4.4, 3-4.5, 3-4.6, 3-5.6, 4-1.3, 4-2.1, 4-2.2, 4-2.3, 4-2.4, 4-3.1, 4-3.2, 4-3.3, 4-6.1, 4-6.2, 4-6.3, 4-6.4, 4-6.5, 5-1.1, 5-1.2, 5-1.4, 6-1.2, 6-6.4, 6-6.5, 6-6.6, 7-1.1, 7-1.3, 7-1.4, 7-1.5, 8-1.2, 8-1.3, 8-1.4, 8-1.5, 8-1.6, 8-2.2, 8-2.3, 8-2.4, 8-2.5, 8-2.6, 8-3.1, 8-3.4, 8-4.2, 8-4.3, 8-4.4, 8-4.5, 8-4.6, 8-5.1, 8-5.2, 8-5.3, 8-5.4, 8-5.5, WG-1.1, WG-1.2, WG-1.4, WG-2.1, WG-2.3, WG-2.4, WG-5.3, WG-7.1, WG-7.2, WG-8.1, WG-8.2, WG-8.3, WG-8.5, MWH-1.1, MWH-1.3, MWH-2.2, MWH-2.6, MWH-5.2, MWH-6.1, MWH-6.3, MWH-6.5, USHC-1.1, USHC-1.2, USHC-1.3, USHC-2.3, USHC-2.4, USHC-3.1, USHC-3.2, USHC-3.3, USHC-3.4, ECON-3.5, ECON-4.1, ECON-4.2, ECON-4.3, USG-2.4, USG-2.5, USG-3.3, USG-3.4 Science: K-1.1, K-2.1, K-2.2, K-2.3, K-2.4, K-2.5, K-4.1, K-4.2, K-4.3, 1-2.1, 1-2.2, 1-2.3, 1-2.4, 1-2.5, 1-2.6, 1-5.1, 1-5.4, 2-2.1, 2-2.2, 2-2.3, 2-2.4, 2-2.5, 2-3.1, 2-3.2, 2-3.3, 2-3.6, 3-2.1, 3-2.2, 3-2.3, 3-2.4, 3-2.5, 3-5.3, 4-2.1, 4-2.2, 4-2.3, 4-2.5, 4-2.6, 4-4.3, 4-4.4, 5-2.2, 5-2.3, 5-2.4, 5-2.5, 5-5.1, 5-5.2, 5-5.6, 6-2.1, 6-2.3, 6-2.4, 6-2.5, 6-2.6, 6-2.7, 6-2.8, 6-3.1, 6-3.2, 6-3.3, 6-3.4, 6-3.5, 6-3.6, 6-3.7, 6-5.7, 6-5.8, 7-4.3, 7-4.4, 7-4.5, 7-4.6, 8-2.2, 8-2.3, 8-2.4, 8-2.5, 8-2.6, 8-4.5, 8-5.4, PS-5.7, B-3.6, B-5.1, B-5.2, B-5.3, B-5.4, B-6.1, B-6.2, B-6.5, B-6.6, P-2.2, P-2.3, P-2.4, P-2.9, ES-4.8 Math: 2-1.8,

**House Museum Tour:** Social Studies: K-2.1, K-2.3, K-2.4, K-3.2, K-3.3, K-4.1, 1-2.1, 1-2.2, 1-2.3, 1-3.1, 1-3.2, 1-3.3, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 2-1.3, 2-2.1, 2-2.2, 2-2.3, 2-2.4, 2-4.1, 2-4.2, 2-4.3, 2-4.4, 3-3.1, 3-3.2, 3-3.3, 3-3.4, 3-3.5, 3-4.1, 3-4.2, 3-4.3, 3-4.4, 3-4.5, 3-4.6, 3-5.6, 4-1.3, 4-2.1, 4-2.2, 4-2.3, 4-2.4, , 4-3.1, 4-3.2, 4-3.3, 4-6.1, 4-6.2, 4-6.3, 4-6.4, 4-6.5, 5-1.1, 5-1.2, 5-1.4, 6-6.4, 6-6.5, 6-6.6, 7-1.1, 7-1.3, 7-1.4, 7-1.5, 7-2.5, 8-1.2, 8-1.3, 8-1.5, 8-1.6, 8-2.2, 8-2.3, 8-2.4, 8-2.5, 8-2.6, 8-3.1, 8-3.4, 8-3.8, 8-4.2, 8-4.3, 8-4.4, 8-4.5, 8-4.6, 8-5.1, 8-5.2, 8-5.3, 8-5.4, WG-1.1, WG-1.2, WG-1.4, WG-2.3, WG-4.1, WG-4.3, WG-4.4, WG-4.5, WG-5.3, WG-7.1, WG-7.2, WG-8.1, WG-8.2, WG-8.3, WG-8.5, MWH-1.1, MWH-1.3, MWH-2.2, MWH-2.6, MWH-5.2, MWH-6.1, MWH-6.3, MWH-6.5, USHC-1.1, USHC-1.2, USHC-1.3, USHC-2.3, USHC-2.4, , USHC-3.1, USHC-3.2, USHC-3.3, USHC-3.4, ECON-3.5, ECON-4.1, ECON-4.2, USG-2.4, USG-2.5, USG-3.3, USG-3.4 Science: K-4.1, K-4.2, K-4.3, 2-3.1, 2-3.2, 2-3.3, 2-3.6, 4-4.3, 4-4.4, 8-3.8, 8-4.5, ES-3.4, ES-4.8

**Meet the Breeds Tour:** Social Studies: K-2.1, K-2.2, K-2.4, 1-1.3, 1-1.4, 2-1.1, 2-1.2, 3-4.3, 3-4.4, 3-5.6, 4-2.1, 4-2.2, 4-2.3, 4-2.4, 4-6.1, 4-6.2, 4-6.3, 4-6.4, 4-6.5, 6-1.2, 6-6.4, 6-6.5, 6-6.6, 7-1.1, 7-1.3, 7-1.4, 7-1.5, 8-1.4, 8-4.4, WG-1.1, WG-1.3, WG-5.3, WG-7.2, WG-8.1, WG-8.2, WG-8.3, WG-8.5, MWH-1.1, MWH-1.3, MWH-2.2, MWH-2.6, MWH-6.5, USHC-2.4, USHC-3.1, USHC-3.2, USHC-3.3, USHC-3.4, ECON-4.1, ECON-4.2, USG-3.3 Science: K-1.1, K-2.1, K-2.2, K-2.3, K-2.4, K-2.5, K-4.1, K-4.2, K-4.3, 2-2.1, 2-2.2, 2-2.3, 2-2.4, 2-2.5, 2-3.1, 2-3.2, 2-3.3, 2-3.6, 3-1.3, 3-2.1, 3-2.2, 3-2.3, 3-2.4, 3-2.5, 4-2.1, 4-2.2, 4-2.3, 4-2.5, 4-4.3, 4-4.4, 5-2.2, 5-2.3, 5-2.4, 5-2.5, 6-3.1, 6-3.2, 6-3.3, 6-3.4, 6-3.5, 6-3.6, 6-3.7, 7-4.3, 7-4.4, 7-4.5, 7-4.6, 8-2.1, 8-4.5, B-3.6, B-5.1, B-5.2, B-5.3, B-5.4, B-6.1, B-6.2, B-6.5, B-6.6 Math: 2-1.8

**Organic Heritage Crop Farm:** Social Studies: K-2.1, K-2.2, K-2.4, K-4.3, 1-1.4, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 2-1.3, 2-3.2, 3-3.3, 2-3.4, 2-3.5, 2-4.1, 2-4.2, 2-4.3, 2-4.4, 4-2.1, 4-2.2, 4-2.3, 4-2.4, 5-6.6, 6-1.2, 6-6.4, 6-6.5, 6-6.6, 7-1.1, 7-1.3, 7-1.4, 7-1.5, 7-6.6, 8-1.4, 8-7.4, WG-1.1, WG-1.3, WG-4.1, WG-4.3, WG-

4.4, WG-4.5, WG-5.3, WG-8.1, WG-8.2, WG-8.3, WG-8.5, MWH-1.1, MWH-1.3, MWH-2.2, MWH-2.6, MWH-8.7, USHC-2.4, ECON-4.1, ECON-4.2 Science: K-1.1, K-2.1, K-2.2, K-2.3, K-2.4, K-2.5, K-4.1, K-4.2, K-4.3, 1-2.1, 1-2.2, 1-2.3, 1-2.4, 1-2.5, 1-2.6, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 1-4.6, 2-3.1, 2-3.2, 2-3.3, 2-3.6, 3-2.1, 3-2.2, 3-2.3, 2-2.4, 3-2.5, 4-2.2, 4-2.5, 4-4.3, 4-4.4, 6-2.1, 6-2.3, 6-2.4, 6-2.5, 6-2.6, 6-2.7, 6-2.8, 8-4.5

**Outdoor Education Center:** Social Studies: K-2.1, K-2.2, K-2.4, K-4.1, K-4.3, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 2-3.2, 2-3.3, 2-3.4, 2-3.5, 2-4.1, 2-4.2, 2-4.3, 2-4.4, 3-1.1, 3-1.2, 3-1.3, 3-4.1, 3-4.2, 4-2.1, 4-2.2, 4-2.3, 4-2.4, 6-1.2, 7-6.5, 8-1.4, 8-1.5, WG-1.3, WG-4.1, WG-4.3, WG-4.4, WG-4.5, MWH-1.1, MWH-1.3, MWH-2.2, MWH-2.6, MWH-3.6, USHC-1.1, USHC-1.2, USHC-1.3, USHC-2.3, USHC-2.4, ECON-2.1 Science: K-2.1, K-2.2, K-2.3, K-2.4, K-2.5, K-4.1, K-4.2, K-4.3, 1-2.1, 1-2.2, 1-2.3, 1-2.4, 1-2.5, 1-2.6, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 1-4.6, 2-3.1, 2-3.2, 2-3.3, 2-3.6, 3-1.3, 3-2.1, 3-2.2, 3-2.3, 3-2.4, 3-2.5, 4-2.2, 4-2.5, 4-4.3, 4-4.4, 5-1.7, 5-2.2, 5-2.3, 5-2.4, 5-2.5, 6-2.1, 6-2.3, 6-2.4, 6-2.5, 6-2.6, 6-2.7, 6-2.8, 7-4.3, 7-4.4, 7-4.5, 7-4.6, 8-4.5, B-3.6, B-6.1, B-6.2, B-6.5, B-6.6, ES-4.8

**Plantation Overview Tour:** Social Studies: K-1.4, K-2.1, K-2.2, K-2.4, K-3.2, K-3.3, K-4.2, 1-1.3, 1-1.4, 2-1.1, 2-1.2, 2-1.3, 2-1.4, 3-1.1, 3-1.2, 3-1.3, 3-4.1, 3-4.2, 3-4.3, 3-4.4, 3-4.5, 3-4.6, 3-5.6, 4-1.3, 4-2.1, 4-2.2, 4-2.3, 4-2.4, 4-3.1, 4-3.2, 4-3.3, 4-6.1, 4-6.2, 4-6.3, 4-6.4, 4-6.5, 5-1.1, 5-1.2, 5-1.4, 6-1.2, 6-6.4, 6-6.5, 6-6.6, 7-1.1, 7-1.3, 7-1.4, 7-1.5, 7-2.5, 8-1.2, 8-1.3, 8-1.5, 8-2.2, 8-2.3, 8-2.4, 8-2.5, 8-2.6, 8-4.2, 8-4.3, 8-4.4, 8-4.5, 8-4.6, 8-5.1, 8-5.2, 8-5.3, 8-5.4, 8-5.5, WG-1.1, WG-1.2, WG-1.3, WG-1.4, WG-2.1, WG-2.3, WG-2.4, WG-5.3, WG-5.4, WG-5.6, WG-7.1, WG-7.2, WG-8.1, WG-8.2, WG-8.3, WG-8.5, MWH-1.1, MWH-1.3, MWH-2.2, MWH-2.6, MWH-6.5, USHC-1.1, USHC-1.2, USHC-1.3, USHC-2.3, USHC-2.4, USHC-3.1, USHC-3.2, USHC-3.3, USHC-3.4, ECON-2.1, ECON-4.1, ECON-4.2, ECON-4.3, USG-2.4, USG-3.3, USG-3.4 Science: K-1.1, K-2.1, K-2.2, K-2.3, K-2.4, K-2.5, K-4.1, K-4.2, K-4.3, 1-2.1, 1-2.2, 1-2.3, 1-2.4, 1-2.5, 1-2.6, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 1-4.6, 2-2.1, 2-2.2, 2-2.3, 2-2.4, 2-2.5, 2-3.1, 2-3.2, 2-3.3, 2-3.6, 3-1.3, 3-2.1, 3-2.2, 3-2.3, 3-2.4, 3-2.5, 3-3.5, 3-3.6, 4-2.1, 4-2.2, 4-2.3, 4-2.5, 4-2.6, 4-4.3, 4-4.4, 5-2.2, 5-2.3, 5-2.4, 5-2.5, 5-3.5, 6-2.1, 6-2.3, 6-2.4, 6-2.5, 6-2.6, 6-2.7, 6-2.8, 6-3.1, 6-3.2, 6-3.3, 6-3.4, 6-3.5, 6-3.6, 6-3.7, 6-4.4, 7-4.3, 7-4.4, 7-4.5, 7-4.6, 8-3.8, 8-4.5, 8-4.7, B-3.6, B-5.1, B-5.2, B-5.3, B-5.4, B-6.2, B-6.2, B-6.5, B-6.6, ES-3.4, ES-3.5, ES-4.8, ES-5.1, ES-5.2, ES-5.4 Math: K-3.4, K-4.1, K-4.3, K-4.4, K-5.4, 1-4.4, 1-4.5, 2-4.2, 3-4.1, 3-4.2, 3-4.3, 3-4.4, 3-5.6, 5-4.6, G-1.9, G-2.2, G-2.3 Visual Arts: 1 & 2-II.A, 1 & 2-II.B, 3-5-III.A, 3-5-III.B, 6-8-II.A, 6-8-I.A, 9-12-II.C, 9-12-V.A, 9-12-IV.A, 9-12-IV.B, 9-12-IV.C

**Stableyards:** Social Studies: K-2.1, K-2.2, K-2.4, K-4.2, K-4.3, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 2-3.2, 2-3.3, 2-3.4, 2-3.5, 2-4.1, 2-4.2, 2-4.3, 2-4.4, 7-1.3, 7-1.4, 7-1.5, 8-1.4, 8-5.5, WG-1.1, WG-4.1, WG-4.3, WG-4.4, WG-4.5, ECON-2.1 Science: K-5.1, K-5.2, 1-4.1, 1-4.2, 1-4.3, 1-4.4, 1-4.6, 2-4.1, 2-4.3, 3-4.4, 6-5.7, 6-5.8, 7-5.3, 7-5.9, PS-3.7, PS-4.6, PS-4.11, C-4.6 Math: K-3.4, K-4.1, K-4.3, K-4.4, Visual Arts: K-IV.A, K-V.A, 1 & 2-II.A, 1 & 2-II.B, 1 & 2-IV.A, 1 & 2-IV.B, 1 & 2-V.A, 1 & 2-VI.A, 3-5-III.A, 3-5-III.B, 3-5-IV.A, 3-5-IV.B, 3-5-IV.C, 6-8-III.A, 6-8-IV.A, 6-8-IV.B, 6-8-IV.C, 6-8-V.A, 9-12-II.C, 9-12-V.A, 9-12-IV.A, 9-12-IV.B, 9-12-IV.C,