

Grade Six

Arts and Crafts Standards

Activity	South Carolina State Visual and Performing Arts Standard
Create paintings and drawings of garden plants	Standard VA6-1
Paint a class garden mural to hang in the hallway for parents' night	Standard VA6-1
Make a seed mosaic	Standard VA6-1
Create a color wheel collage using pictures from old seed catalogs	Standard VA6-1
Make prints using paint and stamps made from various plant parts	Standard VA6-1
Draw your dream garden	Standard VA6-1
Build clay or tissue paper models of flowers	Standard VA6-1
Use leaves to make crayon rubbings or fossils in clay	Standard VA6-1
Paint a classroom mural using samples of different soils as the medium	Standard VA6-1
Design labels for plants to mark plantings	Standard VA6-1
Design T-shirts for your garden program	Standard VA6-1
Design a logo for your garden	Standard VA6-1
Paint rocks to use as garden borders	Standard VA6-1
Put together a photo essay of the garden	Standard VA6-1
Design and build a garden project: birdhouse, birdbath, birdfeeder, solar oven, garden sculpture, cold frame, weather station, etc	Standard VA6-1

English/Language Arts Standards

Activity	South Carolina Academic Standard for English Language Arts
Keep daily garden journals documenting observations, weather conditions, and classroom activities	Writing Standard 6-4 Writing Standard 6-5
Write, compile, and illustrate a collection of garden poems and stories	Writing Standard 6-4 Writing Standard 6-5
Study and learn how to use seed catalogs	Reading Standard 6-2 Researching Standard 6-6

Write and compile a class gardening book with gardening skills and advice	Writing Standard 6-4 Writing Standard 6-5
Contact and write to a pen pal in another school garden program	Writing Standard 6-4 Writing Standard 6-5
Read the daily newspaper and bring in any articles related to gardening, food, farming, nutrition, hunger, etc.	Reading Standard 6-2 Researching Standard 6-6
Research the growing habits of the school garden plants using the Internet and reference material	Reading Standard 6-2 Researching Standard 6-6
Write letters to local merchants explaining the school gardening program and asking for donations	Writing Standard 6-4 Writing Standard 6-5
Write thank you notes to volunteers and garden sponsors	Writing Standard 6-4 Writing Standard 6-5
Brainstorm different adjectives to describe each plant in your garden	Reading Standard 6-1 Writing Standard 6-5
Study a new vocabulary that relates to plants and gardens	Reading Standard 6-3
Publish a class newsletter with student articles about the garden and distribute it to other classrooms and parents	Writing Standard 6-4 Writing Standard 6-5
Write step-by-step instructions for common garden activities	Writing Standard 6-4 Writing Standard 6-5
Follow written instructions to perform a garden task like planting seeds	Reading Standard 6-2
Read books and stories about plants and gardens	Reading Standard 6-1 Reading Standard 6-2
Write a research paper on a favorite plant, including source citations	Writing Standard 6-4 Writing Standard 6-5 Researching Standard 6-6
Prepare and deliver a presentation about the garden for other students, teachers, and parents	Writing Standard 6-4 Writing Standard 6-5
Learn about the origins of scientific plant names	Researching Standard 6-6
Read a garden magazine article highlighting a plant and distinguish between the facts and opinions presented by the writer	Reading Standard 6-2 Researching Standard 6-6
Research the nutritional value of your favorite garden vegetable and then write a script for a 60 second advertisement designed to get more people to grow and eat it	Writing Standard 6-4 Writing Standard 6-5 Researching Standard 6-6

Health/Nutrition Standards

Activity	South Carolina Academic Standards for Health and Safety Education
Compare the importance of nutrients in the health of humans and plants	Standard N-6.1
Study the nutritional value of the various crops in your garden	Standard N-6.1
Discuss the difference in nutritional value of various plant parts	Standard N-6.1
Create brochures with information on daily food intake recommendations	Standard N-6.1, N-6.3, N-6.7
Plan a day's menu that includes all components of a balanced diet	Standard N-6.1, N-6.3, P-6.6, N-6.7
Keep food journals that highlight how many fruits and vegetables are eaten and describe any new produce tried	Standard P-6.6
Invite chefs from the community to do cooking demonstrations for students and parents	Standard N-6.8
Coordinate a cooking lesson in your school's kitchen using the produce your class has grown	Standard N-6.8
Ask cafeteria managers to share safe food handling information and provide tours of school kitchens	Standard P-6.1
Invite a registered dietitian to visit classrooms and discuss healthy food choices and healthy preparation methods in connection with MyPyramid.gov	Standard N-6.1, N-6.3
Create a classroom or school recipe book that features produce grown in school gardens	Standard N-6.3
Use MyPyramid.gov to help you choose a healthy diet	Standard N-6.1, N-6.3, P-6.6
Come up with tasty recipes that use lots of fruits and vegetables and little fat or sugar	Standard N-6.1, N-6.3
Compare the nutritional content of different colors of a specific variety of vegetables grown	Standard N-6.1, N-6.3
Visit a local farmers' market or start a school farmers' market	Standard N-6.8
Grow and use fresh herbs to flavor your dishes with natural ingredients	Standard N-6.1, N-6.3

and decrease the use of salt in recipes	
Create a school announcement promoting fruits and vegetables	Standard P-6.2, N-6.8

Mathematics Standards

Activity	South Carolina Academic Standard for Mathematics
Measure the growth rates of plants and display results on different types of graphs	Mathematical Processes Standard 6-1 Data Analysis and Probability Standard 6-6
Make predictions regarding future growth	Mathematical Processes Standard 6-1 Data Analysis and Probability Standard 6-6
Use standard and nonstandard units of measurement	Mathematical Processes Standard 6-1 Measurement Standard 6-5
Design a sun dial	Mathematical Processes Standard 6-1
Tally cricket chirps to estimate temperature	Mathematical Processes Standard 6-1 Measurement Standard 6-5
Host a bean race	Mathematical Processes Standard 6-1
Plant a number of beans at the base of a trellis and track their growth on a chart	Mathematical Processes Standard 6-1
Determine the rate of growth and award the fastest plant a blue ribbon	Mathematical Processes Standard 6-1 Measurement Standard 6-5 Data Analysis and Probability Standard 6-6
Using information from seed catalogs, predict dates of germination and maturity	Mathematical Processes Standard 6-1
Plan backward from a desired harvest date to determine when each crop should be planted	Mathematical Processes Standard 6-1
Measure your garden parameters and calculate the area	Geometry Standard 6-4 Measurement Standard 6-5
Use graph paper to make a map to scale of your garden	Geometry Standard 6-4 Measurement Standard 6-5
Calculate amounts of fertilizer to use per quart and per liter of water	Mathematical Processes Standard 6-1
Chart temperatures of the air and soil in your garden in Fahrenheit and centigrad	Mathematical Processes Standard 6-1
Determine the weight and volume of soil mix when wet and dry	Mathematical Processes Standard 6-1
Determine the volume of soil in a	Mathematical Processes Standard 6-1

rectangular window box	
Investigate vegetable prices in a supermarket	Mathematical Processes Standard 6-1
Track the amount of produce harvested in your garden and use the market prices to determine the value of your harvest	Mathematical Processes Standard 6-1
Count the number of seeds planted and the number of seeds that sprout and calculate the germination rate	Mathematical Processes Standard 6-1 Measurement Standard 6-5
Calculate serving sizes of different fruits and vegetables using common cooking supplies	Mathematical Processes Standard 6-1 Measurement Standard 6-5
Measure the height of a group of plants and determine the mean, median and mode	Data Analysis and Probability
Make a recipe that uses fruits and vegetables from the garden and requires various measuring techniques	Mathematical Processes Standard 6-1

Music/Drama Standards

Activity	South Carolina State Visual and Performing Arts Standards
Make musical instruments from gourds and learn to play them	Standard MG6-1
Create and perform a garden-inspired dance expressing the growth of a seed or the opening of a flower bud	Standard D6-1, Standard D6-2, Standard D6-3, Standard D6-7
Pantomime various gardening tasks (transplanting, fertilizing, sowing seeds, pollinating)	Standard T6-2, Standard T6-6
Learn a collection of songs that relate to food, gardens, and the environment	Standard MG6-1, Standard MG6-6
Listen to the music of composers inspired by nature	Standard MG6-4, Standard MG6-6
Create a skit about food safety	Standard T6-1, Standard T6-6
Write parodies of well-known songs, turning them into a gardening song	Standard MG6-1, Standard MG6-2, Standard MG6-6
Hold a harvest festival square dance	Standard D6-5
Take a garden-themed piece of children's literature and do readers theater with it	Standard T6-2

Science Standards

Earth Science	
Activity	
Create a garden weather station. Record daily measurements and compare conditions with plant growth	Scientific Inquiry Standard 6-1 Structures, Processes and Responses of Plants Standard 6-2 Earth's Atmosphere and Weather Standard 6-4
Compare and contrast the properties of different types of soils (density, air space, presence of living organisms, composition, texture, smell, appearance)	Scientific Inquiry Standard 6-1 Structures, Processes and Responses of Plants Standard 6-2
Simulate soil erosion in your classroom garden	Scientific Inquiry Standard 6-1
Observe the difference in soil loss when water is splashed on a tilted, planted pot and on a tilted unplanted pot	Scientific Inquiry Standard 6-1
Study local geology and put together a display of the soil and rock types found in your area	Scientific Inquiry Standard 6-1
Life Science	
Distinguish and describe differences and similarities between living and non-living things	Structures, Processes and Responses of Plants Standard 6-2 Structures, Processes and Responses of Animals Standard 6-3
Observe the life cycles of plants using fast-growing plants in your classroom	Scientific Inquiry Standard 6-1 Structures, Processes and Responses of Plants Standard 6-2
Study the various conditions that different plants need in order to grow	Structures, Processes and Responses of Plants Standard 6-2
Compare the things people need to the things plants need	Structures, Processes and Responses of Plants Standard 6-2 Structures, Processes and Responses of Animals Standard 6-3
Create experiments investigating what happens when plants are exposed to different amounts of light, water, space, and nutrients	Scientific Inquiry Standard 6-1 Structures, Processes and Responses of Plants Standard 6-2 Earth's Atmosphere and Weather Standard 6-4
Investigate the functions of different plant structures (cotyledons, roots, stems, leaves, flowers, fruits and seeds)	Structures, Processes and Responses of Plants Standard 6-2
Dissect flowers and seeds and create	Scientific Inquiry Standard 6-1

experiments to investigate how light, heat, and moisture affect germination	Structures, Processes and Responses of Plants Standard 6-2
Explain to students that some characteristics are inherited and others are caused by the environment	Structures, Processes and Responses of Plants Standard 6-2 Structures, Processes and Responses of Animals Standard 6-3
Discuss photosynthesis	Structures, Processes and Responses of Plants Standard 6-2
Discuss how plants adapt for survival	Structures, Processes and Responses of Plants Standard 6-2
Research adaptations of seeds for dispersal and adaptations of flowers for attracting pollinators	Structures, Processes and Responses of Plants Standard 6-2
Observe pollinators in the garden	Scientific Inquiry Standard 6-1
Investigate the impact of environmental changes on plants	Scientific Inquiry Standard 6-1 Structures, Processes and Responses of Plants Standard 6-2
Study wildlife and insects along with their habitats	Scientific Inquiry Standard 6-1
Investigate food chains and webs	Structures, Processes and Responses of Plants Standard 6-2 Structures, Processes and Responses of Animals Standard 6-3
Demonstrate how plants are the primary source of energy for all food chains	Structures, Processes and Responses of Plants Standard 6-2
Raise and then release beneficial insects into the garden	Scientific Inquiry Standard 6-1
Physical Science	
Use litmus paper or a test kit to test the pH of different soils. Investigate how plants response to soils with different pH levels	Scientific Inquiry Standard 6-1 Structures, Processes and Responses of Plants 6-2
Simulate the water cycle in the indoor garden by covering it with a dome of clear plastic	Scientific Inquiry Standard 6-1 Earth's Atmosphere and Weather Standard 6-4
Cover pots with cellophane of different colors to screen out all but one wavelength of light from plants and observe plant growth	Scientific Inquiry Standard 6-1 Structures, Processes and Responses of Plants 6-2 Conservation of Energy Standard 6-5
Observe how energy changes to matter during photosynthesis	Scientific Inquiry Standard 6-1 Conservation of Energy Standard 6-5

Social Studies Standards

Activity	South Carolina Social Studies Academic Standard
Research and report on cultural or ethnic differences in food consumption and agricultural production	Standard 6-1
Research agricultural history and create a timeline of important events	Standard 6-1
Research the use of various uses of herbs and spices in different cultures	Standard 6-1
Study the contribution of Native American foods and other cultures' foods to our history and diet and grow samples in the school garden	Standard 6-1 Standard 6-4
Research and populate the garden with decorations representative of other cultures	Standard 6-1 Standard 6-2 Standard 6-3 Standard 6-4 Standard 6-6 (Relating to art and architecture)
Research and report on how other cultures use and control insects	Standard 6-1

Other fun garden activities:

- Identify the parts of the plant represented by common fruits and vegetables
- Study adaptations of plant parts that make them good food sources
- Sprout various seeds for eating
- Conduct a blindfolded taste test using classroom-grown vegetables and supermarket vegetables
- Experiment with food preservation techniques, such as drying, freezing and canning
- Grow a salad garden and give students a chance to sample the harvest with a salad party
- Invite a grocery store employee to talk to the class about where their products come from
- Visit a local farm
- Graph the Vitamin A content in the lighter colored greens and in the darker greens
- Research and compare fruits and vegetables with various origins
- Identify cultural dishes and their preparation methods
- Host an international day and provide samplings of fruits and vegetables from those cultures
- Visit some local farms and interview farmers about choice of crops. Growing practices, marketing and farm history

- Contact, report on or volunteer services at a local food bank, gleaning project, and food cooperative
- Research the history of classroom garden plants
- Discover where classroom plants originated, the impact they've had on our diets, and how today's varieties differ from the original plants
- Locate the origins of classroom plants on a map and then trace their movement around the world
- Use the Thanksgiving holiday to explore meals throughout history and the different crops grown and harvested at that time of the year
- Complete a site analysis of the school garden and create a garden map noting important features, including a north arrow
- Trace the path of a fruit or vegetable from the field to the table
- Use the classroom garden to complement a study of the influence of climate on food production
- As a class, develop garden rules and then vote on them
- Interview experienced community members, local farmers, or senior citizens about their gardening/farming experiences