

Grade 1

Arts and Crafts Standards

Activity	South Carolina State Visual and Performing Arts Standard
Create paintings and drawings of garden plants	Standard VA1-1
Paint a class garden mural to hang in the hallway for parents' night	Standard VA1-1
Make a seed mosaic	Standard VA1-1
Create a color wheel collage using pictures from old seed catalogs	Standard VA1-1
Make prints using paint and stamps made from various plant parts	Standard VA1-1
Draw your dream garden	Standard VA1-1
Build clay or tissue paper models of flowers	Standard VA1-1
Use leaves to make crayon rubbings or fossils in clay	Standard VA1-1
Paint a classroom mural using samples of different soils as the medium	Standard VA1-1
Design labels for plants to mark plantings	Standard VA1-1
Design T-shirts for your garden program	Standard VA1-1
Design a logo for your garden	Standard VA1-1
Paint rocks to use as garden borders	Standard VA1-1
Put together a photo essay of the garden	Standard VA1-1
Design and build a garden project: birdhouse, birdbath, birdfeeder, solar oven, garden sculpture, cold frame, weather station, etc	Standard VA1-1

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 1-4
Write, compile, and illustrate a collection of garden poems and stories	Writing Standard 1-4 Writing Standard 1-5
Study and learn how to use seed catalogs	Reading Standard 1-2 Researching Standard 1-6

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

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-1.1
Identify the parts of the plant represented by common fruits and vegetables	Science Standard 1-2
Study adaptations of plant parts that make them good food sources	Science Standard 1-2
Grow a salad garden and give students a chance to sample the harvest with a salad party	Standard N-1.1
Invite a grocery store employee to talk to the class about where their products come from	
Create brochures with information on daily food intake recommendations	Standard N-1.1
Plan a day's menu that includes all components of a balanced diet	Standard N-1.1, P-1.5, N-1.6
Keep food journals that highlight how many fruits and vegetables are eaten and describe any new produce tried	Standard N-1.1, N-1.6
Invite chefs from the community to do cooking demonstrations for students and parents	Standard N-1.2
Ask cafeteria managers to share safe food handling information and provide tours of school kitchens	Standard P-1.1, P-1.3, P-1.4, P-1.5, P-1.6
Invite a registered dietitian to visit classrooms and discuss healthy food choices and healthy preparation methods in connection with MyPyramid.gov	Standard N-1.1, P-1.3, P-1.4, P-1.5, N-1.6
Use MyPyramid.gov to help you choose a healthy diet	Standard N-1.1, P-1.5, N-1.6
Compare the nutritional content of different colors of a specific variety of vegetables grown	Standard N1-1
Research and compare fruits and vegetables with various origins	Social Studies Standard 1-1
Identify cultural dishes and their preparation methods	Standard N-1.2
Host an international day and provide samplings of fruits and vegetables from	Social Studies Standard 1-1

those cultures	
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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 1-1 Measurement Standard 1-5 Data Analysis and Probability Standard 1-6
Make predictions regarding future growth	Mathematical Processes Standard 1-1 Data Analysis and Probability Standard 1-6
Use standard and nonstandard units of measurement	Measurement Standard 1-5
Design a sun dial	Mathematical Processes Standard 1-1 Measurement Standard 1-5
Tally cricket chirps to estimate temperature	Number and Operations Standard 1-2 Measurement Standard 1-5
Host a bean race	Mathematical Processes Standard 1-1
Plant a number of beans at the base of a trellis and track their growth on a chart	Measurement Standard 1-5 Data Analysis and Probability Standard 1-6
Determine the rate of growth and award the fastest plant a blue ribbon	Mathematical Processes Standard 1-1 Measurement Standard 1-5 Data Analysis and Probability Standard 1-6
Using information from seed catalogs, predict dates of germination and maturity	Data Analysis and Probability Standard 1-6
Plan backward from a desired harvest date to determine when each crop should be planted	Mathematical Processes Standard 1-1 Number and Operations Standard 1-2
Measure your garden parameters and calculate the area	Geometry Standard 1-4 Measurement Standard 1-5
Use graph paper to make a map to scale of your garden	Data Analysis and Probability Standard 1-6
Calculate amounts of fertilizer to use per quart and per liter of water	Mathematical Processes Standard 1-1 Geometry Standard 1-4
Chart temperatures of the air and soil in your garden in Fahrenheit and centigrad	Measurement Standard 1-5 Data Analysis and Probability Standard 1-6
Determine the weight and volume of soil mix when wet and dry	Measurement Standard 1-5
Determine the volume of soil in a	Measurement Standard 1-5

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

Music/Drama Standards

Activity	South Carolina State Visual and Performing Arts Standards
Make musical instruments from gourds and learn to play them	Standard MG1-1
Create and perform a garden-inspired dance expressing the growth of a seed or the opening of a flower bud	Standard D1-2, Standard D1-3, Standard D1-7
Pantomime various gardening tasks (transplanting, fertilizing, sowing seeds, pollinating)	Standard T1-2
Learn a collection of songs that relate to food, gardens, and the environment	Standard MG1-1, Standard MG1-6
Listen to the music of composers inspired by nature	Standard MG1-4, Standard MG1-6
Create a skit about food safety	Standard T1-1
Write parodies of well-known songs, turning them into a gardening song	Standard MG1-1, Standard MG1-2, Standard MG1-6
Hold a harvest festival square dance	Standard D1-5
Take a garden-themed piece of children's literature and do readers theater with it	Standard T1-2

Science Standards

Earth Science	
Activity	South Carolina Science Academic Standard
Create a garden weather station. Record daily measurements and compare conditions with plant growth	Scientific Inquiry Standard 1-1 Plants Standard 1-2 Earth Materials Standard 1-4
Compare and contrast the properties of different types of soils (density, air space, presence of living organisms, composition, texture, smell, appearance)	Scientific Inquiry Standard 1-1 Plants Standard 1-2 Earth Materials Standard 1-4
Simulate soil erosion in your classroom garden	Scientific Inquiry Standard 1-1 Earth Materials Standard 1-4
Observe the difference in soil loss when water is splashed on a tilted, planted pot and on a tilted unplanted pot	Scientific Inquiry Standard 1-1 Earth Materials Standard 1-4 Exploring Motion Standard 1-5
Study local geology and put together a display of the soil and rock types found in your area	Scientific Inquiry Standard 1-1 Earth Materials Standard 1-4
Life Science	
Distinguish and describe differences and similarities between living and non-living things	Scientific Inquiry Standard 1-1
Observe the life cycles of plants using fast-growing plants in your classroom	Scientific Inquiry Standard 1-1 Plants Standard 1-2
Study the various conditions that different plants need in order to grow	Plants Standard 1-2
Compare the things people need to the things plants need	Scientific Inquiry Standard 1-1 Plants Standard 1-2
Create experiments investigating what happens when plants are exposed to different amounts of light, water, space, and nutrients	Scientific Inquiry Standard 1-1 Plants Standard 1-2 Earth Materials Standard 1-4
Investigate the functions of different plant structures (cotyledons, roots, stems, leaves, flowers, fruits and seeds)	Scientific Inquiry Standard 1-1 Plants Standard 1-2
Dissect flowers and seeds and create experiments to investigate how light, heat, and moisture affect germination	Scientific Inquiry Standard 1-1 Plants Standard 1-2
Explain to students that some characteristics are inherited and others are caused by the environment	Plants Standard 1-2
Discuss photosynthesis	Plants Standard 1-2 Sun and Moon Standard 1-3

Discuss how plants adapt for survival	Plants Standard 1-2
Research adaptations of seeds for dispersal and adaptations of flowers for attracting pollinators	Scientific Inquiry Standard 1-1 Plants Standard 1-2
Observe pollinators in the garden	Scientific Inquiry Standard 1-1 Plants Standard 1-2
Investigate the impact of environmental changes on plants	Scientific Inquiry Standard 1-1 Plants Standard 1-2 Sun and Moon Standard 1-3 Earth Materials Standard 1-4
Study wildlife and insects along with their habitats	Scientific Inquiry Standard 1-1
Investigate food chains and webs	Scientific Inquiry Standard 1-1
Demonstrate how plants are the primary source of energy for all food chains	Plants Standard 1-2
Raise and then release beneficial insects into the garden	Scientific Inquiry Standard 1-1
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 1-1 Earth Materials Standard 1-4
Simulate the water cycle in the indoor garden by covering it with a dome of clear plastic	Scientific Inquiry Standard 1-1 Earth Materials Standard 1-4
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 1-1 Plants Standard 1-2 Sun and Mood Standard 1-3
Observe how energy changes to matter during photosynthesis	Scientific Inquiry Standard 1-1 Plants Standard 1-2

History/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 1-1
Research agricultural history and create a timeline of important events	Standard 1-1
Visit some local farms and interview farmers about choice of crops. Growing practices, marketing and farm history	Standard 1-1

Contact, report on or volunteer services at a local food bank, gleaning project, and food cooperative	Standard 1-4
Study the contribution of Native American foods and other cultures' foods to our history and diet and grow samples in the school garden	Standard 1-1, Standard 1-4
Research and populate the garden with decorations representative of other cultures	Standard 1-4
Research the history of classroom garden plants	Standard 1-1
Discover where classroom plants originated, the impact they've had on our diets, and how today's varieties differ from the original plants	Standard 1-1
Use the Thanksgiving holiday to explore meals throughout history and the different crops grown and harvested at that time of the year	Standard 1-4
Complete a site analysis of the school garden and create a garden map noting important features, including a north arrow	Standard 1-1
Trace the path of a fruit or vegetable from the field to the table	Standard 1-1
Use the classroom garden to complement a study of the influence of climate on food production	Standard 1-1
As a class, develop garden rules and then vote on them	Standard 1-2, Standard 1-3
Interview experienced community members, local farmers, or senior citizens about their gardening/farming experiences	Standard 1-4
Research and report on how other cultures use and control insects	Standard 1-1

Other fun garden activities:

- Study the nutritional value of the various crops in your garden
- Discuss the difference in nutritional value of various plant parts
- 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
- Invite a grocery store employee to talk to the class about where their products come from
- Visit a local farm
- Coordinate a cooking lesson in your school's kitchen using the produce your class has grown
- Create a classroom or school recipe book that features produce grown in school gardens
- Come up with tasty recipes that use lots of fruits and vegetables and little fat or sugar
- Graph the vitamin A content in the lighter colored greens and in the darker colored greens
- Visit a local farmers' market or start a school farmers' market
- Grow and use fresh herbs to flavor your dishes with natural ingredients and decrease the use of salt in recipes
- Create a school announcement promoting fruits and vegetables
- Using a movie camera with single-frame capability, make a time-lapse film of a plant growing
- Research the use of various uses of herbs and spices in different cultures
- Locate the origins of classroom plants on a map and then trace their movement around the world