Vocabulary:

- Accessible
- Ambassador
- Archive
- Assess
- Balance
- Budget
- Business plan
- Civic engagement
- Collaboration
- Communication tools
- Community building
- Composition
- Compost
- Conceptual plan
- Contour
- Delegate
- Digital archive
- Digital humanities
- Draft
- Hardiness zone
- Horticulture
- Landscape architecture
- Maintenance plan
- Mentoring
- Native ecosystem
- Natural resources
- Pitch
- Proposal
- Prototype
- Quote
- Relevance
- Revegetation
- Site plan
- Social entrepreneurship
- Soil amendment
- Soil sample
- Spatial map
- Spreadsheet
- Stakeholder
- Sustainability
- Synthesize
- Testimony

Recommended Grade Level: 6-12

National Standards Alignment: *see page 3

Challenge Goals:
Students will…

- *learn* how to conduct online and survey-based research.
- *refine* presentation skills as they convey their findings and visions to their class.
- *collaborate* in groups to establish the long-term goals and direction of the project.
- *investigate* the impact of environmental conditions on an area.
- *design* a mathematical representation of the space with a model prototype, computer program, or technical drawing.
- *write* effective and persuasive proposals with a conceptual design, purpose, and budget.
- *communicate* their idea to school administrators or property owners to encourage collaboration and secure necessary permissions.
- *initiate* a grant application, fundraising project, and business plan to obtain needed materials.
- *organize* and spearhead a community build day.
- *share* their story with the Smithsonian Gardens' Community of Gardens digital archive.

Understanding(s):

- Gardens and green spaces can strengthen community health and cooperation.

Essential Question(s):

- How can gardens contribute to the overall wellbeing of communities?

- Why is it important to document and share stories about green space development?

What you'll need: Necessary materials will vary based on the project crafted by your students, but the challenge requires *a safe and accessible green space in or around your school campus*. See the "Teacher's Toolshed" at the end of this document for online resources, including handouts, templates, computer programs, and grant opportunities.

Introduction to the Challenge:

Empower your students to become local leaders and engage them in making your school healthier by taking on Smithsonian Gardens' challenge to design a green space. This project-based endeavor offers students an opportunity to take the lead in their own community development by building a long-term vision and completing their goals through a final project. As local leaders, students will gain a better understanding of how to make a positive impact on their environment through practical application. They will be challenged to conduct research, present their findings, and design visual representations of the space. Students and teachers who complete this challenge will become **Smithsonian Gardens Green Ambassadors**, joining a national network of leaders who use gardens as conduits for community improvement.

Become a **Smithsonian Gardens Green Ambassador** by completing these three steps -

- Design a green space or garden.
- Assemble a letter, images and other media, documenting and explaining the impact and significance of your new community green space.
- Submit these materials to communityofgardens@si.edu and we will add your stories to the Smithsonian Gardens Community of Gardens digital archives.

Teacher Tip: Lessons with a green star indicate the primary steps towards becoming a Smithsonian Gardens Green Ambassador.

This teacher's packet outlines twelve recommend steps towards realizing your green space goal. At the end of this document you will also find our "Teacher's Toolshed" which features helpful resources, such as school garden grant opportunities that may require early planning. Students can follow along with the challenge by visiting our Community of Gardens Education page. While we encourage schools and teachers to complete all steps involved in the design process, teachers may choose to focus on individual lesson units within this packet to suit specific project needs. The lessons represent **optional guidelines**, not requirements, for building a green space. You and your students can become Green Ambassadors without completing every step of the challenge. As noted above, the only requirement for becoming a Green Ambassador is to build a green space and submit documentation and images of the green space to the Smithsonian Gardens.

Parent/Guardian Consent: In order for a teacher to submit student work (writing and photographs, and audiovisual materials) to the Community of Gardens archive, the student's parent or legal guardian must sign the parent/guardian consent form. Teachers should retain these consent forms for their own records; they do not need to be submitted to Smithsonian Gardens (see the "Teacher's Toolshed" at the end of this document for the consent forms).

Prompt:

Gardens and green spaces increasingly play an important role in community development across the nation. Viewed as community assets, these spaces are revitalizing urban areas and encouraging healthier lifestyles by providing a place for outdoor recreation and relaxation. Building a garden or cultivating a green space has the potential to brighten up your neighborhood, mobilize community cooperation, and provide fresh produce and flowers. How can creating a green space transform your school community? How can documenting and sharing that transformation inspire other communities?

In the context of this project, we will use the term "community" throughout to refer specifically to your school community (teachers, students, administrators, custodial staff, parents, etc.). If you have additional support and resources available, you may elect to expand the scope of your project by designing a green space in your larger community.

21st Century Skills:

- Act responsibly with the interests of the larger community in mind.
- Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems.
- Analyze and evaluate major alternative points of view.
- Articulate thoughts and ideas effectively using oral, written, and non-verbal skills.
- Assume shared responsibility for collaborative work, and value the individual contributions made by each team member.
- Balance tactical (short-term) and strategic (long-term) goals.
- Collaborate in groups to synthesize ideas and make decisions.
- Communicate clearly in diverse environments and for a range of purposes.
- Demonstrate imagination and curiosity.
- Develop, implement, and communicate new ideas to others effectively.
- Elaborate, refine, analyze, and evaluate ideas in order to improve and maximize creative efforts.
- Exercise flexibility and willingness to be helpful in making compromises to accomplish a goal.
- Evaluate information critically and competently.
- Listen effectively to decipher meaning, including knowledge, values, attitudes, and intentions.
- Understand the local and global implications of civic decisions.
- Use a wide range of idea creation techniques (such as brainstorming).
- Use communication for a range of purposes (e.g., to inform, instruct, motivate, and persuade) and in diverse environments (including multi-lingual).
- Use information accurately and creatively for the issue or problem at hand.
- Use technology as a tool to research, organize, evaluate, and communicate information.

Common Core Standards:
- **CCSS.ELA-Literacy.CCRA.W.7**
- **CCSS.ELA-Literacy.CCRA.W.8**
- **CCSS.ELA-Literacy.SL.11-12.2**
- **CCSS.ELA-Literacy.SL.9-10.1**
- **CCSS.ELA-Literacy.SL.11-12.1.b**
- **CCSS.ELA-Literacy.SL.11-12.1.d**
- **CCSS.ELA-Literacy.CCRA.SL.4**
- **CCSS.ELA-Literacy.CCRA.SL.5**
- **CCSS.Math.Content.HSG.MG.A.1**
- **CCSS.Math.Content.HSG.MG.A.2**
- **CCSS.Math.Content.HSG.MG.A.3**
- **CCSS.Math.Content.8.G.C.9**
- **CCSS.Math.Content.7.G.A.1**
- **CCSS.Math.Content.7.G.B.6**
- **CCSS.Math.Content.7.SP.A.1**
- **CCSS.Math.Practice.MP1**

Next Generation Science Standards:
- **MS-LS2-2**
- **MS-LS2-5**
- **HS-LS2-7**
- **HS-ESS3-3**
- **HS-ESS3-2**

National Arts Standards:
- **VA:Cr1.2.HSIII**
- **VA:Cr2.3.HSI**
- **VA:Cr2.3.HSII**
- **VA:Cr3.1.HSIII**

Lesson Plans:

Lesson One: Survey the Community

Guiding Question(s)	Vocabulary	
• How do green spaces impact a community? • What are the needs of our school?	• community building	• assess • horticulture

Have the students read the introductory letter addressed to them by the Smithsonian Gardens education manager to introduce the project (see "Teacher's Toolshed").

What kind of green space is best for your community? Remember, for this project the term "community" refers to your school community (teachers, students, administrators, custodial staff, parents, etc.). Task the students to work in groups and prepare a four to six question survey that addresses the needs of your school. Questions should be multiple choice or open-ended, and may encourage follow up questions.

Question examples:
1. How would our community wellbeing improve from having more public green spaces?
2. What type of space would be most beneficial for you? For the community?
   Answer options: recreation and exercise space, relaxation space, beautification project, outdoor classroom, garden, arboretum, or pollinator habitat.
3. What type of community support is available to develop or enhance a green space?
4. How could you support a green space project?
   Answer options: maintaining the space, donating goods or funds, getting the word out.

Challenge the class to identify and survey a sample of five to ten stakeholders outside of class. Respondents should be school community members. Your project will be more attainable with shared enthusiasm behind it. The surveys may be paper or electronic (check out the "Teacher's Toolshed" at the end of this document).

Dig in deeper: Have students find key words and phrases in their community surveys and create a word cloud. How will frequently mentioned terms inform the project?

Lesson Two: Research and Brainstorm

Guiding Question(s)	Vocabulary	
• What are the short and long-term goals of our project?	• landscape architecture	• revegetation • conceptual plan

How did community members respond to the idea of constructing a green space? How can that input be incorporated into the project plan? Ask the students to share findings from their surveys with a presentation or in a group discussion. Challenge them to speak not only on the responses they gathered, but also on any personal ideas they have for the direction of the project. As a class, define the goal of the project based on the identified needs of their community. The students may want to build a garden, design an outdoor classroom, plant and maintain a tree, build birdhouses to create a bird habitat, or design an area for relaxation. If your school already

has a garden, they could add an additional space, toolshed, or compost bin. Looking for inspiration? Check out the Smithsonian's Community of Gardens website to learn about green projects going on throughout the U.S.

Dig in deeper: Take a trip to a local public garden or invite a horticulturalist or Master Gardener to speak to the class for inspiration. What lessons and ideas can be included in your project?

Lesson Three: Find a Location and Secure Permission

Guiding Question(s)	Vocabulary	
• How can a green space enhance the selected area?	• proposal • natural resources	• budget • accessible

Where will your project best serve the community? Take the students on a walk around the school property or have a class discussion on the most optimal location. Review the merits of each space and come to a group consensus on the best location.

Questions to keep in mind:
- How accessible and safe is the area?
- Does the site receive adequate sunlight and have a nearby water source?
- Are there plans for the site that would negate your efforts, such as future construction work?

Once you have chosen the site, have the class draft a proposal to present to administrators. This should include a statement of purpose, estimated budget, and a list of community members eager to support. Your plan will evolve as you continue, but administrators need to see an outline and clear direction. Approach administrators, facility workers, or property owners with the proposal on the students' behalf. Choose a student leader to describe the project's plans and goals.

Dig in deeper: Have the students photograph the potential spaces for your project, along with green spaces in the area that inspire them.

Lesson Four: Analyze the Site

Guiding Question(s)	Vocabulary	
• How do environmental conditions—climate, soil, plants growth, light direction—affect the development of a particular green space?	• soil sample • soil amendment • hardiness zone	• native ecosystem • contour • site plan

As a class, head out to your secured space to analyze the environmental conditions. If planting directly into the ground, have the students collect three soil samples to send to a nearby soil-testing lab or extension service. See the "Teacher's Toolshed" for a lab locator, instructions on how to collect the soil samples, and a school garden site analysis worksheet for students. You may conduct your own analysis instead by purchasing a soil-testing kit from a local hardware store. What is the importance of soil nutrients? Students should also measure and record the dimensions of the space. Continue the analysis by asking students to identify existing plants, insects, sunlight direction, water sources, and other important conditions of the area to be used for the model. Using this data, have the students construct a scaled map including all key features of the area on grid paper or with a computer model.

Dig in Deeper: Set up a rain gauge in your future green space so that students can monitor rainfall. How could the project be impacted by climate change?

Lesson Five: Design

Guiding Question(s)	Vocabulary	
• How do creative and artistic choices play a role in landscape design?	• prototype • draft	• composition • balance

Now that your class has a purpose, plan, and place for the project, it's time to design. Have students reflect on the results of their initial surveys. How will the needs of the community and the goals of the project be reflected in the final design? Encourage students to get creative when discussing what type of green space will be most valued and most utilized by the school as a whole. Remind students that the type of green space they decide on will impact their design. For example: a pollinator garden and an outdoor meditation space would each be designed differently.

Considering factors such as color, line, and composition, have students work on conceptual designs for the green space. Students could draw a landscape plan, make a 3D prototype, compose a digital draft, or create an abstract representation with photographs, paintings, or animations. Encourage an in-depth exploration of various artistic and logic models based on students' individual abilities and interests. As they formulate their ideas, challenge the students to consider the long-term impact of their proposed green space design. What will the green space look like one year from now? What about five years?

While more detailed work can be completed indoors, take the opportunity to do work on preliminary sketches or studies in the actual soon-to-be green space. How does working outside influence the creative process? Being outdoors during this early design phase can allow the students to detect additional details they may not have observed during Lesson Four and determine what additions or alterations would complement the setting.

Dig in Deeper: Decide on a name and logo for your project to go on signs, flyers, and t-shirts. How can you make your project recognizable to the community?

Lesson Six: Decision Time

Guiding Question(s)	Vocabulary	
• How does design affect the budget and function of a space? • What will be the final design for the project?	• delegate • design education	• spatial map

Students should present and explain their ideas to the class, and then evaluate the different perspectives. Reach a group consensus on the final design by synthesizing ideas. Remind students to keep costs, implementation, and upkeep in mind when coming to this decision. They should update their spatial map (see Lesson Four) or make a new, scaled map that includes all structural features of the final plan. Decide which plants and/or seeds you will start out with and how they fit into your design. If the plan requires upkeep, discuss the roles of the students and

other community members as active participants. You may want to designate a leadership team to oversee the space or plan regular workdays for maintenance.

Dig in Deeper: Present the updated plan to stakeholders at the school, including principals or administrators, custodial staff, and fellow students. What can you learn from their feedback?

Lesson Seven: Budget and Schedule

Guiding Question(s)	Vocabulary	
• What are the expected costs?	• garden management plan	• spreadsheet
• What is the timeline to complete the project?	• maintenance plan	

Work with your class to write a budget based on the final design of the project. Have the students develop a spreadsheet of resources and materials they will need to see the project to fruition (there is a sample school garden budget worksheet in the "Teacher's Toolshed"). Instruct students to research the prices for needed materials by searching online or visiting a local store. Have the students then set a realistic and achievable budget that fulfills the goals of the project. Continue the logistical preparation by having the students make a master list of tasks left to be accomplished. Keeping in mind the amount of time your class has to build the project, students should assign deadlines to each task and then divide tasks equally. Will the project require continuous work after it has been built? Schedule and prepare for that work with a written maintenance plan.

Dig in Deeper: Depending on the time available, challenge your students to compose a Garden Master and Management plan that builds on their initial proposal. This should include mission and vision statements, implementation plan, design layout, maintenance plan and financial report.

Lesson Eight: Gather

Guiding Question(s)	Vocabulary	
• What materials and support do we need to complete the task?	• quote	• supplies drive
	• compost	• pitch

It's time to gather what you need to complete the task. Find recycled supplies for your project or repurpose old materials, such as wood, tires, or bricks. How can your class save money and make the project more environmentally friendly? Students should identify possible suppliers, taking stock of resources they already have access to or connections they have already made with local businesses. Are there parents or teachers who may be willing to donate supplies? Your class could host a garden supplies drive, asking adults to bring in gently used tools. Local parks or farms may be willing to donate compost. Remember: you need supplies for both the initial build and the long-term upkeep.

Brainstorm ways to raise money and seek donations. See the "Teacher's Toolshed" for grant opportunities. Reach out to organizations and individuals that might become sponsors of the project. Make a list of local garden associations, plant nurseries, and Master Gardeners to ask for involvement or support. These companies could pay to have their logo on a sign in the green space. Challenge students to develop a one to two minute pitch, explaining why community members should support the project. Students may want to turn the pitch into a video, PowerPoint presentation, blog, or social media campaign.

Dig in Deeper: Design t-shirts to sell for a fundraiser. Get the t-shirts in bulk from a local company and sell them at a higher price to raise funds. Who in class can sell the most t-shirts?

Lesson Nine: Build the Project!

Guiding Question(s)	Vocabulary	
• How are community events organized? • What is our role as community leaders?	• social entrepreneurship	• collaboration

It's time to make your green space vision a reality! Have students work in teams to complete construction tasks according to the schedule that they drafted in Lesson Seven. If tools are involved in the process review applicable safety precautions that students should follow while using them.

Strive to make the day a community build day for not only for the students, but for families, teachers, principals and administrators. Challenge your students to invite as many members from the school community as possible. Students could publicize the workday by hanging up flyers, posting on social media or submitting a message to be read for your school announcements. How does communal engagement impact the build experience? Bringing people together to work on the project can build long-term interest and support from your community. Keep a list of names and emails of the community members who come out to help as they will be valuable contacts for future workdays.

Encourage students to record aspects of the construction throughout the process. Take plenty of pictures along the way to share with your community (see Lesson Eleven: Document and Share). Does the space look the way the students imagined that it would? Compare and contrast the early design mockups with the finished green space. What does the completed space mean to the class and school community as a whole?

Dig in Deeper: What building techniques did students learn? Ask them to consider how they can use their newly developed green skills outside of school.

Lesson Ten: Maintain Your Legacy

Guiding Questions	Vocabulary	
• What is the value of a lasting project? • How will the green space be sustained and have a long-term impact?	• sustainability • mentoring	• recruitment techniques

How will your class maintain what it started? And how can you get the larger community to help? Future upkeep may require time, dedication, specialized knowledge, and supplies. Encourage students to take charge, building a garden leadership team and finding people in your community to join in. Remind students to recruit younger students at the school who can continue the project and become the next leaders. Students should think about how to maintain partnerships with local organizations and experienced gardeners who may have been involved in the build process. Partners can serve as valuable resources for learning gardening techniques and locating funding.

Dig in Deeper: Host events, such as community workdays or green space tours, to keep people engaged and updated. Ask local gardeners or horticulturists to join your students for a workshop. How will building community partnerships enhance the project and contribute to its success?

Lesson Eleven: Document and Share

Guiding Question(s)	Vocabulary	
• What is the benefit of sharing a story with the community?	• communication tools	• testimony • relevance

What did the design experience mean for you and your students? Have students reflect on their endeavors and share their experience with the community by keeping a class blog or website with updates on the project. Students could write articles or submit photos to showcase their progress and keep the community informed. Contact your local newspaper or send out your own newsletter. Students could present progress reports on their project to your school, local organizations, school board, or city government to let them know how the green space has impacted the school community.

Dig in Deeper: How can you document your experience so that others will learn from it? Have students investigate how broadcasting information about their green story could benefit the larger community outside of school.

Lesson Twelve: Submit Materials to Smithsonian Gardens

Guiding Questions	Vocabulary	
• How can we effectively communicate our class efforts? • Why do garden histories matter?	• archive • ambassador • synthesize	• digital humanities • digital archive

Building off of Lesson Eleven, your students can share their project with the nation by contributing the story of their green space development with the Smithsonian Gardens Community of Gardens digital archive. By completing this step, you and your students will become Smithsonian Gardens Green Ambassadors, joining a network of leaders helping others better understand the meaning and value of gardens and green space to American life – today and in the future!

To celebrate the hard work that went into the creation of your green space we will send you a Smithsonian Gardens Green Ambassadors Challenge sign for your green space along with Certificates of Acknowledgement signed by the Smithsonian Gardens Director.

Submit the project to communityofgardens@si.edu. Be sure to include:
- A narrative document from you or your students explaining the process, how it contributed to the health of the community, and what the students learned.
- Images, videos, garden designs, link to your blog, published article about the project, or any other creative outlet that showcases your students' work.

After submitting the above information, Smithsonian Gardens will contact you and help you add your story to its Community of Gardens digital archive. In sharing your story with the Smithsonian Gardens you ensure that your green space can be an inspiration to others looking to bring a green space to their community as well. We can't wait to hear from you!

Teacher's Toolshed:

- **Introductory Challenge Letter to Students from the Smithsonian Gardens Education Manager**
  - See end of this document or download here as a PDF document.

- **Parent/Guardian Consent Form**
  - See end of this document or download here as a PDF document. Teachers should retain the consent forms for their own records; they do not need to be submitted to Smithsonian Gardens.

- **Smithsonian Gardens**
  - Smithsonian Gardens "Community of Gardens": https://communityofgardens.si.edu/
  - "Classroom Challenge: Design a Green Space" for students to follow along: http://communityofgardens.si.edu/education
  - Smithsonian Gardens garden education resources: http://gardens.si.edu/come-learn/

- **Budget and Business Plan**
  - School Garden Budget Worksheet (see end of this document or download here as a Word document).
  - Finance in the Classroom: http://financeintheclassroom.org/teacher/print.shtml
  - Scholastic Financial Literacy: http://www.scholastic.com/browse/collection.jsp?id=886

- **Design Education**
  - School Garden Site Analysis Worksheet (see end of this document or download here as a Word document).
  - Mathematics Assessment Project lesson on drawing a garden to scale: http://map.mathshell.org/lessons.php?collection=8&unit=7310
  - Sketch Up, a digital 3D design program: http://www.sketchup.com/
  - Cooper Hewitt, Smithsonian Design Museum's "Ready, Set, Design" lesson: http://www.cooperhewitt.org/2011/09/09/ready-set-design/

- **Electronic Surveys**
  - Survey Monkey: https://www.surveymonkey.com/
  - Google Forms: https://www.google.com/forms/about/

- **Grant opportunities:**
  - America in Bloom: http://www.americainbloom.org/resources/grant-opportunities.aspx
  - USDA Farm to School Grant Program: http://www.fns.usda.gov/farmtoschool/farm-school-grant-program

- **Planting**
  - Pollinator Partnership Ecoregion Planting Guide: http://www.pollinator.org/guides

- o Missouri Botanical Garden Plant Finder:
  http://www.missouribotanicalgarden.org/plantfinder/plantfindersearch.aspx
- o USDA Plant Hardiness Zone Map: http://planthardiness.ars.usda.gov/PHZMWeb/
- o USDA Plant Database: http://plants.usda.gov/java/

- **Soil testing**
  - o Locate a soil lab at a land-grant university near you: http://nifa.usda.gov/partners-and-extension-map
  - o US Geological Survey lesson plan: http://education.usgs.gov/lessons/soil.pdf

Smithsonian Gardens

Dear Students,

Gardens and green spaces are increasingly playing a larger role in community development across the nation. Viewed as community assets, these spaces are revitalizing urban areas and encouraging healthier lifestyles by providing a place for outdoor recreation and relaxation. Building a green space has the potential to brighten up your neighborhood, strengthen community cooperation, and provide fresh produce and flowers. How can designing a green space transform your community?

Smithsonian Gardens challenges you to be a local leader and make your school, neighborhood, or city healthier by building a garden or green space. Begin the Challenge by heading out into your community to assess its needs. What type of green space would best suit your area? You may want to build or revitalize a garden, clear a nature path, design an outdoor classroom, plant a pollinator garden, create a bird habitat, or construct a green space of your choosing. Whatever you decide, recruit a team to help you take on the project and make your community greener and healthier.

Tackling this challenge will require a long-term vision for your community. You will be tasked with conducting research, presenting your idea to your community, and securing permission and support for your proposal. Your project may require fundraising or applying for a local grant. Be prepared for the time and dedication it will take to make your vision a lasting reality.

If you accept and complete this challenge, you will become a Smithsonian Gardens Green Ambassador, joining a national network of students who use green spaces as conduits for community improvement. After completing the project, you will have the opportunity to share your story on Smithsonian Gardens' "Community of Gardens" website with audiences around the world.

We look forward to seeing what takes root!

-Cynthia A. Brown

Manager, Education and Collections Management, Smithsonian Gardens

COMMUNITY OF GARDENS

PARENT/GUARDIAN CONSENT FORM

Dear Parent or Legal Guardian,

Our class is participating in a national storytelling program through Smithsonian Gardens. Students will have the opportunity to interview gardeners in their community (family, friends, and community members) and submit their oral history project to *Community of Gardens*, or share their own school garden story with *Community of Gardens*. *Community of Gardens* is an online, digital archive dedicated to preserving garden history stories for future generations and maintained by Smithsonian Gardens. By participating in this project, students will have the opportunity to learn more about the importance of green spaces in their community and, with your permission (the consent form follows), may contribute to a national archive. Before giving consent, learn about the *Community of Gardens* by visiting: https://communityofgardens.si.edu/faq and https://communityofgardens.si.edu/submission-agreement.

Parental Permission:

I understand that my child is participating in a class project to create stories, photos, videos, interviews, and audio files about gardens, *and if I consent*, my child's teacher may share my child's project with the Smithsonian for possible inclusion in a Smithsonian digital archive, *Community of Gardens*, and related Smithsonian activities. I have reviewed the *Community of Gardens* submission rules and FAQs.

I hereby grant permission for my child's teacher to submit, and for the Smithsonian to generally use, my child's class project, along with his/her first name and (if submitted) likeness without time limit and without compensation to my child or me. This permission includes but is not limited to publication of my child's project, in whole or part, on the *Community of Gardens* website, other Smithsonian communication channels (websites, social media, print and online publications or newsletters), fundraising, educational programming, and exhibitions. I understand this is a public archive,

meaning that if it is selected for inclusion my child's project will be available to the public for personal, educational, or non-commercial uses.

I understand that I can revoke this consent for my child's participation in *Community of Gardens* at any time by contacting Smithsonian Gardens.

Parent/Guardian Name: _____

Parent/Guardian Signature: _____

Child' Name: _____

Teacher's Name: _____

School Name: _____

Date: ___/___/_____

About *Community of Gardens*: *Community of Gardens* is a free, non-commercial digital archive and website created and managed by Smithsonian Gardens, part of the Smithsonian Institution. The archive is a collection of stories about gardens and gardeners added by the general public, ranging from interviews with family and neighbors, stories of backyards and community gardens, and memories of gardens past. With the help of the public, including students and teachers, we hope to preserve these community stories for future generations of gardeners and historians.

If you have any questions about the project, please contact Smithsonian Gardens at communityofgardens@si.edu or 202-633-5840.

- Information about the project is available at: https://communityofgardens.si.edu/faq
- A complete description of *Community of Gardens*, and the information that it collects from users, is described in the Submission Agreement: https://communityofgardens.si.edu/submission-agreement and Privacy Statement: http://www.si.edu/Privacy

When beginning to design a new garden (or adding on to or modifying an existing garden), it is important to identify potential problems or hazards that exist at your chosen garden site, understand its strengths and weaknesses, and determine what stays, what goes, and what needs to be fixed. You've got to know what you're working with!

Draw or create a basic to-scale map of your garden site as it is now. Include dimensions and key features such as trees, bushes, water sources, and existing elements such as hardscape and buildings. As you answer the questions below, notate your map with important information about the direction of water drainage, shade and sun, water source, and more. This map and the site analysis questionnaire will act as a reference throughout the design process, from start to finish.

Existing features: Note what already exists on the property on the map, including trees, bushes, fences, hardscape, and buildings.

Topography: Mark the direction of the slope of the ground on your map, and any uneven terrain.

Sun and Shade: How much sunlight does the site receive each day? Do certain parts of the landscape receive more shade or sun than other parts? Mark your map with the four directions: North, South, East, and West.

Water source: How will you be able to get water to the garden? Mark your water source on the map.

Drainage: Where does water drain on your site? Where does water flow after it rains? This is easiest to observe by touching the soil and checking it for moisture.

Accessibility: How will people enter the garden? Are there any obstacles that make the site hard to reach? Once you are in the garden, how easy is it to move around?

Potential Problems: Will you need a fence to keep animals away? Are there buried utility lines you need to know about before digging? Major roads or dangerous intersections nearby?

Storage: Where will you store your garden tools? Is there a secure shed or outbuilding, or will you have to build one?

The View: What can you see from the site? How can you enhance or maximize the view through your garden design? Would certain views benefit from being hidden or minimized?

Waste: Is there a trash can? Is there a compost bin? Where (and how) will you dispose of waste?

Questions for projects adding on to or improving existing gardens:

Signage: Is there adequate signage in the garden? Signs should let people know where to enter, when the garden is open to visitors, and information about the plants and features.

Use: Are different parts of the gardens used for different purposes? For example, growing space, meeting space, recreational space, etc.

Sample garden tool inventory for projects adding on to or improving existing gardens:

Garden tool	How many?	Condition
Trowels		
Gloves		
Wagon or wheelbarrow		
Fertilizer or plant food		
Scissors		
Buckets		
Hose		
Watering can		
Cultivator (handheld rake)		
Big shovel		
Other:		
Other:		
Other:		
Other:		
Other:		
Other:		

What equipment and tools might you need to acquire to maintain the garden?

NEEDS:

WANTS:

Sample Garden Project Supply & Budget List

Date:

Material/Supply (Be specific—what type of paint? What size wood? What type of nails?)	Source (Where could you get the material?)	Cost per item (e.g., cost of a single can of paint)	Quantity (how much/how many do you need?)	Subtotal (the total cost of this particular supply—e.g. the cost of 7 cans of paint)

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