

## **Service Learning Lesson Plan**

Project Title: Shape Hunt in the Grade Level: Duration: 2 months

Garden Kindergarten

Main Subject Area: Math Theme: Environment

### **Objective/Description**

Students identify geometric shapes through the act of planting a fall garden and starting seeds in differently-shaped containers. They then go on a 'shape hunt' in the garden. Students also learn that the vegetables in the garden are part of a healthy diet as they snack on fall vegetables cut into geometric shapes. Vegetables are donated to the school cafeteria.

#### **Common Core State Standards**

#### CCSS.Math.Content.K.G.A.1

Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.

#### CCSS.Math.Content.K.G.B.5

Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

#### CCSS.Math.Content.K.G.B.6

Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

## **Driving Question**

What shapes are in the garden? What kind of healthy choices can I make in the garden?

## Investigation

Research, class instruction, interviewing civic leaders and/or professionals, surveying neighbors or peers

- What shapes can we name?
- Instruct students to draw and label shapes.
- Research proper seed planting techniques.
- Invite garden expert to come and help with planting vegetable seeds.
- Research helathy snacks found in the garden.

## **Preparation**

#### Collaborative problem solving, planning, and task assignment by & with the students

- See "Planning Tools" at http://servicelearning.childreninc.org/?page\_id=527.
- Teacher and volunteers demonstrate proper planting and harvesting techniques.
- Inside or outside: Plant fall vegetables in different shaped containers.
- Fall crops (choose a few): carrots, radish, beets, turnips, kale, collards, lettuce, Swiss chard (to set up for future lessons on plant parts, select seeds for roots (carrot, radish, beet), stems (potato, kohlrabi), leaves (any greens), seeds/fruit (snap peas))
- Collect different shaped containers (or have students collect). For example:

Sphere/cylinder: soup cans, to-go containers, old sports ball with top cut off.



Square/rectangular: to-go containers, milk cartons with tops cut off.

Triangle: build out of cardboard.

- In groups, fill with soil and plant seeds in containers.
- Water and place in spot that gets 6+ hours sunlight/day.
- Go on a "shape hunt" in the garden.
- During snack talk about how healthy snacks can be found in the garden.

#### Action

#### Service activities or methods used to address a social issue or community need

Plant vegetables in the school or community garden. Donate vegetables to the school cafeteria.

#### Reflection

# Frequent assessment of students' growing knowledge and developing skills; refer to driving question

- See "Reflection/Evaluation" at <a href="http://servicelearning.childreninc.org/?page\_id=483">http://servicelearning.childreninc.org/?page\_id=483</a>.
- What shapes did we see?
- What seeds did we plant?
- Name the healthy snacks that we got from the garden.

#### **Demonstration of Knowledge**

#### Assessment of students' knowledge/skills and project outcomes

Drawings of garden outlining the geometric shapes found in the garden and the vegetables planted. Informational posters to display in the cafeteria.

## **Community Partners**

Includes anyone who offers expertise to the project or who benefits from the project Community volunteers, garden experts, school cafeteria

#### Outcome

Funds or goods generated, direct or indirect service provided, advocacy or education done Vegetables for the school cafeteria

## **Secondary Subject Areas** (Bold all that apply)

- **■** English, Reading, Language Arts
- World Languages
- Arts
- Mathematics
- Science
- Economics
- Geography
- History

- Government and Civics
- Global Awareness
- Financial, Economic, Business, and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- **Environmental Literacy**

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## 21st Century Skills (Bold all that apply)

- Career Readiness
- Creativity and Innovation
- Communication and Collaboration
- Critical Thinking and Problem Solving
- Physical Education
- Initiative and Self-direction
- Flexibility and Adaptability

- Consumerism
- Information Literacy
- Media Literacy
- Technology Literacy
- Productivity and Accountability
- Leadership and Responsibility
- Social and Cross-cultural Skills

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