America's Container Garden

Standard of Learning
Science K.1, K.7, K.9, 1.1, 1.4, 2.1, 2.4, 2.8, 3.1, 3.8, 4.1, 4.4

Objective
Students will:
- plant containers of red, white and blue annuals to be displayed at the entrance to their school.

Materials
- Larger flower pot or ½ wooden barrel (large enough to hold at least 5 gallons of potting soil) with drainage holes
- Drainage material such as stones, broken clay pots or Styrofoam peanuts (not the ones that dissolve)
- Potting soil (at least 5 gallons/container) with slow-release fertilizer
- Assorted red, white and blue annuals purchased from your local garden center, greenhouse or nursery:
  Red – petunias, zinnias, Lantana 'Patriot Cherry', Salvia
  White – petunias, zinnias, Bacopa 'Snowstorm', Angelonia 'Angelface White', Globe Amaranth, Dusty Miller
  Blue – there are not too many true blue flowers, so you may substitute dark purple flowers such as petunias, Salvia 'Victoria Blue', Verbena
- Trowels
- Watering can

Background Knowledge
Seeds vary greatly in germination rate, amount of time needed for plant maturity, and growing conditions. Some seeds, like radishes, only need 4-6 weeks to grow to maturity, while corn and soybeans require several months. The purpose of this activity is to provide students with an opportunity to observe the germination process.

Germination is when the seed sprouts and begins to grow. It is important for your students to know that it starts right when there is a bud present from the seed. Explain to your students that their sprout will need a while to grow and that every plant is different in the amount it takes for them to get to maturity. Ask them what their plant will need to grow. All plants need water, light, temperature, time, soil (nutrients), oxygen, and space to grow to full maturity.

Red, white, and blue are the colors on the American flag, which is one of the most widely recognized symbol on the United States. When first adopted in 1777 the colors on the flag did not have a specific meaning and there is still not an official designation. However, when the Great Seal was adopted in 1782, the colors were said to signify the following: white – purity and innocence; red – valor and bravery; blue – vigilance, perseverance, and justice.

Procedure
1. Place containers in the location where they will be displayed. They should receive at least 6 – 8 hours of sunlight per day.
2. Add one inch of drainage material to the bottom of the container.
3. Fill container with potting soil up to two inches below the rim.

4. Choose at least one variety of red, white and blue flowering plants for each container.
5. Remove plants from their small nursery pots.
6. Loosen roots to promote growth in their new larger pot.
7. Plant the assorted plants in the container at the same depth they were growing in their small pots. Planting them too deep may cause them to die.
8. Space for mature size (read your labels from the garden center). Approximately 12 plants will fit in a ½ wooden barrel.
9. After all flowering plants are planted in their new homes, water thoroughly (until you see water draining from the bottom of the container).
10. Throughout the growing season, pinch off dead flowers to promote continuous blooming.
11. Water as needed throughout the growing season when the soil is dry to the touch. As the plants mature, and as the temperatures increase during the summer, the containers will need to be watered more often.

Note: Your location in Virginia will determine when it's safe to plant tender annuals outdoors. It will vary from late April to mid-May.

Extension Ideas
1. After the students have planted the containers, have them write entries in their garden journal about the procedures they followed for a successful container garden.
2. Draw pictures of the flowering plants that were chosen for their containers.
3. Keep records of how the plants grow and change.

References
America's Anniversary Garden
http://www.ext.vt.edu/americasgarden/index.html

http://bensguide.gpo.gov/3-5/symbols/flag.html