

Curriculum topics

- Geometry
- Fractions
- Plant Structures
- Artistic Expression

Subjects

- Science
- Art
- Math

Grade range: K – 5

Serves: Each kit can be used by one or more students at a time, individually or in small group collaboration depending on the intended outcomes.

Who we are: Resource Area for Teaching (RAFT) helps educators transform the learning experience by inspiring joy through hands-on learning.

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PAPER SUNFLOWERS

Young learners practice motor skills and blend science, art, and math to create beautiful plant models!



An easy craft project that makes a great card or decoration! Only four, globally important crops are native to the United States: blueberry, cranberry, pecan, and the sunflower! Students use paper, some creativity, and scissor cuts to create beautiful paper models of sunflowers. They can use them to describe stories related to sunflowers, explain some facts with others about their learning on sunflowers and other plants, and more!



Materials

Materials in the kit may vary but generally, this kit contains the following:

- Paper Sunflowers Circles Template (x1)
- Paper Sunflowers Rectangle Template (x1)
- Folder, 8.5" x 11" (x1)

- Foam, spongy (x1)
- Glue stick (x1)
- Not included: Scissors, paint/markers

Facilitation

Think of a theme/concept/topic to serve as the focus for the paper sunflowers student will make. Drawing inspiration from books/stories is highly encouraged. Students may want to incorporate their own memories, favorite experiences, or other ideas to personalize their paper sunflowers!

A few suggestions for getting started:

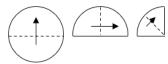
- Have students explore and name the various materials they will use.
- Show students pictures or other examples of real sunflowers. Call on a few students to identify important parts of the sunflowers. Assist as necessary.

Once students have had a chance to explore the materials and examples, review the theme/focus for the activity. Discuss the theme with students and review the assembly steps (see **To Do and Notice** below). Below are some grade level-specific suggestions:

- TK/K: Spend ample time on folding paper in half to produce identical shapes.
- 1st Grade: Explore flower/plant structure by identifying parts of flowers and their importance.
- 2nd Grade: Discuss the paper sunflowers as models that represent but are not exactly like real flowers.

To Do and Notice

The Sunflower: Cut out the circles and rectangles from the included templates. Fold the 3 yellow circles in half, then in quarters, and then in eighths (see below).



- Cut a petal shape through all eight layers of each folded yellow circle, with the petal going 2/3 of the way down on the circle sector. Unfold each cut yellow circle (petal unit).
- Assemble the sunflower by layering and gluing the petal units one on top of the other, offsetting each layer so its petals can be seen. The sunflower will have a total of 24 petals (see title page picture). Glue the black circle in the center of the sunflower.
- The Stem and Leaves: Fold one green paper rectangle in half lengthwise. Cut a leaf shape using scissors (see below) and unfold. Cut a green stem for the sunflower about as wide as a small finger/pinky and any desired length. Glue the leaves and stem onto the sunflower. Decorate the sunflower petal ends with paint using the included foam or with markers as desired.
- **Share** student creations with RAFT! Submit photos/video via email: education@raft.net

Core Content Skills:

Math

Numbers and Operations in Base Ten, Operations & Algebraic Thinking, Reasoning with Shapes and Their Attributes

Science & Engineering (NGSS)

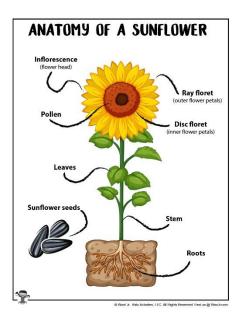
Constructing an argument with evidence, data and/or a model, Structure & Function

Social Emotional Learning

- Self-awareness
- Self-management
- Responsible decisionmaking

The Content Behind the Activity

Only four globally important crops are native to the United States: blueberry, cranberry, pecan, and the sunflower. With uses ranging from oils, ornamentals and snack food, farmers in the U.S. have several million acres of land devoted to sunflower production. Native Americans have used wild sunflowers for a variety of purposes like flour, sunflower butter, and medicine, for at least 8,000 years. Recent cultivation has produced over 2,000 varieties for specific purposes, such as increased oil content. The sunflower (Helianthus annuus) is a member of the Astor (daisy) family.



Reuse

This kit uses 100% reusable materials designed for other uses. To continue making a positive impact in reducing waste, reuse these materials in other projects.

Additionally, any unused materials can be collected and delivered back to RAFT.

Feedback

Please comment on this kit by taking this short survey: http://bit.ly/RAFTkitsurvey. Let us know of any material concerns such as missing, broken, or poorly fitting parts as well as improvements or other suggestions.

Visit https://raft.net to view related activities!

Faux Bamboo The Germinator Paper Tulips 3D Tree Bouquet of Flowers

Resources

- Wonderopolis How do plants know when to flower? https://bit.ly/39YoHXS
- YouTube (7:36) Parts of plants for kids https://bit.ly/3omvjl9