

GRADES K-2

TIME

10-15 minutes, per observation.

PLANTS ALIVE: Garden in a Glove Journal



Science



Language Arts



PRESENTED BY



CORTEVA[™]
agriscience

GARDEN IN A GLOVE JOURNAL

The Children's Museum's lessons are designed to weave classroom experiences and museum education together. All lessons are interdisciplinary and can be used as individual classroom experiences or in combination to create a cohesive unit. Lessons are optimized when used in connection with museum virtual programs and field trips.

Students will observe the **germination** and **growth of plants** from seeds over the course of several days, and record their observations in a journal. Students will note plant parts like **stems, roots, leaves,** and **seeds**.

FOCUS QUESTIONS

- Did the seeds change after you put them in the glove?
- Did all the seeds change in the same way?
- What part(s) of the seeds grew into the cotton ball?
- What part(s) of the seeds grew up into the glove?

INDIANA ACADEMIC STANDARDS

Science: SEPS.2, K.LS.1, K.LS.2, K.LS.3, 1.LS.1, 2.LS.2

ELA: K.W.2.1, K.W.2.2, K.W.6.2, 1.W.2.1, 1.W.2.2, 1.W.6.2, 1.W.6.2a, 1.W.6.2b, 1.W.6.2c, 2.W.2.1, 2.W.2.2, 2.W.6.2, 2.W.6.2a, 2.W.6.2b, 2.W.6.2

OBJECTIVES

Students will:

- Make scientific observations
- Document and share their observations verbally and in a journal.
- Identify plant structures during growth.



MATERIALS

- Class set of journals (printed copies or PDF provided for Plants Alive school program)
- Assembled Garden-in-Glove from the Plants Alive school program

Photo Credits: Boy with glove (Cover), The Children's Museum of Indianapolis; Hanging glove with germinating seeds (above), The Children's Museum of Indianapolis; Journal Illustration (page 4), Brandmix / Adobe Stock; Observing sprouting seeds on (page 3), The Children's Museum of Indianapolis; Flat glove with germinating seeds (page 4), The Children's Museum of Indianapolis



Observing and Journaling

PROCEDURES

Pre-Lesson Preparation

- Gloves must be pre-assembled prior to making observations. This will be completed in the school program
- Make extra copies of journals if needed.

Special Note

The journaling process should occur at regular intervals. It is recommended that journaling occur every 2-3 days over two weeks (the expected time needed to germinate the seeds from start to finish). If possible, journaling should start immediately following the creation of the gloves. Encourage patience in the students, as plants may take up to 10 days to emerge from their seed coats after initially placed in the glove.

Classroom Directions

- For each observation, make sure students can easily observe their gloves, and have access to their journals and crayons or pencils.
- Have students look at the seeds/plants within their gloves. It might be helpful to remind students to look for changes in their seed or plant.
- Ask students to write the current date for their journal entry in the space provided and then draw what they see in the glove-template under today's date. Remind students that it is good science practice to record things as they are and not as they expect them to be.
- Ask students to try to identify visible plant parts for each seed (stem, root, seed, and/or leaf) and label them in the drawing. After students have recorded their observations in their notebooks, invite students to share observations. The following questions can be used to help students discuss the changes in their plants.



- o How have your plants changed since we made our last observation?

- o Do any of the plant parts remind you of other plants you have seen? Do the plants have similar parts? Are the parts in the same places?

- o How do you think the plants might change before our next observations?

- Review the parts of the plants including roots, stems and leaves. Ask students to identify these parts in their plants.
- Remind students that many of the changes they are seeing are part of the process of germination, where a plant seedling gradually sprouts from a seed over time.
- If students have removed their gloves from a window, ask students to return the gloves to the proper location to allow continued growth.

Activity Steps

VOCABULARY

- Plant
- Growth
- Germination
- Seed
- Root
- Stem
- Leaf

- 1** Arrange your glove in front of you so you can easily see inside, and take a few moments to look at your seeds or plants.
- 2** Put today's date on your journal in the spot provided.
- 3** Draw what you see in each finger inside the outline of the glove located below today's date.
- 4** Label the different parts of the seeds or plants that you can see. Parts you might expect to see are the seed, root, stem, and leaves.
- 5** Think about what you see when looking at the different plant parts:
 - a. Are they like the parts of other plants that you've seen before?
 - b. Are the parts of the plants growing the way you expected?
- 6** Look at the journal entries that you made before:
 - a. How have your seeds or plants changed from the last time you looked at them?
 - b. Are there new things you noticed that you have questions about?
- 7** After you are done with your journal entry please return your gloves and journal to their proper spaces.

