

EXPLORING ACORNS

Preparation and Engagement Guidance

If you have oak trees, you probably have acorns, which can be fun and interesting to explore. It is valuable for learners to become aware of and learn about oaks and their acorn seeds, since oaks are extremely important for supporting many organisms within an ecosystem. Poke around your nature area to see if you have many acorns and, if so, what state they're in (whole, eaten/broken, in trees vs. on ground, etc.). You don't need whole acorns to do the activity—any acorn, and maybe especially broken or partial acorns, can be a fun mystery to look at.

Target audience: This activity is best for learners 6-years-old and older, or younger learners with adult support.

Materials

- a printed copy of this document to refer to during the activity
- appropriate number of *Exploring Acorns* flip card decks for your organization (depending on how many learners you expect to use them)
- 10–15 acorn samples
 - Too many samples can be overwhelming. Include at least one whole acorn and variations of eaten acorns or acorns in different stages.
- 2–3 magnifiers for the table (more if you are offering them to learners to borrow while they explore)
- (optional) 1 printed activity sign
- (optional) 1 clear plexiglass menu stand to display the activity sign

Preparation

If this is your first time using Flip Cards, review *Flip Card Activities: Background Information* for more information on preparation, materials to support learners, and engagement guidance. The following steps are our recommendations and should be customized for your site and program.

1. Decide whether to include an optional card.
 - a. Card 13b is optional in this deck. Consider including it if you have trees, fences, or other places where learners will be able to see acorns stored in holes.
2. Print sets of the Flip Card activity.
 - a. We recommend printing on cardstock and/or laminating for ongoing use.
3. Try out the activity yourself! Your experience using this flip card deck in the space in which learners will use them will help you share specific examples and point learners to interesting things to look at.
4. Review and customize the Engagement Guidance (on the next page). Think about your space, your audience, the time you will have with learners, and how you might want to best engage them.
5. On the day you will be sharing this flip card deck with learners:
 - a. (optional) Place the large activity sign on the menu stand on the table. (The activity sign is a large version of the first card in the deck.)
 - b. Place sets of the Flip Card activity on the table. If you're not using the large activity sign, place the first card of each set facing up. If you are using the large activity sign, place the second card of each set facing up.
 - c. Place 10–15 acorn samples and the magnifiers on the table near the flip card decks.

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Preparation and Engagement Guidance (continued)

Engagement Guidance

Here is an example of how you might engage learners at the beginning of their experience when they first show interest in an activity, as well as after they complete the activity. The first time you use the *Exploring Acorns* activity, we recommend trying out some of the suggested language (in italics, below) and then customizing it.

At the beginning:

- Point out the acorn samples on the table and offer:
 - *Check out how different each of these acorns is—some are small, big, round, skinny/pointy, hats/no hats, holes, etc.*
- Hold up an acorn.
 - *If you're interested in exploring acorns, take this flip card deck with you into the outdoor nature area. The cards will guide you to explore and learn more about acorns.*
 - *Feel free to take a magnifier with you, if you want.*
- Say something about the status of acorns in your nature area at the moment. Are there a lot, few, growing in trees, on the ground, being eaten, etc.? If, at the time, there are very few whole acorns in your outdoor nature area, you could share something about what learners might find. For example, share:
 - *At this time of year, it's unlikely to find whole acorns, but there are lots of partial acorns to explore and discover—and each has a mystery about what has happened and what is happening to it.*

At the end:

- *What did you discover? Which different kinds of acorns did you find?*
- *Did you find any acorns that looked like they may have been eaten? What do you think might have eaten them?*
- *Do you have a photo of acorns to share? What do you find interesting about that acorn? What do you find interesting about any other acorns you found?*
- *Where else do you think you could find oaks and acorns to observe? Do you think those acorns would be the same or different from the ones you found today?*
- Ask some reflective questions, such as:
 - *What is something interesting about acorns and oaks that you learned?*
 - *Would you like to do a different activity now or come back to do a different activity at another time?*

Flipping Through Nature: Card Decks to Guide Outdoor Exploration

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Card	Citation
	All illustrations by Kate Rutter.
1	“Magnifier” photo courtesy of the University of California at Berkeley and The Lawrence Hall of Science; “Acorn” photo by Douglas Goldman under Attribution Non-Commercial Creative Commons License .
2	Photo by Deb Barnes on Unsplash .
3	All “Acorn” photos by Kevin Beals courtesy of the University of California at Berkeley and The Lawrence Hall of Science.
4	All “Acorn” photos by Kevin Beals except “Acorn with hole (bottom row, middle)” by Emilie Lygren. All photos courtesy of the University of California at Berkeley and The Lawrence Hall of Science.
5	“Single acorn” photo by Kevin Beals and “Trio of acorn caps” photo by Emilie Lygren courtesy of the University of California at Berkeley and The Lawrence Hall of Science. “Single acorn cap” photo by Eleftherios Katsillis under Attribution 4.0 International License .
6	“Group of baby acorns” and “Cracked acorn” photos by Emilie Lygren courtesy of the University of California at Berkeley and The Lawrence Hall of Science. “Two baby acorns” photo by James Bailey under Attribution-Non-Commercial 4.0 International License .
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10	“Acorn Woodpecker with an acorn” (cropped) by Susan T. Cook, Channel City Camera Club under Creative Commons Attribution 2.0 ; “Eaten acorn” and “Acorn with holes” photos by Kevin Beals courtesy of the University of California at Berkeley and The Lawrence Hall of Science.
11	“Squirrel” photo by Dorothy Johnson under Attribution Non-Commercial Creative Commons License ; California Scrub-Jay with acorn by Becky Matsubara from El Sobrante, California under Creative Commons Attribution 2.0 Generic license.
12	Majestic Oak in the Tove Valley by Bob under the Creative Commons Attribution-Share Alike 2.0 Generic license.
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Photograph and Illustration Credits (continued)

Card	Citation
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17	“Two acorns in wood” photo by Kevin Beals courtesy of the University of California at Berkeley and The Lawrence Hall of Science; “Single acorn” photo by Douglas Goldman under Attribution Non-Commercial Creative Commons License .