EXPLORING OUTDOORS WITH PHOTOS/VIDEOS
Preparation and Engagement Guidance

Instead of fighting to get rid of technology in the outdoors, this activity embraces it by encouraging learners to use a cell-phone camera as a tool for exploring nature. Learners often need a little bit of coaching to do this, which this card deck provides by walking learners through a series of steps and strategies. Most current cell phones can magnify a subject quite a bit while taking photos or videos. A low-cost Easy-Macro Lens Band can increase magnification even more. Close-up photos and slow-motion videos can then be used to make observations of things that are easy to miss in real time.

Target audience: This activity is best for learners 9-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 Outdoors with Photos/Videos* flip card decks for your organization (depending on how many learners you expect to use them)
- some interesting objects from nature to engage learners in taking photos/videos
- (optional) appropriate number of Easy-Macro bands, or similar product
- (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 14b is optional in this deck. If your organization is using the Easy-Macro bands (or a similar product), keep this card in the deck. If your organization is not offering additional phone magnification to learners, remove this card from the deck.
2. Print sets of the Flip Card activity.
   a. We recommend printing on cardstock and/or laminating for ongoing use.
   b. Print each card in color, single-sided, actual size.
   c. Cut each individual card to the 4" x 6" trim size. (Use the inner set of crop marks as your guide.)
   d. Hole punch the circle in the top-left corner of each card.
   e. Use a book binder ring (½" to 1") to collate each card deck.
3. Try out this 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. Gather some interesting objects from nature to engage learners. It can be fun to choose something such as leaves with tiny hairs so learners will have the experience of immediately seeing something with magnification they wouldn't have otherwise seen. Similarly, it can be fun to use roly polies (or pill bugs), which can be interesting for users to take videos of in slow-motion. See *Flip Card Activities: Background Information* for more guidance on using roly polies.
6. 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 the interesting objects (and optional Easy-Macro bands) on the table near the flip card decks.

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EXPLORING OUTDOORS WITH PHOTOS/VIDEOS

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 Outdoors with Photos/Videos* activity, we recommend trying out some of the suggested language (in italics, below) and then customizing it.

At the beginning:

- Invite learners to use their phones to take photos and videos of the sample objects/organisms.
  - Note that Easy-Macro bands do not work on all cell phones.
    - **If the cell phone has 1-2 lenses,** then the Easy-Macro band should work. Strap it onto the phone with the plastic lens directly over one lens (usually the lens toward the top) and with the curvy side of the lens facing away from the phone.
    - **If the cell phone has 3+ lenses,** the Easy-Macro band won't work, but magnification within the phone without the Easy-Macro band should be strong.
- Move the camera phone slowly forward and backward until the [object] comes into focus. When it comes into focus say, *"Whoa!"*
  - Note that if the subject is blurry while using an Easy-Macro band, it probably means that the lens is not close enough to the subject. They work best when the lens is 1 inch or less away from the subject.
- When in focus, ask follow-up questions and make comments to fuel interest and curiosity. For example:
  - *What do you notice?*
- Encourage visitors to use their camera phones or magnifiers in the outdoor nature area:
  - *If you're interested in nature photography/videography, take this set of cards with you in the outdoor nature area. The cards will guide you to explore and learn about nature photography.*
  - *You can check out other animals, leaves, flowers, lichen, etc.*
  - *You might also want to try getting close to flowers with pollinators, such as bees, and videoing them in slo-mo. That might take some patience!*

At the end:

- Ask some reflective questions, such as:
  - *What did you discover?*
  - *What did you think about using your cell phone to observe things in nature?*
  - *Is there an outdoor area or living things in or near where you live where you could take photos and videos?*
- If learners say they don't know, encourage them to think outside the box. For example, leaners might have access to a small patch of outdoors, a community garden, or something indoors such as houseplants, spiders, flies, vegetables, etc.
- As appropriate and if learners are interested, let them know about any apps they can use to identify living things in nature, such as:
  - iNaturalist (anything in nature and also includes discussion with others about finds)
  - Seek (plants)
  - Merlin Bird ID (birds)

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