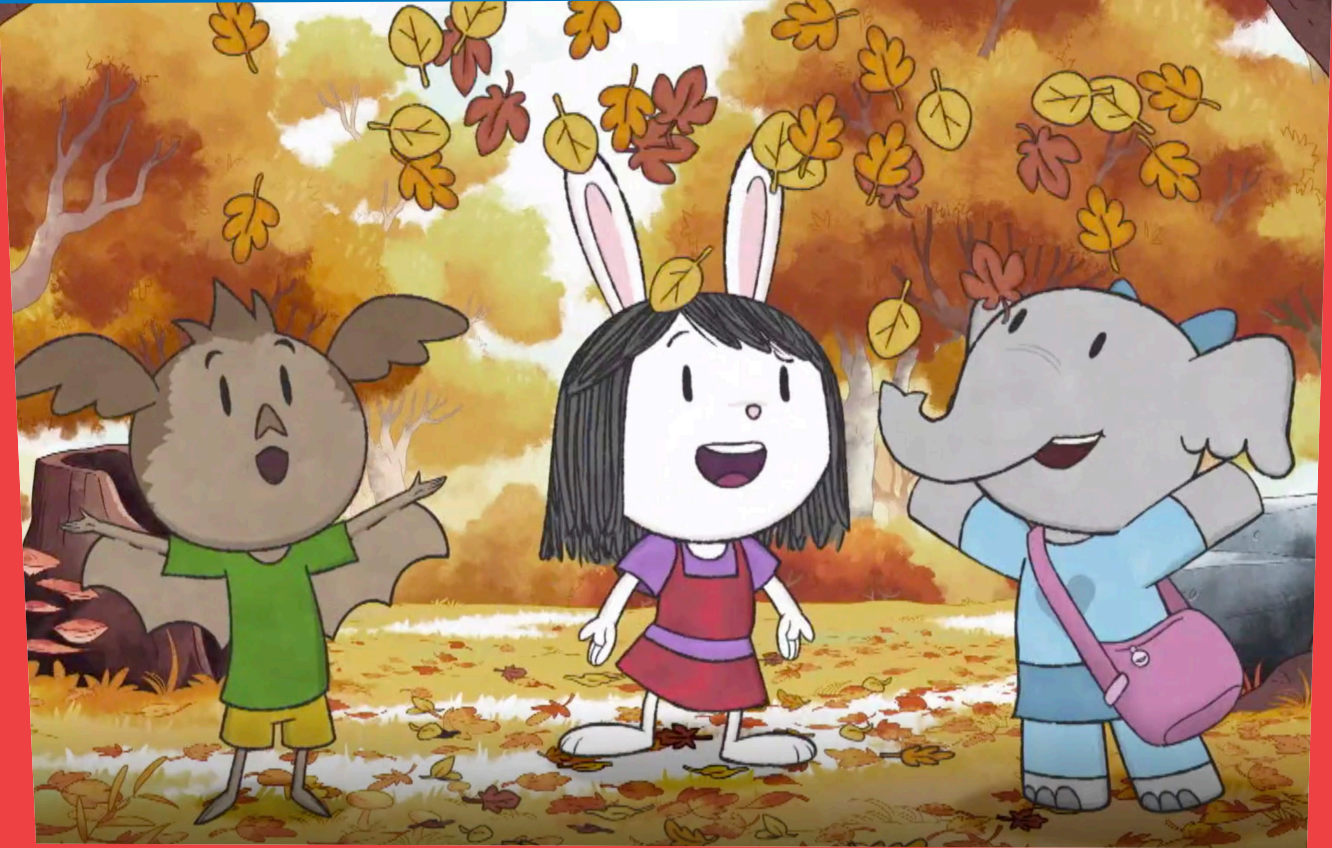


ACTIVITY 7: Where the Leaves in the Forest Go



It's all about nature flows and cycles!

Being curious, making observations and collecting data can help you answer questions about the natural world.

TARGET AGE GROUP

Preschool-K

TIME

60-90 minutes

PREPARATION

ReReview the RTL Activities introduction for tips and suggestions before implementation.

WATCH

This learning experience combines indoor and outdoor exploration and investigation. It can be adapted for in-person and/or virtual learning approaches. Use the **Elinor Wonders Why Collection** on PBS Learning Media, particularly the **Being Curious Outdoor Lesson** and **Teacher Guide** digital lessons as visuals and/or slides for virtual learning.

As you start the workshop, say something like, ***Hello explorers! Today, we are going to get curious and investigate nature.*** To start getting kids curious, ask questions like:

- ▶ *Have you been outside this week?*
- ▶ *What did you notice about nature?*

TIP: For virtual learning, send families printables and supplies ahead of time before the virtual session.

“Leave it to Ari” (2:11-3:50)

Elinor Wonders Why

Say something like, *We are now going to watch a video clip from Elinor Wonders Why.* Ari, Elinor and Olive are curious about leaves that fall on the ground.

Watch the clip from **2:11-3:50**. Pause the video and ask kids questions like:

- ▶ *What do the leaves look like around where you live?*
- ▶ *Have you had to rake or gather leaves? When do you see people raking leaves? Why do we rake leaves?*
- ▶ *Where do you think all the new leaves come from?*

Continue watching the clip from **3:50-5:17**. Pause again to ask kids more questions like:

- ▶ *What question does Ari and his friends have?*
Follow up with, *That’s a great question! I wonder what we could do to find out together?*
- ▶ *Where do you think all the leaves in the forest go?*

EXPLORE

You will be taking kids outside to investigate the question: **What happens to leaves when they fall on the ground.** Say something like, **We are going to investigate the outdoors. But first, we need some tools.**

Materials:

- | | |
|---|--|
| <input type="checkbox"/> <i>Elinor Wonders Why</i> Science Notebook | <input type="checkbox"/> DIY Magnifying Glass |
| <input type="checkbox"/> Pencil or other writing utensil | <input type="checkbox"/> Your 5 senses tools: hand, nose, mouth, ears and eyes |

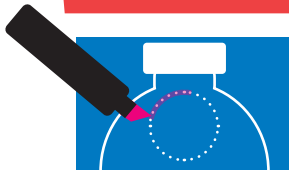
MAKE

With grownup supervision, kids will make DIY magnifying glasses to add to their toolkit for exploration and investigation. Ask questions like, ***Think of different tools that help us see things better. What are some examples of tools that help you see better?***

What You'll Need:

- ☐ Large empty plastic bottle
- ☐ Marker
- ☐ Scissors
- ☐ Pipe cleaners
- ☐ Tape
- ☐ Water
- ☐ Items to observe (any small object such as a fruit or vegetable, a pebble and a small toy)

INSTRUCTIONS



1. Using the marker, draw a circle around the smooth, curved part of the plastic bottle near the top, just below the bottleneck. Don't include the bottleneck in your circle.



2. Cut the circle from the bottle with a grownup's help. Carefully, smooth sharp points with your scissors. The cut-out shape should resemble a shallow bowl.



3. Place pipe cleaners around the edge of the cut plastic circular bowl. Tape down to smooth out the edges so that the magnifying glass is easy to hold.



4. Ask kids to choose an object to observe. Ask kids questions like, *What do you notice about the object without the magnifying glass? What can you see?*



5. Hold the shallow bowl and fill it with a little water. Then, ask kids to observe the object with their homemade magnifying glass. Ask questions like, *What do you notice about the object without the magnifying glass? What can you see that's different or the same?*

Tip: Have water handy to keep refilling homemade magnifying glasses when outdoors.

Now that kids have all their tools, introduce data collection as part of the scientific process. Say something like:

- ▶ ***When we use our tools, we can collect data. Data is information we observe and notice to help us answer questions. Data can be written or drawn.***
- ▶ ***What kind of data can you collect with the tools that you have?***

PLAY

To help kids think more about how tools will help them collect data, kids can play the PB KIDS Game: ***Elinor's Nature Adventure***.

In ***Elinor's Nature Adventure***, kids will explore various environments and use different tools to learn more about the world around them. Through interactions with visitors, they will learn how to use the tools and what they can do. As kids progress through the game, they unlock new areas, collect new tools and make new discoveries.

In addition to promoting curiosity and using science tools for different kinds of investigations, kids will document their observations through Olive and the Science Notebook. Players will also be able to create collections with Ari that will allow for sorting by properties. The game models what kids will do when they go outdoors to explore and investigate questions about nature.

OUTDOOR PLAY

As you prepare to lead kids in outdoor play, say something like, ***Let's go outside, and find out what happens to leaves when they fall on the ground. We will use our tools to notice and make observations and collect data. Let's plan what data we should collect in our notebook to answer our question.***

Lead kids in the Exploring Club Pledge together as a chant or song before going outdoors:

An Explorer is brave! (*Standing straight, tall, hands on hips*)

An Explorer is kind! (*Hands over heart*)

An Explorer is curious! (*Point to brain*)

Who knows what we will find! (*Open hands with arms wide*)

Lead kids to an outdoor space and encourage using tools to notice, observe and investigate. Encourage kids to use their senses to find leaves, their homemade magnifying glass to notice and make observations, and to write down or draw data in their notebook.

Ask questions like:

- ▶ What do you notice about the leaves on the ground?
- ▶ Have you seen leaves like these before?
- ▶ Do all the leaves on the ground look the same? How do they look different?
- ▶ What do you notice about freshly fallen leaves? How about older leaves?

Tip: For virtual learning, ask a caregiver or adult to supervise a child's outdoor exploration for 10–15 minutes before coming back together for the Share portion of the activity. If outdoor play is not practical for a virtual experience, encourage kids to look out their windows and to participate using their senses to make observations and write or draw data in their notebook.

SHARE

Gather kids back together and ask them to share what they noticed and what data they gathered about leaves in their neighborhood. Ask kids to share any drawings or observations they made about newly fallen leaves and older leaves.

Say something like, ***You’ve made observations and collected data during your investigation in nature. What did you notice about leaves in your neighborhood? What did you find? What do you think happens to leaves when they fall on the ground?***

WATCH

“Leave it to Ari” (5:50-8:47)

Elinor Wonders Why

Ask kids questions like:

- ▶ *What did Ari, Olive and Elinor discover about what happens to leaves when they fall on the ground?*
- ▶ *Did you collect similar or different data?*

Say goodbye and share the *Elinor Wonders Why* **Compost Cycle Diagram** on PBS Learning Media, the *Nature Cat* **Make a Composter** directions on PBS.org/Parents and a letter for kids to take home to grownups.

Hello Families:

Today we worked with others to investigate a question: What happens to leaves when they fall on the ground? Using science inquiry and critical thinking skills, your child worked with others and made tools, noticed and made observations, and collected data. With the help of Elinor, Olive and Ari, from the PBS KIDS program Elinor Wonders Why, we discovered that leaves fall on the ground, break down and eventually become a part of the soil!

To find out more about what your kid learned, you can ask:

- ▶ *What tools can you use to answer a scientific question about nature?*
- ▶ *What observations did you record in your notebook?*
Observations are data we use to help answer our question.
- ▶ *How did your observations help you find out what happens to leaves when they fall on the ground?*
- ▶ *What else are you curious about in nature?*

Tune in to your local PBS station and visit pbskids.org online for more opportunities to learn, watch and play together with your family. Watching videos and playing games with your kids encourages social interactions, bonding and learning.

You can also access PBS KIDS content free in PBS KIDS Video app and the PBS KIDS Games app.

Estimadas familias:

Hoy hemos trabajado en equipo para investigar la respuesta a esta pregunta: ¿Qué les pasa a las hojas cuando caen al suelo? Haciendo uso de sus habilidades de investigación científica y razonamiento crítico, su niño(a) trabajó en equipo y fabricó instrumentos, notó cosas, hizo observaciones y reunió datos. Con ayuda de Elinor, Olive y Ari, del programa *Elinor Wonders Why* de PBSKIDS, descubrimos que las hojas caen al suelo, se descomponen y, con el tiempo, pasan a formar parte de la tierra.

Si quieren saber más sobre lo que aprendió su niño(a), pueden preguntarle:

- ▶ ¿Qué instrumentos puedes usar para responder a una pregunta científica sobre la naturaleza?
- ▶ ¿Qué observaciones anotaste en tu cuaderno? Las observaciones son datos que usamos para responder a la pregunta.
- ▶ ¿Cómo te ayudaron tus observaciones a averiguar qué les pasa a las hojas cuando caen al suelo?
- ▶ ¿Qué otras cosas de la naturaleza te causan curiosidad?

Sintonicen el canal local de PBS y visiten PBSKIDS.org en Internet para enterarse de otras oportunidades para aprender, ver y jugar con su familia. Ver videos y jugar juegos con su niño(a) estimula las interacciones sociales, el desarrollo de vínculos afectivos y el aprendizaje. También pueden tener acceso gratuito a los materiales de PBS KIDS en las aplicaciones informáticas (apps) PBS KIDS Video y PBS KIDS Games.

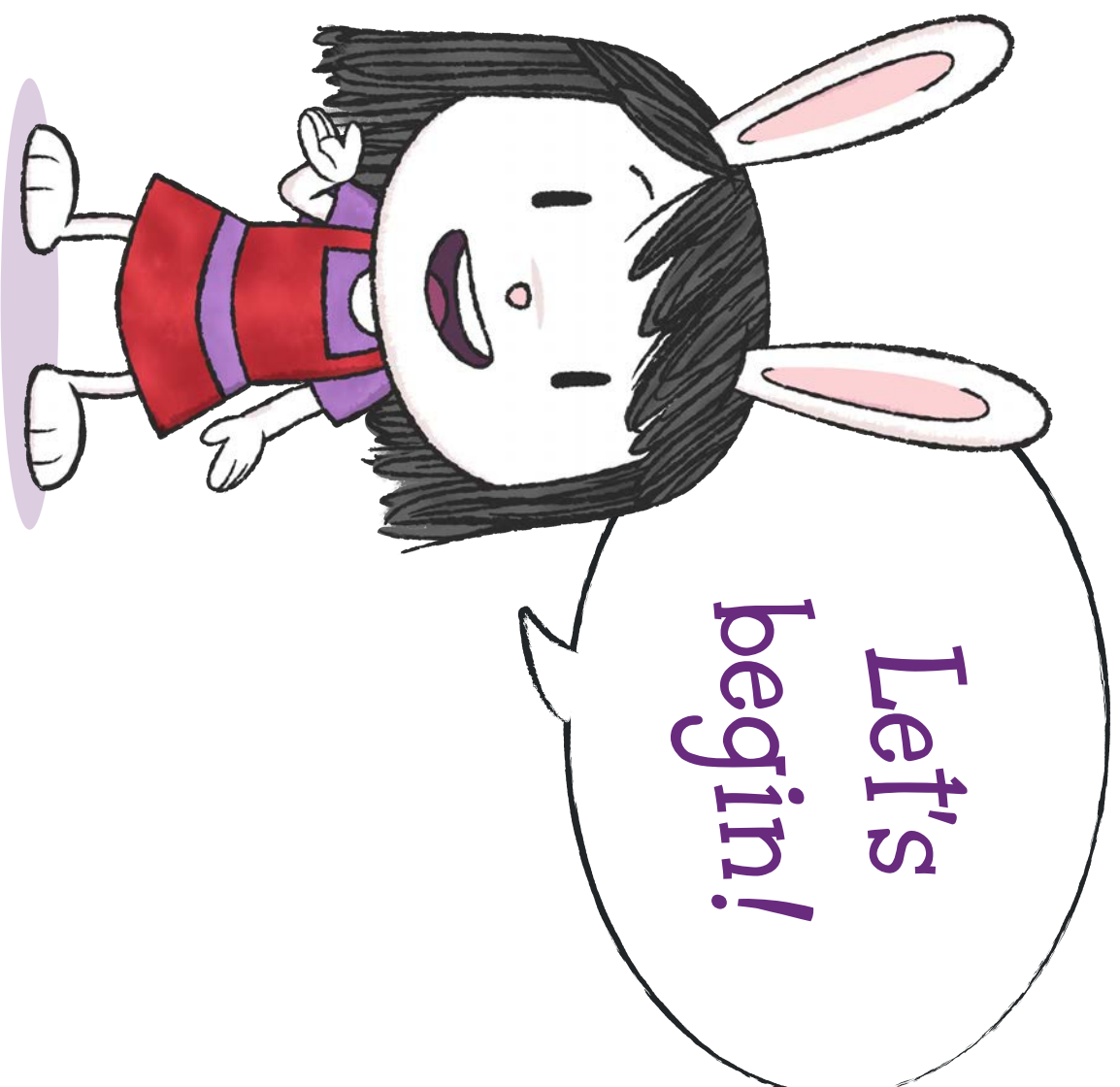
Being Curious:
Outdoor Lesson

Learning Together Outdoors

Welcome to learning with *Elinor Wonders Why!*

In this lesson, children will meet Elinor and her adventurous friends as they head outside to discover fun routines, tools, and transitions for learning and exploring outdoors.





Let's Be

Curious!

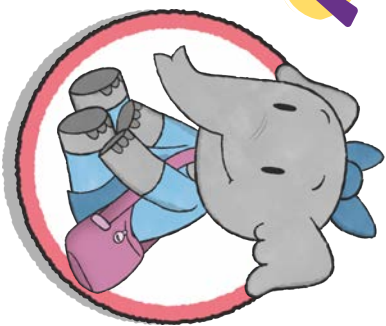
Today, we'll meet Elinor and her friends and learn about being an **explorer**.

Let's watch part of the "**Follow That Roly Poly**" story. Then, we'll practice being scientists indoors and outdoors.



Let's get ready to learn with Elinor and her friends.

We are
ready to
learn.



We have calm
bodies,



watching
eyes,



and listening
ears.



Let's
find out:

What is an explorer?



View With a Purpose!



Let's
find out:

What is an explorer?



To view the video clip, click [here](#)
or find the link in the **Materials** section
of this lesson's Teacher Guide.



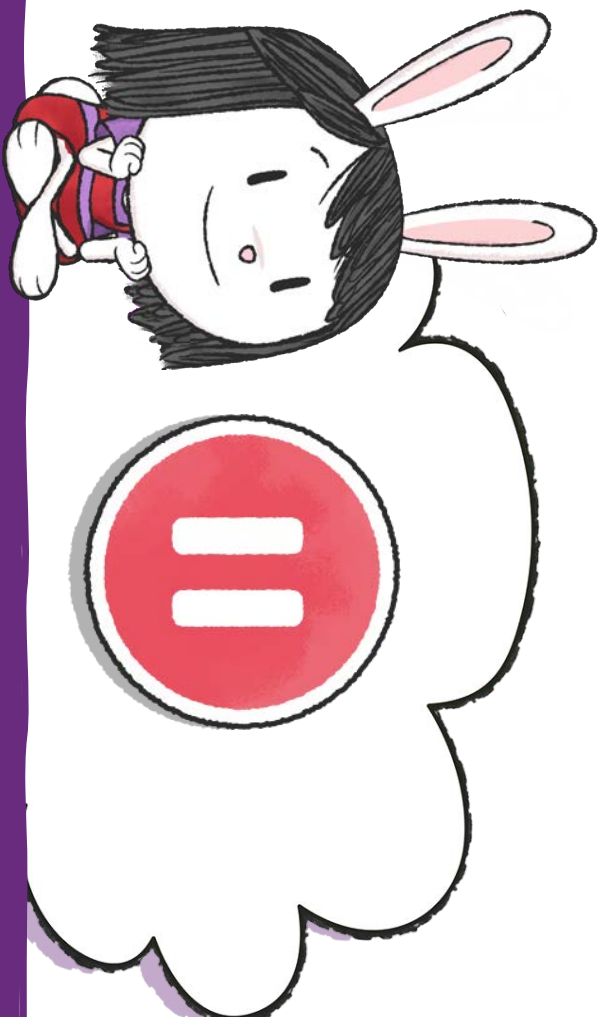
Turn & Talk

We listened and learned,
and had some fun.
What did you notice?
Now tell someone!



- ? What is an **explorer**?
- ? Explorers are brave, kind, and curious. What could we do outdoors to show that we are brave? Kind? **Curious**?





Here is a good spot to take a break in the lesson, if needed.



I Wonder...

How do we
investigate our
curiosities?

What tools help us
explore outdoors?



Let's Plan!

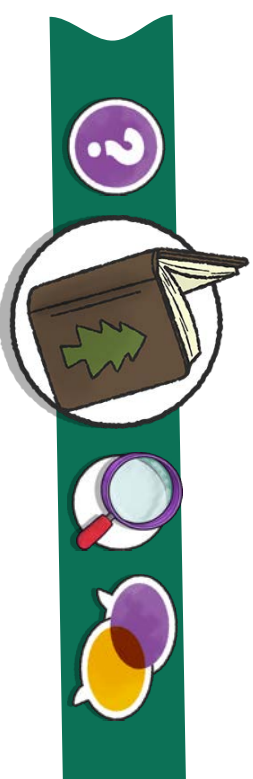
Scientists plan their investigations by deciding what tools will help them answer their questions.

Let's create a tool kit to take outdoors when we explore.

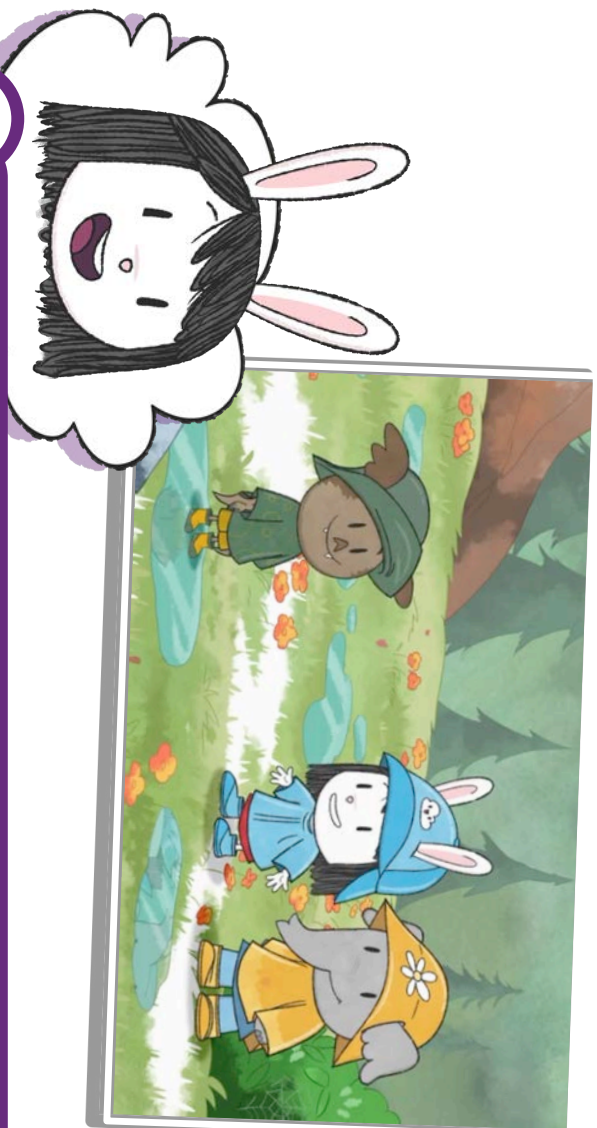
Choose the tools that will help you investigate.



DIY note:
You can make your own magnifying glass and binoculars using instructions in the **Support Materials** section.



Let's get ready to learn outdoors!



1

We'll play this 1-minute song while we prepare to go outside.

To play the song, click [here](#) or find the link in **Materials** section of this lesson's Teacher Guide.



We are ready to go outside!

Let's say the Exploring Club Pledge together.



An Explorer is brave!

(Standing straight, tall, hands on hips)

An Explorer is kind!

(Hands over heart)



An Explorer is curious!

(Point to brain)



Who knows what
we will find!

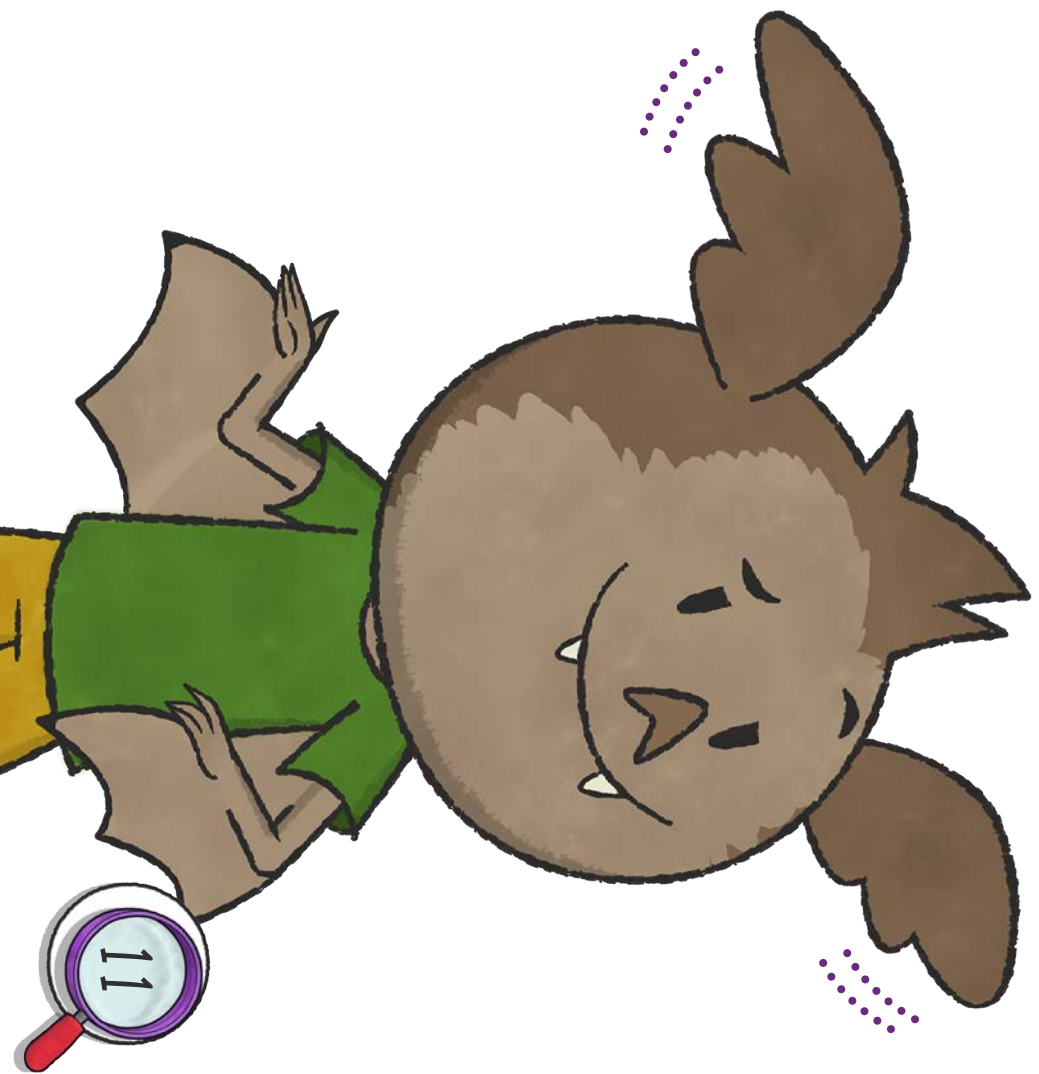
(Open hands with arms wide)



Safety note:

If this is your first time learning outdoors with children, review the Safety Notes in the **Before You Begin** section.

Let's Explore!

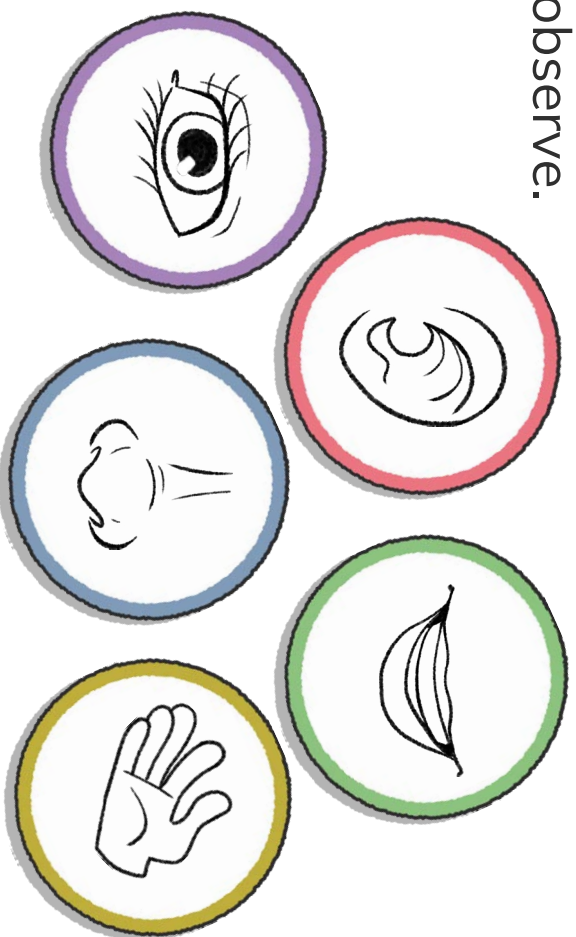


5 Senses Check

We use our five **senses** to make observations. Observations help us answer our questions and make new ones. Let's do a “**5 Senses Check**” to help us get ready to observe.

Tell me something you...

- **see** with your **eyes**.
- **hear** with your **ears**.
- **smell** with your **nose**.
- **feel** with your **hand**.
- **taste** with your **mouth**.



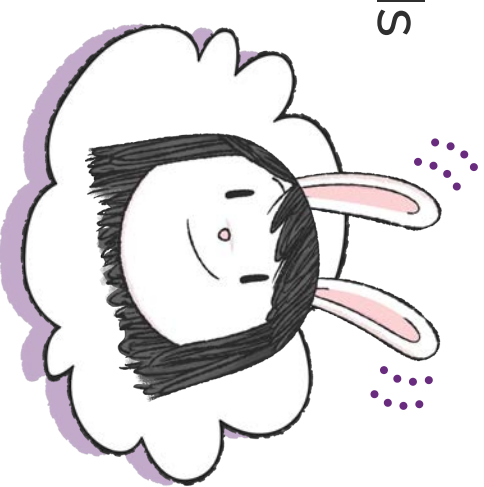
We can use the “**5 Senses Check**” anytime we are getting ready to learn outdoors. When scientists make observations with their five **senses** they ask lots of questions.



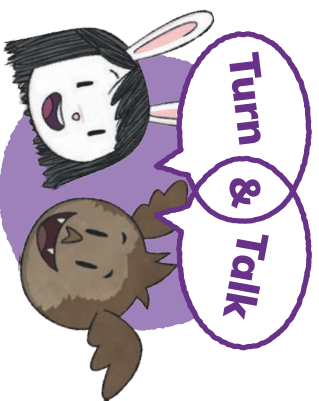
Time to Investigate!

Now let's use our five senses and other tools to **explore**, observe, and ask questions about our **environment**.

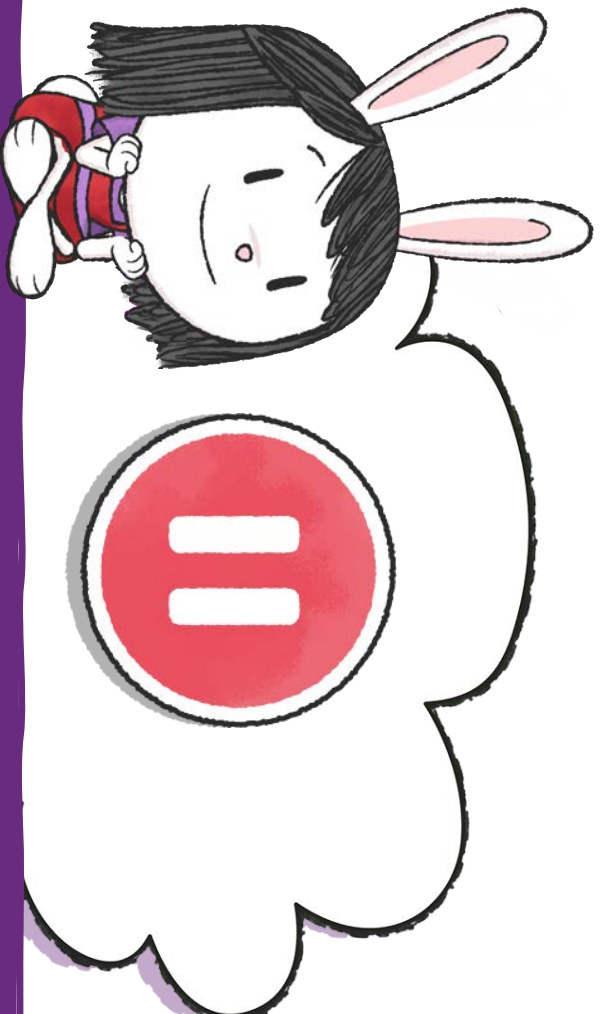
Take a walk in your neighborhood.



- ❓ What do you see? Hear? Feel? Smell?
- ❓ What do you wonder?



Great observing, scientists! We found
some interesting animals!



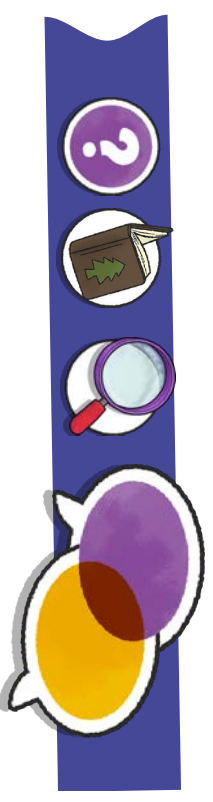
Here is a good spot to take a break in the lesson, if needed.



Let's

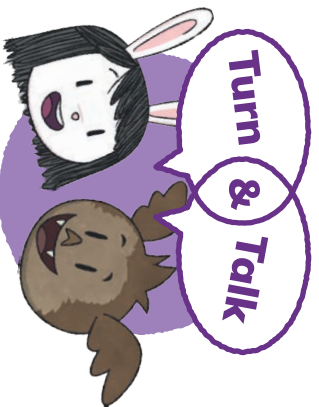
Share!

Scientists share
what they discover
to teach others
about what they
learned.



Turn & Talk

Tell us explorers,
What did you learn?
It's time to share.
Now it's your turn!



- ? What did you observe outside?
- ? What tools did you use?



Open-Ended Response

Let's record our data!

Draw something that
you observed in your
community.
Remember to add
labels to your
drawing.

Let's record it in
our notebook!



Congratulations Scientists!

You are now a member of the Exploring Club!

Exploring is for everyone! Print out your membership card and practice the Exploring Club Pledge and your “5 Senses Check” before your next outdoor exploration!



Being Curious:
Outdoor Lesson

Learning Together Outdoors

Welcome to learning with *Elinor Wonders Why!*

In this lesson, children will meet Elinor and her adventurous friends as they head outside to discover fun routines, tools, and transitions for learning and exploring outdoors.



Before You Begin

This lesson has four phases and usually lasts about 45 mins.



Let's Be Curious

↓ **10 minutes**

- Watch a video clip (Total: 13 seconds)
- Learn the "Exploring Club Pledge."
- Wonder: "What tools help us explore outdoors?"



Let's Plan

↓ **5 minutes**

- Decide on the tools you'll need for your investigation.
- Prepare to go outside.



Let's Explore

↓ **15 minutes**

- Go outdoors to make observations in your community.
- Learn the "5 Senses Check."



Let's Share

↓ **15 minutes**

- Talk: What did you observe outside?
- Draw and label something you observed in your community.



Learning Goals

This lesson will help children to:

- Build early research and media literacy skills.
 - View media with a purpose for learning.
 - Collect information and data.
 - Talk about what they learned from the video.
- Understand that asking questions is part of the work of a scientist.



Materials You'll Need

- **Science Notebook pages**
(or paper/a blank notebook)
- **Writing tools**
(crayons, markers, pencils)
- **Items for an Outdoor Exploration Kit**, such as:
 - 5 Senses Check card
 - Binoculars/DIY Binoculars
 - Magnifying glass/DIY Magnifying Glass
 - “Sit-upon” (large ziplock bag stuffed with recycled newspaper to sit on)
 - Collection bag (ziplock or paper bag with yarn handle to put over the shoulder for hands-free exploring)



Note:

All of the media and printables for this lesson are online at: pbslearningmedia.org/collection/Elinor

Choose **Being Curious** from the left side menu, then **Outdoor Lesson**, and the resource called **Printable Lesson | Learning Together Outdoors**.

If you don't have access to a printer, you can recreate the Science Notebook chart on blank paper and use drawings instead of the pictures provided.

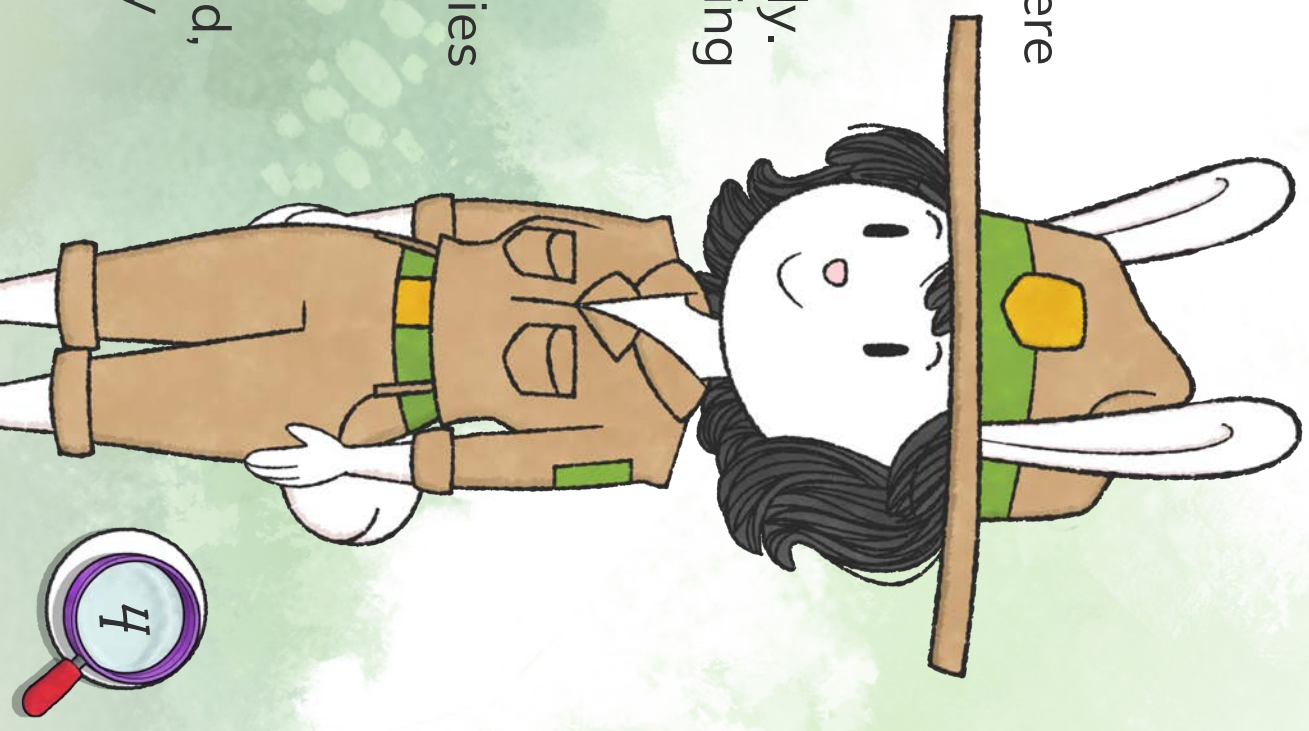


Safety Notes

Exploring outdoors provides many rich opportunities for discovery and learning. Here are some safety tips to help make outdoor learning fun and enjoyable for all.

Always:

- Check the weather and dress accordingly.
- Preview the area that you will be exploring for hazards such as harmful garbage or plants.
- Talk to children about the importance of staying with an adult. Set clear boundaries about where children are allowed to explore.
- Ask children what they can do to treat nature kindly (leave flowers in the ground, leave critters in their homes, walk quietly and carefully, etc.).



Learning with Media

Scientists use media, including books, articles, and videos, to help answer questions. We call that research.

This lesson uses clips from the *Elinor Wonders Why* episode, “Follow That Roly Poly.”

The Exploring Club is looking for a cool place to explore when they follow a roly poly and discover an entire community of critters that live under a log. They learn that you don’t have to go very far to find a grand adventure in nature.

In this lesson’s video clip: Elinor and her friends teach the “Exploring Club Pledge.”



Science Words

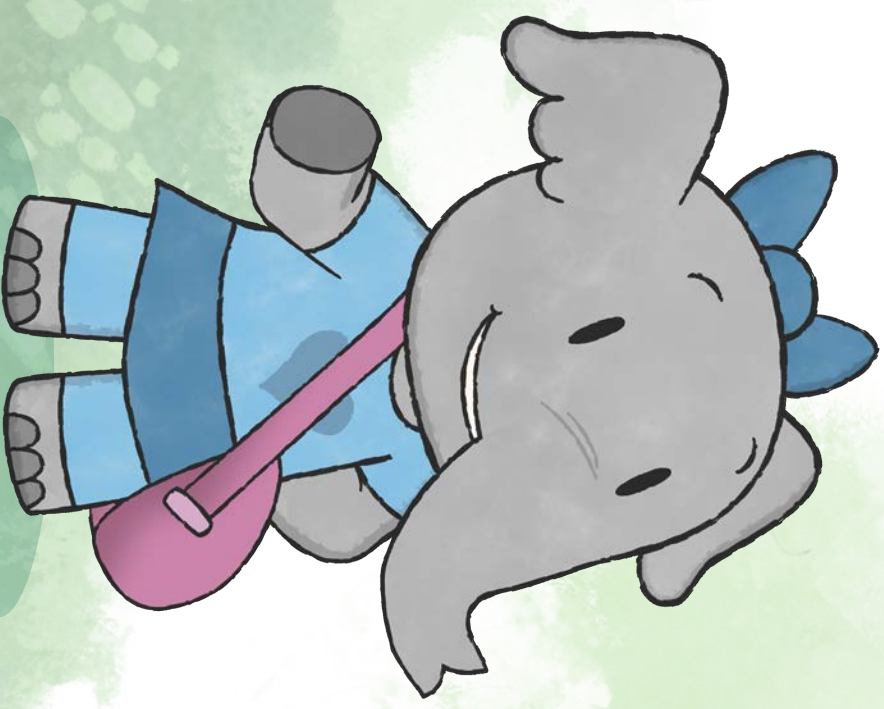
Here are some words we will be using as scientists in this lesson:

Explore: To investigate and be curious about a place indoors and out. An explorer is brave, kind, and curious!

Senses: The way animals, including people, take in information about the world. Seeing, hearing, touching, tasting, and smelling are commonly used senses.

Environment: Everything around you in an area, including things that are living (plants and animals) and non-living (rocks, buildings, streets).

For more words we use as scientists, read “Talking Like a Scientist.”





Visit pbskids.org/elinor



's

(name)

Science Notebook

Draw a picture of yourself here.

Let's Be Curious

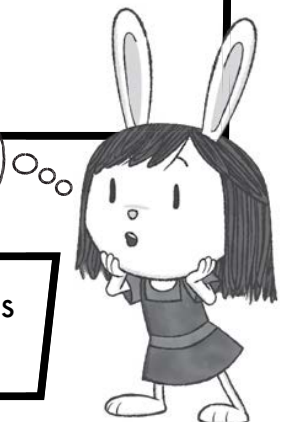
(name)

What do you wonder? What are you curious about? Draw or write about it here!

Let's Plan

How will you investigate? Where will you explore and create? What tools or materials do you need? How will you stay safe?

That's **so**
interesting!



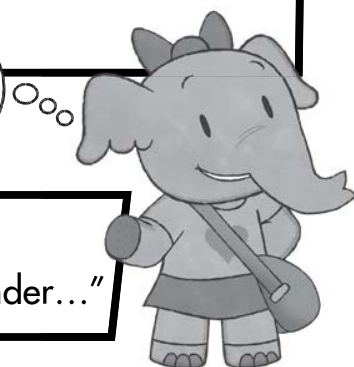
Let's Explore

(name)

What do you observe with your eyes? Your ears? Your nose? Your skin?

Let's Share

Talk about what you discovered. What new questions do you have?
You might use the words, "I noticed..." or "I observed..." and "I wonder..."



Let's Explore

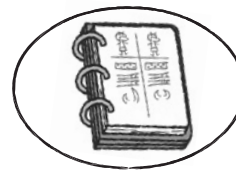
T-Chart

(name)

What did you notice? Record your ideas here.

WITHOUT my magnifying glass

WITH my magnifying glass



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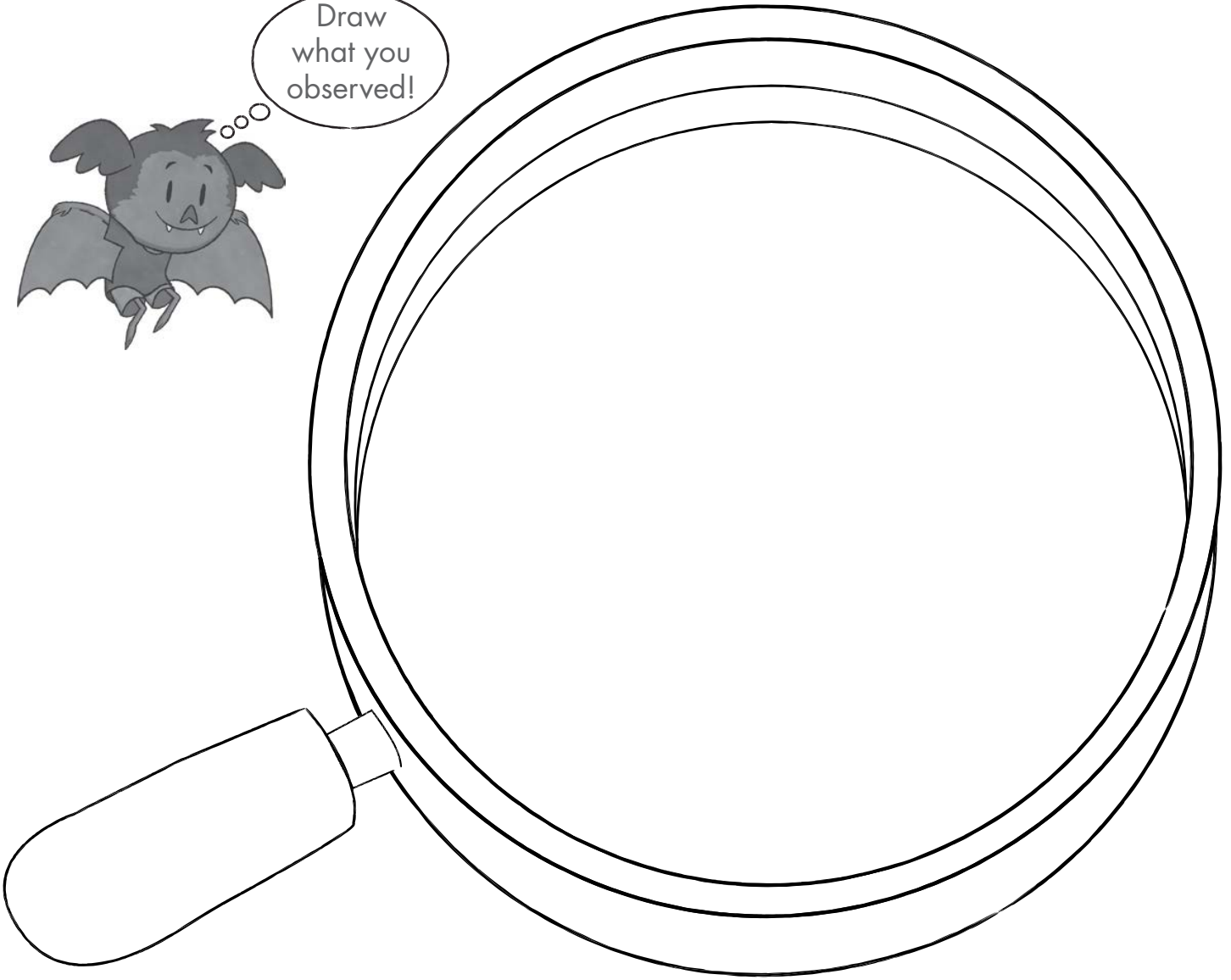
Scientists are Curious!

_____ (name)

Curious means you really want to find out about new things.



Draw
what you
observed!



I'm curious about... _____



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Let's Be Curious!

(name)

What do you want to know more about?

Let's Plan!

What will you do to investigate? What tools and materials will you use?
What senses will you use to observe? How will you stay safe?



Let's Explore!

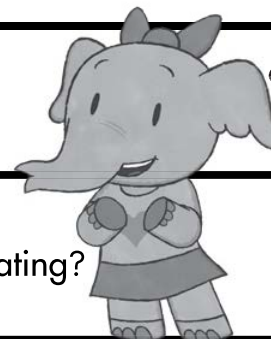
Record what you observe or discover:



I noticed...

Let's Share!

Talk about what you noticed.
What else are you interested in investigating?
What do you wonder about now?



I wonder...



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I can help take care of
the environment by....

By Scientist:

_____ (name)



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Membership Card

Bookmark



Exploring Club Pledge

An explorer is brave!
An explorer is kind!
An explorer is curious!
Who knows what
we'll find!



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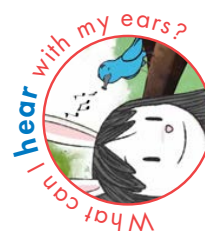
Exploring Club Member



(name)

↑ play

Five Senses Check





Visit pbskids.org/elinor

Let's Plan!

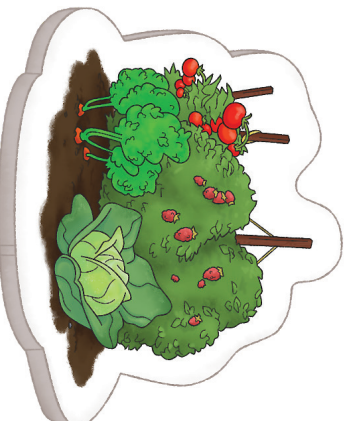
Get ready to collect your data by cutting out the **composting steps** along the dashed lines.



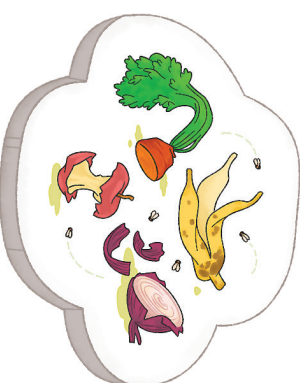
The plants make food for us to eat.



The worms eat the leaves and leftovers. The worm poop becomes part of the soil.



The new soil helps plants grow.



Old plants and food get mushy and crumbly.



I'm a scientist!
Ask me what
I'm curious about.



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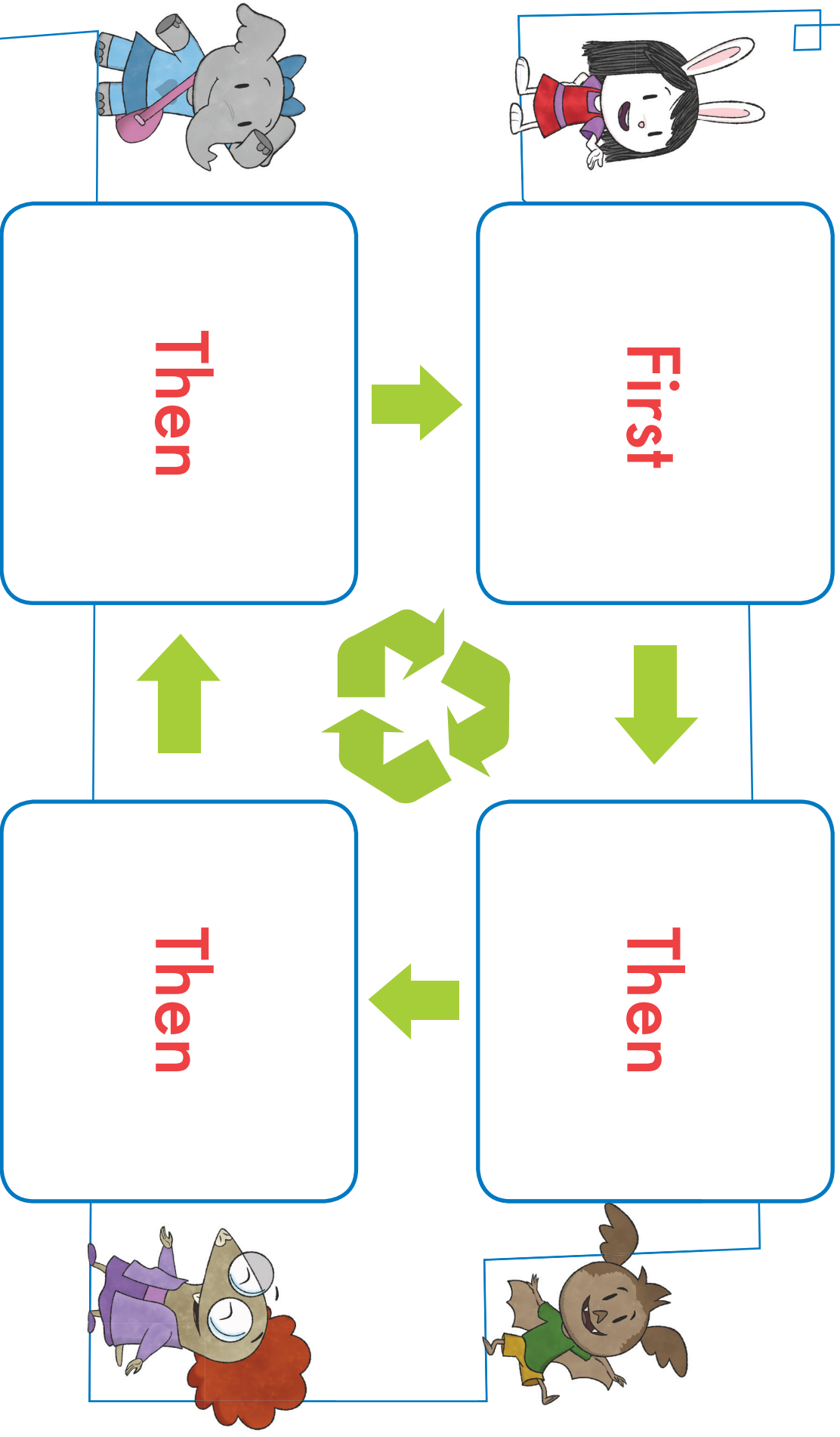


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Let's Explore!

What happens to leftover food and leaves when we compost them?

Record your data. Glue or tape the **composting steps** in order. Follow the arrows!



Visit pbskids.org/elinor

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