

Problem Solvers Activity 7: Squirrel Snacks

CHILDREN ARE LEARNING TO...¹

- Recognize the number of small objects in a set without counting (subitizing).

MATERIALS NEEDED:

8 hiding places—items under which a small object can be hidden (for example, small boxes, buckets, bins, plastic cups or dishes, books, plush toys)

Optional: Acorns and/or sunflower seeds to show children as part of the activity introduction

Handout 1: Squirrel (or optional plush squirrel toy)

Handout 2: Squirrel Snack Cards

PREPARATION:

- Print one copy of **Handout 1**. Cut out the squirrel image and glue to cardboard/manila folder to make it sturdier. (Or use a plush squirrel toy instead of the handout.)
- Print copies of **Handout 2**.
 - You'll need two copies for classroom use. Cut the cards apart, keeping the sets separate. You may want to laminate the Squirrel Snack Cards or glue them to index cards to make them more durable.
 - You'll need to make an additional copy of the **Squirrel Snack Cards** for each child in the group, as this matching game is the suggested at-home activity. If you wish, you can cut each set apart and place the cards in an envelope, or leave the cards in two sheets so they're less likely to get lost or separated.
- If using the acorns/sunflower seeds, place in small bowls to pass around for children to touch.
- Prepare copies of the parent handout for distribution.
- If you plan on implementing the optional book activity, refer to the preparation instructions in that section.
- Before gathering the children in the Circle Time area, you need to hide two **Squirrel Snack** cards for children to find during the opening game. To do this, spread out the 8 hiding places you've selected (buckets, containers, boxes, etc.) around the circle area. Place a **Squirrel Snack** card with one acorn pictured under one of the 8 hiding places. Place a **Squirrel Snack** card with two acorns pictured under a different hiding place. Note: Not all hiding places will contain squirrel snacks.

SUBITIZING

This activity focuses on the skill of "subitizing," which is a child's growing ability to recognize small quantities of objects without counting. Babies are born with the ability to tell the difference between one item and two. Children eventually learn to recognize larger (but still small) groups of items, like three and four.

While we can't really "teach" children to subitize, we can provide them with lots of practice and experience with sets of different quantities so they develop this ability over time.

¹ Head Start Early Learning Outcomes Framework: Ages Birth to Five. <https://eclkc.ohs.acf.hhs.gov/interactive-head-start-early-learning-outcomes-framework-ages-birth-five>

ACTIVITY INSTRUCTIONS

ENGAGE

Gather a group of 4 children.

Show the prepared **Squirrel** picture or plush toy and ask if the children have ever seen a squirrel. Discuss what they know about squirrels. Where do children think they live? What might they like to eat?

Show the examples of squirrel food: acorns and/or and sunflower seeds. If not using the real items, show children the photos from the **Squirrel Snacks** cards. Talk about what each food item looks like and teach its name. Explain that squirrels often hide their food and come back later to get it when they're hungry.

SAY: Let's help this squirrel find something to eat. She has hidden some food in our classroom. The food is hidden under one of the toys here. We'll choose a card to see how many acorns to look for. Here's the card! How many are on this card? Can you tell me the quantity you see?

Show the **Squirrel Snack Card** with one acorn.

ASK: Who can find one acorn hidden under one of these toys?

Choose a child to search for the one-acorn card. When the one-acorn card has been found, observe: One acorn on this card, one acorn on that card.

Show the **Squirrel Snack Card** with two acorns.

ASK: How many are on this card? Can you tell me the quantity you see? Who can find two acorns for our squirrel?

Subitizing is the act of looking at a set of objects and immediately recognizing how many are there. This is not a counting activity. However, if children are unable to recognize the quantity or state the incorrect quantity, then you can take the group through counting the dots on the card to reinforce what a quantity of "two" looks like.

5 SQUIRREL FACTS FOR TEACHERS

1. Squirrels live in nests (called dens) in trees. You might find them in a park or in your backyard.
2. You can recognize squirrels by their big, bushy tails. They are great jumpers and can leap from tree to tree. Their tails help them balance.
3. Squirrels are omnivorous, which means that they eat both plants and animals. Nuts and seeds are some of their favorite foods. You might see squirrels eat foods like acorns, walnuts, or sunflower seeds.
4. Squirrels hide their food in lots of different places to keep other animals from stealing it. They remember where the food is hidden and come back to eat it later.
5. Squirrels talk to each other by making chirping sounds. They also communicate by moving their tails.

EXPAND

Return the one- and two-acorn cards to the stack of **Squirrel Snack Cards**.

Introduce the **Squirrel Snacks** game. Choose a child to begin—they will be the Hider.

The Hider draws a **Squirrel Snack Card** and shows it to the group.

ASK: How many acorns (or seeds) do you see? What quantity of acorns/seeds do you see?

Prompt the other children cover their eyes while the Hider hides the **Squirrel Snack Card** they've chosen. At the same time, the teacher should hide two more cards showing different quantities of acorns. (These cards will act as distractors—quantities that don't match the number the Squirrel is looking for.) Tell children when they can open their eyes.

Remind children of the number of acorns they're searching for, and select another child (the Squirrel) to find it. You can hold up 1 to 5 fingers with the target quantity for children as a reference.

Once the Squirrel finds a card, have children look to see if the number of acorns on the card is the same as the number of fingers you're holding up.

If children wish, when it's their turn to be the hungry squirrel they can pretend to then "gobble up" the acorns they find.

Continue until each child has had a turn to be the Hider or the Squirrel.

EXPLORE

For children aged 2 ½ to 3 years, play the Squirrel Snacks card game (explained below) **as a group**.

For children aged 3 to 4 years of age, create pairs to play Squirrel Snacks, a matching card game.

Demonstrate how to play the game. Place the **Squirrel Snack Cards** face down on the rug or table. Pick up two cards. Compare the number of acorns on the cards. If they match, the player keeps the cards. If not, replace the cards face down and the second player tries to make a match. Continue making matches until all children have found pairs for all cards.

REFLECT

Bring the children back together in a group of four.

SAY: Problem Solvers, did you find matches for all your Squirrel Snacks? Is our squirrel still hungry or did he fill up on lots of good snacks?

ASK: Hmmm, let's look at this card. (Hold the **Squirrel Snack Card** with 2 acorns up for 1-2 seconds for children to see. Then put it face-down on your lap.) How many acorns did you see on the card?

Observe: Are children able to recognize and name the set of acorns as "two"? If so, they are subitizing. If not, take the card out again and point to each acorn as you count together with children. Emphasize: "This is two. There are two acorns on the card."

Repeat the activity above with numbers 5 and under, in random order to encourage subitizing rather than counting

ASK: How many did you see on this card?

WRAP-UP: Today we pretended to be squirrels who were hungry for groups of 1, 2, 3, 4, or 5 acorns. All of you squirrels used great problem-solving skills today to find your hidden snacks! Now let's scamper like squirrels back to our class!

Individualizing the Activity

MAKE IT MORE CHALLENGING:

- Use larger quantities. Begin the opening activity with two **Squirrel Snack Cards** featuring larger quantities (3, 4, and 5) hidden in the room.
- For the group game, use all **Squirrel Snack Cards** (featuring quantities up to 5).
- For the partner activity, use more pairs of cards in the Squirrel Snacks game (up to 20 total cards or 10 pairs).

MAKE IT LESS CHALLENGING:

- Use only quantities of 1 and 2 for both the opening group activity and partner activity.
- If children have difficulty recognizing or naming 1 and 2 acorns, you can count them each time they're revealed.
- For the Squirrel Snacks matching card game, consider starting with only 5 pairs (one pair for each child in the group, plus one for the teacher).

MAKING CONNECTIONS ACROSS THE DAY:

- Point out groups of 1, 2, or 3 as you see them: 1 jacket on a hook, two mittens or shoes together, three wheels on a tricycle.
- Trace children's bodies on craft paper and count and label all the "I have two" parts you can see: eyes, ears, hands, feet, etc.
- When you see birds or animals in the playground or on walks, talk about features that come in sets of two (a bird's feet and wings) or sets of four (a dog's legs, picnic table legs) and point out how other animals are similar or different.

Song: *Squirrel Snacks*

The lyrics to this song are listed below—along with suggested body movements that children can use to participate in the song. For the activity that goes with this song, you will need:

- A matching pair of Squirrel Snacks cards, each showing 2 snacks
- A Squirrel Snacks card showing 1 snack
- A Squirrel Snacks card showing 3 snacks

Take a look; what do you see?

How many squirrel snacks do we need?

I see two; how about you?

Where has squirrel hidden two?

Look up high; look down low

Shake your tail and here we go!

Take a look; what do you see?

One? That's not two!

Let's keep looking, you and me!

Look up high; look down low

Shake your tail and here we go!

Take a look; what do you see?

Three? That's not two!

Let's keep looking, you and me!

Look up high; look down low

Shake your tail and here we go!

Take a look; what do you see?

Two? That's a match!

We found just the snacks we need!

Hold up the Squirrel Snacks card with 2 snacks

Palms face up and shrug shoulders

Hold up 2 fingers

Hand to forehead and pretend to look around

Model looking up high and down low

Wiggle the hips like a tail excitedly

Hold up the Squirrel Snacks card with 1 snack

Hold up 1 finger on one hand and 2 on the other

Point to children and then to self

Model looking up high and down low

Wiggle the hips like a tail excitedly

Hold up the Squirrel Snacks card with 3 snacks

Hold up 3 fingers on one hand, 2 on the other

Point to children and then to self

Model looking up high and down low

Wiggle the hips like a tail excitedly

Hold up a Squirrel Snacks Card with 2 snacks

Hold up the two matching Squirrel Snacks cards, each with 2 snacks pictured

Do a thumbs up

Making Literacy Connections

Share the following book with children as an opportunity to deepen their understanding of subitizing. The literacy extension activity below suggests another play-based experience to invite children to recognize groups of objects in their environment.

Suggested Book: *What Comes in 2's, 3's, and 4's?* by Suzanne Aker

AS YOU READ:

What Comes in 2's, 3's, and 4's? asks a question: *What comes in 2's?* and then provides a series of simply illustrated answers. Your eyes, ears, hands, and feet. The handles on a sink. The bread on a sandwich.

As you read, you can:

- Ask children to look at an illustration and tell you how many there are. Show them the illustration for a 1-2 seconds and then turn the book over on your lap and ask: How many X did you see?
- Then encourage children to join you in counting aloud the number of items in a picture.
- Ask children to point to real-life objects as they're mentioned: two eyes, or four legs on a chair.
- Engage children by comparing their own experiences to those in the book: What do we do when we see a red light? How many of you have ever ridden a tricycle? What do we use a spoon for?
- Allow space to discuss experiences that are different than those pictured: Some people use chopsticks instead of a knife, fork, and spoon. Some children are not allowed to use knives—too sharp!

BUILD ON THE BOOK:

Materials: smartphone or camera, printer and printer paper

Set aside a day (or even a week) to celebrate a number, like Twos-Day. Take children on a scavenger hunt in search of things that occur in twos. When a child spots a pair—salt & pepper, socks, shoes, eyes, ears—take a photo for later printing. Create a "We Found Quantities of Two" book or bulletin board with items labeled: 2 socks, 2 shoes, etc.











It's much harder to find naturally occurring sets of 3's, so Threes-Day might be a hunt for triangles. On Fours-Day, you can help children find 4's by suggesting categories: vehicles (things that go) with 4 wheels, furniture (like tables and chairs) with 4 legs, animals with 4 legs.

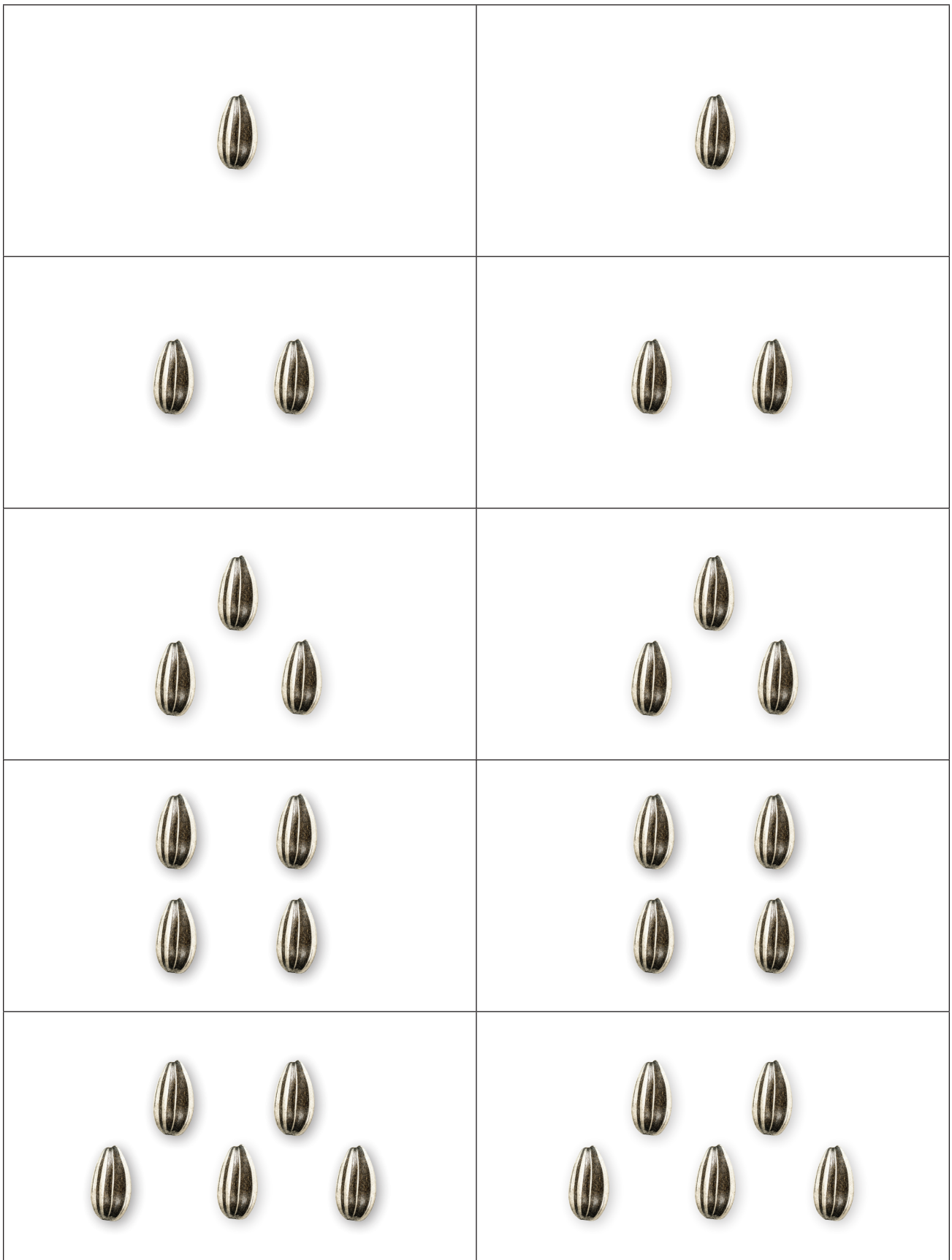
You may want to ask families to contribute photos from home on the designated day.

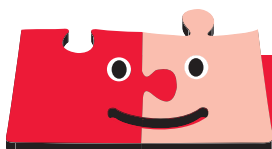
Handout 1: Squirrel



Handout 2: Squirrel Snack Cards / Cartas de Bocadillos de Ardilla





How Many?

This week, we are exploring the idea that we use numbers to tell “how many.” For example:



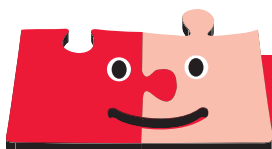
As children get older, they’ll begin to recognize small numbers of items (2 or 3) without counting. In class this week, we talked about how squirrels like to eat acorns and we played math games to learn what sets of 1, 2, and 3 acorns look like.

Help your child have fun recognizing small quantities with this matching game. Here’s how to play the **Squirrel Snacks** card game: Mix up the **Squirrel Snack Cards**. Then place the five pairs of **Squirrel Snack Cards** face down.

Let your child turn over any two cards to try to find a match. If a match is made, they keep the pair of cards. If no match is made, the cards are turned back over for another try. Then it’s your turn. Keep making matches until all the cards are used up.

If your child is looking for more challenge, use all 10 pairs of cards in the game. If this game is too challenging, use just 2 or 3 pairs.





Solo para familias

¿Ahora Muchos?

Esta semana, estamos explorando la idea de que usamos números para decir "cuántos". Por Ejemplo:



A medida que los niños crecen, comenzarán a reconocer un pequeño número de elementos (2 o 3) sin contar.

En clase esta semana, hablamos sobre cómo a las ardillas les gusta comer bellotas y semillas y jugamos juegos de matemáticas para aprender cómo se ven los conjuntos de 1, 2 y 3.



Ayude a su hijo a practicar el reconocimiento de pequeñas cantidades con este juego de igualación. A continuación, le indicamos cómo jugar con bocadillos de ardilla. Coloque cinco pares de **Cartas de Bocadillos de Ardilla** boca abajo.

Deje que su hijo voltee dos cartas hacia arriba para ver si las cartas son iguales. Si encuentra que las cartas son iguales, se queda con el par de cartas. Si las cartas no son iguales, las cartas se devuelven e intenta de nuevo. Sigue haciendo pares hasta que todas las cartas se terminen.