

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

Children work in pairs to fill four empty cookies with a target number of chips. Each child receives a blank board with four empty cookies. Children take turns rolling a number cube to determine how many chocolate chips to place on the cookies on each given turn. One child counts out the chips based on the number rolled and the other child counts to make sure it's the correct number. Then children place the chips on the cookies, making sure they don't end up with more than the target number of chips on each cookie. Children switch roles and continue until all their cookies are filled with exactly the target number of chips.

Primary Objective

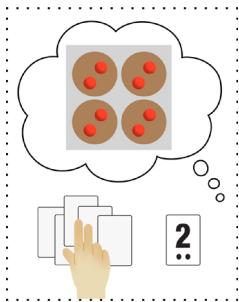
- Producing and understanding number combinations of totals to four or more

Materials

- 4-Cookie Game boards (each child receives their own board with 4 cookies on it)
- Counting chips (all the same color)
- Small bowl and plate
- 1-3 dot number cubes (at least one cube for each pair of children; see Summary of Activity Adaptations for other number cube options)
- Counting cards
- Cookie Game activity step icons

How to Play the Activity

The activity steps icons below outline the steps of the activity. Print these icons as cards and share them to help children remember the steps. They're also a helpful scaffold for children!



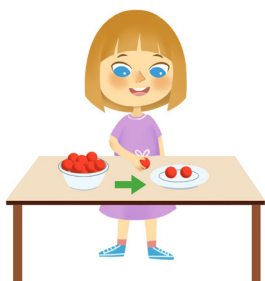
Step 1

Children draw a counting card to determine the “target” number of counters (chocolate chips) that will go on top of each of the four cookies.



Step 2

Child 1 rolls the number cube and tells how many counters to take out on that turn.



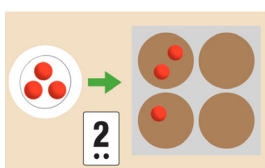
Step 3

Child 1 counts out that many counters from the bowl and puts them on the paper plate.



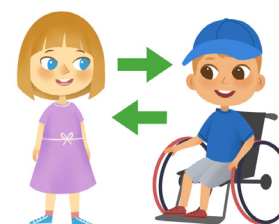
Step 4

Child 1 asks Child 2, “Am I right?” Child 2 checks and agrees, if correct.



Step 5

Child 1 puts the counters from the paper plate onto the cookie.



Step 6

Children switch roles and play again, continuing until their cookie is filled.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

Teacher's Guide

Instructions for introducing the activity to the **Whole Group**.

Introduce the Activity	
<ul style="list-style-type: none">■ <i>We're going to pretend to be bakers. Each of you is going to make cookies for four of your friends, but we have to make sure each friend gets a cookie with the same number of chocolate chips!</i>	<ul style="list-style-type: none">■ Show children the empty cookie board (with four blank cookies) and the bowl of counters, emphasizing that the counters are the pretend chocolate chips.
Model the Activity	
<ul style="list-style-type: none">■ <i>We're going to use these pictures to help us remember the steps.</i>	<ul style="list-style-type: none">■ Show children the activity step icons.■ To make the executive function (EF) easier, use the activity step icons.■ To make the executive function (EF) harder, omit the activity step icons and related text in each step below.
<ul style="list-style-type: none">■ <i>First, we choose a counting card to see how many chocolate chips we'll put on top of each cookie. This will tell us how many chips in all we need for our cookie recipe.</i>	<ul style="list-style-type: none">■ Point to the first activity step icon card. Draw the top card from the pile of counting cards; the number on the card will determine how many chips should be placed on each cookie.
<ul style="list-style-type: none">■ <i>Next, I roll the cube and say how many are (or which number is) on the top of the cube. This will tell us how many chocolate chips we need to count out for this turn. We might not fill up each cookie on the first turn, and that's okay!</i>	<ul style="list-style-type: none">■ Point to the second activity step icon card.■ To make the math and executive function (EF) easier, use a dot cube with only 1-2 or 1-3 dots repeated on the faces.■ To make the math and executive function (EF) harder, use more challenging cubes. In order of increasing difficulty: 1-6 dot cube, 1-6 numeral cube, two dot cubes, one numeral cube and one dot cube, or two numeral cubes.
<ul style="list-style-type: none">■ <i>I rolled [number].</i>	<ul style="list-style-type: none">■ Roll the number cube and say the number on top.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

<ul style="list-style-type: none"> ■ <i>Then, I count that many chocolate chips from my bowl and put them on my plate. I'm going to make sure I stop when I get to [number on top of the rolled cube] because that's how many we need for our recipe.</i> 	<ul style="list-style-type: none"> ■ Point to the third activity step icon. ■ Count out the correct number of counters from the bowl and place them on the plate.
<ul style="list-style-type: none"> ■ <i>Next, I turn to my partner and ask, "Am I right?" My partner looks at the cube, then counts the chips on my plate and tells me if I am right. We work together to fix it if we need to.</i> 	<ul style="list-style-type: none"> ■ Point to the fourth activity step icon. ■ Model how the partner will count to check the number of chips. If you have another adult available, it can be helpful to have them pretend to be the partner.
<ul style="list-style-type: none"> ■ <i>Next, I put the chips from the plate onto the cookies. How many should each cookie have?</i> 	<ul style="list-style-type: none"> ■ Point to the fifth activity step icon. ■ Have children count with you while placing chips on the first cookie, making sure they recognize to stop at the target number. If chips remain on the plate, ask children what you should do with the rest. Guide them to figure out that you can use the rest to start filling the other cookies.
<ul style="list-style-type: none"> ■ <i>Now we switch turns and my partner will fill up their cookies.</i> 	<ul style="list-style-type: none"> ■ Point to the last activity step icon.



Summary of Activity Adaptations

This is a summary of all the available adaptations to make Cookie Game easier or harder to accommodate the needs of your students. Whether the adaptation is easier or harder depends on each student’s math or executive function (EF) skills.

	Make It Easier	Make It Harder
EF	<ul style="list-style-type: none"> Use the activity step icons. 	<ul style="list-style-type: none"> Omit the activity step icons and related text in each step below.
Math & EF	<ul style="list-style-type: none"> Use a dot cube with only 1-2 or 1-3 dots repeated on the faces. 	<ul style="list-style-type: none"> Use more challenging cubes. In order of increasing difficulty: 1-6 dot cube, 1-6 numeral cube, two dot cubes, one numeral cube and one dot cube, or two numeral cubes.

Explore The Executive Function And Math Skills In This Activity

Visit the website for resources to support teaching this activity.

What to Do Next

Are some students ready for more challenge? Try the adaptations provided above for Whole Group. On another day, have the students play in pairs in **Small Group**.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

Children work in pairs to fill four empty cookies with a target number of chips. Each child receives a blank board with four empty cookies. Children take turns rolling a number cube to determine how many chocolate chips to place on the cookies on each given turn. One child counts out the chips based on the number rolled and the other child counts to make sure it's the correct number. Then children place the chips on the cookies, making sure they don't end up with more than the target number of chips on each cookie. Children switch roles and continue until all their cookies are filled with exactly the target number of chips.

Primary Objective

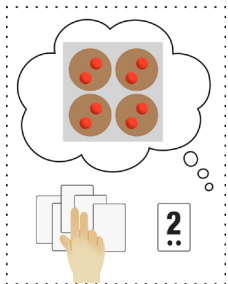
- Producing and understanding number combinations of totals to four or more

Materials

- 4-Cookie Game boards (each child receives their own board with 4 cookies on it)
- Counting chips (all the same color, enough for 40 chips for each child)
- Small bowl and plate (one of each for each pair of children)
- 1-3 dot Number cubes (at least one cube for each pair of children; see Summary of Activity Adaptations for other number cube options)
- Counting cards (one set for each pair of children)
- Cookie Game activity step icons (one set for each pair of children)
- Cookie Game role cards (one set for each pair of children)

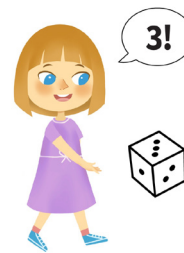
How to Play the Activity

For Small Groups, we suggest four children arranged in pairs of two with a teacher present to provide guidance. The activity steps icons below outline the steps of the activity. Print these icons as cards and share them to help children remember the steps. They're also a helpful scaffold for children!



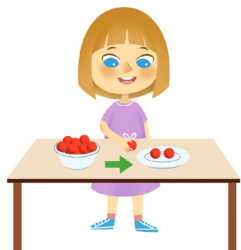
Step 1

Children draw a counting card to determine the “target” number of counters (chocolate chips) to put on each cookie.



Step 2

Child 1 rolls the number cube and tells how many are on top.



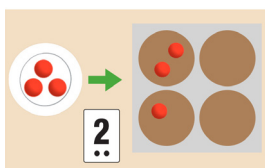
Step 3

Child 1 counts out that many counters from the bowl and puts them on the paper plate.



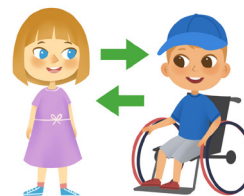
Step 4

Child 1 asks Child 2, “Am I right?” Child 2 checks and agrees, if correct.



Step 5

Child 1 puts the counters from the paper plate onto the cookie.



Step 6

Children switch roles and play again, continuing until their cookie is filled.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

Teacher's Guide

Instructions for introducing the activity to the **Small Group**.

Introduce the Activity

- ***It's time to make chocolate chip cookies for our friends. We're going to make them extra chocolaty with these chocolate chips! You each have your own cookies to fill and you will take turns rolling and checking.***
- Show children the empty 4-cookie board and the bowl of counters, emphasizing that the counters are the pretend chocolate chips.

Model the Activity

- ***First, we're going to flip over one counting card to find out how many chocolate chips we have to put on each cookie.***
- Point to the first activity step icon as you describe this step, then flip over the top counting card.
- **To make the executive function (EF) easier**, use the activity step icons.
- **To make the math and executive function (EF) easier**, use a smaller target number of chips (less than 5).
- **To make the executive function (EF) harder**, omit the activity step icons.
- **To make the math and executive function (EF) harder**, use a larger target number of chips (5 or more).

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

- ***[First child's name], it's your turn to roll the number cube and count your chips.***
- ***You get the hand card first because you get to roll and count first.***

- Place the hand role card in front of the child who is rolling and counting first.
- Point to the second and third activity step icons as you describe these steps.
- **To make the executive function (EF) easier,** use the role cards.
- **To make the math and executive function (EF) easier,** use a dot cube with only 1-2 or 1-3 dots repeated on the faces.
- **To make the executive function (EF) harder,** omit the role cards.
- **To make the math and executive function (EF) harder,** use more challenging cubes. In order of increasing difficulty: 1-6 dot cube, 1-6 numeral cube, two dot cubes, one numeral cube and one dot cube, two numeral cubes.

When working with two cubes, after children roll (for example, $2 + 2$, 4 total), ask them if there's another combination that would give the same total (for example, $1 + 3$). You can let them manipulate cubes to determine the answer or give them part of the 'alternate' option as a prompt (for example, "If one cube was a 3...").

Have children tell you how many chips they had before rolling, what they rolled, and how many total chips they will have after rolling—all before manipulating the chips.

- ***[Second child's name], it's your turn to check if your partner is right.***
- ***You get the check card first because you get to check first.***
- ***Do they have the right number of chips for the recipe?***

- Place the check role card in front of the child who is checking first.
- Point to the fourth activity step icon as you describe this step.
- After the child checks, ask them to confirm whether the correct number of chips was counted.
- If the correct number was not counted onto the plate, encourage children to work together to fix it. It may be easier for children to remove the chips and start over than to fix the mistake by adding to or taking away from the chips already on the plate.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

- ***[First child's name], now you can put the chocolate chips onto the cookies! How many should each cookie have?***

- The first child places chips on their cookies.
- Point to the fifth activity step icon as you describe this step.
- **To make the math easier:**
If a child is having difficulty determining how many more chips can fit on their cookie, ask them to count on keeping track (on fingers) from the number of chips they already have on their cookie. For example, “You have 1 chip and you need 4. Let’s count on using our fingers, 2 (hold up 1 finger), 3 (hold up 2 fingers)... Look, we need 3 more chips to fill the cookie!”
- **To make the math and executive function (EF) easier:**
If a child is having difficulty accurately placing the extra chips on the other cookies (i.e., adhering to the rule for the maximum number of chips per cookies), have children Think-Pair-Share about how to put the chips on the cookies.
- **To make the executive function (EF) easier:**
If children need more support remembering the maximum number of chips, use a dry erase marker to draw or have a child draw circles for the chips on their cookie.

Use the Think-Pair-Share cards and Think-Pair-Share introduction to remember the steps of the Think-Pair-Share process.
- **To make the math harder:**
Have children tell you how many chips they will have in all before they place the new set on the cookie or have children figure out how many chips they need to fill their cookies.
- **To make the math and executive function (EF) harder:**
Have children remember and state the starting number of chips and what steps they took to reach the number they have now, introducing plus and minus terms (for example, “I had 2, plus 3, and now I have 5.”).
- **To make the executive function (EF) harder:**
Omit the Think-Pair-Share cards and Think-Pair-Share introduction.

- ***Now we switch and [second child's name] will roll to fill up their cookies.***

- Have children trade hand and check role cards so that the first child now has the check card and the second child has the hand card.
- Point to the final activity step icon as you describe this step.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

Time to Play!

■ ***Now you'll take turns being the roller and counter and the checker!***

■ Give each pair of children two Cookie Game boards, a bowl of counting chips, a small plate, a number cube, a set of role cards, and a set of activity step icons.

■ ***It's your turn to be the roller and counter first [point to student], and it's your turn to be the checker [point to student].***

■ Assign one student in each pair to be the counter and roller and the checker, using the role cards if needed.

■ **To make the executive function (EF) easier**, use the role cards.

■ **To make the executive function (EF) harder**, omit the role cards.

■ ***Let's play! First, the roller and counter rolls the cube and counts the chips. Then the checker checks. Then the roller and counter puts them on the cookie.***

■ Lead students through the activity with the activity step icons.

■ ***It's time to switch roles and play again! If you were the roller and counter last time, you're now the checker. If you were the checker, now you get to be the roller and counter.***

■ Switch roles until the cookie boards are filled, also switching the role cards if they're being used.

■ Continue through the steps until the cookie boards are filled.

■ If one child completes their cookie well before the other child in the pair, the two can work together to complete the other child's cookie, continuing to take turns.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

Summary of Activity Adaptations

This is a summary of all the available adaptations to make Cookie Game easier or harder to accommodate the needs of your students. Whether the adaptation is easier or harder depends on each student’s math or executive function (EF) skills.

	Make It Easier	Make It Harder
Math	<ul style="list-style-type: none"> ■ If a child is having difficulty determining how many more chips can fit on their cookie, ask them to count on keeping track (on fingers) from the number of chips they already have on their cookie. For example, “You have 1 chip and you need 4. Let’s count on using our fingers, 2 (hold up 1 finger), 3 (hold up 2 fingers)... Look, we need 3 more chips to fill the cookie!” 	<ul style="list-style-type: none"> ■ Have children tell you how many chips they will have in all before they place the new set on the cookie or have children figure out how many chips they need to fill their cookies.
EF	<ul style="list-style-type: none"> ■ Use the activity step icons. ■ Use the role cards. ■ If children need more support remembering the maximum number of chips, use a dry erase marker to draw or have a child draw circles for the chips on their cookie. <p>Use the Think-Pair-Share cards and Think-Pair-Share introduction to remember the steps of the Think-Pair-Share process.</p>	<ul style="list-style-type: none"> ■ Omit the activity step icons. ■ Omit the role cards. ■ Omit the Think-Pair-Share cards and Think-Pair-Share introduction.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

	Make It Easier	Make It Harder
Math & EF	<ul style="list-style-type: none"> ■ Use a smaller target number of chips (less than 5). ■ Use a dot cube with only 1-2 or 1-3 dots repeated on the faces. ■ If a child is having difficulty accurately placing the extra chips on the other cookies (i.e., adhering to the rule for the maximum number of chips per cookies), have children Think-Pair-Share about how to put the chips on the cookies. 	<ul style="list-style-type: none"> ■ Use a larger target number of chips (5 or more). ■ Use more challenging cubes. In order of increasing difficulty: 1-6 dot cube, 1-6 numeral cube, two dot cubes, one numeral cube and one dot cube, two numeral cubes. <p>When working with two cubes, after children roll (for example, 2 + 2, 4 total), ask them if there's another combination that would give the same total (for example, 1 + 3). You can let them manipulate cubes to determine the answer or give them part of the 'alternate' option as a prompt (for example, "If one cube was a 3...").</p> <p>Have children tell you how many chips they had before rolling, what they rolled, and how many total chips they will have after rolling—all before manipulating the chips.</p> <ul style="list-style-type: none"> ■ Have children remember and state the starting number of chips and what steps they took to reach the number they have now, introducing plus and minus terms (for example, "I had 2, plus 3, and now I have 5.").



Explore The Executive Function And Math Skills In This Activity

Visit the website for resources to support teaching this activity.

What to Do Next

Do some students need more support or more challenge? Try the adaptations provided above for Small Group. Continue working in Small Groups with teacher support until students can comfortably play with minimal teacher guidance. Then have students practice the activity independently in **Center**.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

Children work in pairs to fill four empty cookies with a target number of chips. Each child receives a blank board with four empty cookies. Children take turns rolling a number cube to determine how many chocolate chips to place on the cookies on each given turn. One child counts out the chips based on the number rolled and the other child counts to make sure it's the correct number. Then children place the chips on the cookies, making sure they don't end up with more than the target number of chips on each cookie. Children switch roles and continue until all their cookies are filled with exactly the target number of chips.

Primary Objective

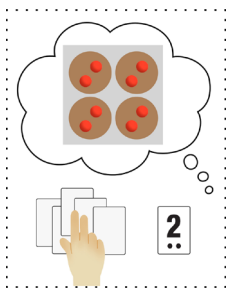
- Producing and understanding number combinations of totals to four or more

Materials

- 4-Cookie Game boards (each child receives their own board with 4 cookies on it)
- Counting chips (all the same color, enough for 40 chips for each child)
- Small bowl and plate (one of each for each pair of children)
- Number cubes (at least one cube for each pair of children; see Summary of Activity Adaptations for other number cube options)
- 1-3 dot cube
- Counting cards (one set for each pair of children)
- Cookie Game activity step icons (one set for each pair of children)
- Cookie Game role cards (one set for each pair of children)

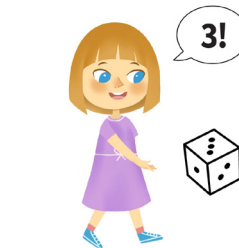
How to Play the Activity

The activity steps icons below outline the steps of the activity. Print these icons as cards and share them to help children remember the steps. They're also a helpful scaffold for children!



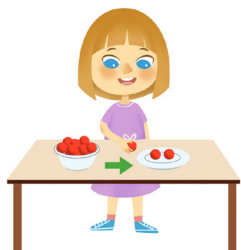
Step 1

Children draw a counting card to determine the "target" number of counters (chocolate chips) to put on each cookie.



Step 2

Child 1 rolls the number cube and tells how many are on top.



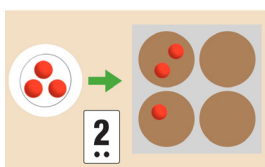
Step 3

Child 1 counts out that many counters from the bowl and puts them on the paper plate.



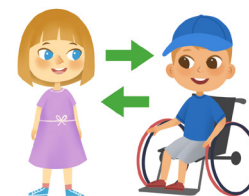
Step 4

Child 1 asks Child 2, "Am I right?" Child 2 checks and agrees, if correct.



Step 5

Child 1 puts the counters from the paper plate onto the cookie.



Step 6

Children switch roles and play again, continuing until their cookie is filled.

Cookie Game

One Big Cookie

Share the Chips

Whole Group

Small Group

Center Time

Teacher's Guide

Instructions for introducing the activity to the **Whole Group**.

Review the Activity

■ ***Today, the Cookie Game we've been playing together will be at [name] Center!***

- Tell students that the activity will be in Centers to play on their own.
- **To make the math and executive function (EF) easier**, use a smaller number of target chips (less than 5). Use a dot cube with only 1-2 or 1-3 dots repeated on the faces.
- **To make the math and executive function (EF) harder**, use a larger number of target chips (greater than 5).
Use more challenging cubes. In order of increasing difficulty: 1-6 dot cube, 1-6 numeral cube, 5-10 number cube, two dot cubes, one numeral cube and one dot cube, or two numeral cubes.

■ ***You will have picture cards to help you remember how to play and to remind you whether you are the roller and counter or the checker.***

- Display the activity step icons and role cards.

Time to Play!

■ ***Let's remind ourselves how to play the game!***

- Review the steps of the activity while referencing the activity step icons and role cards.
- **To make the executive function (EF) easier**, use the role cards or the activity step icons.
- **To make the executive function (EF) harder**, omit the role cards and the activity step icons.



Summary of Activity Adaptations

This is a summary of all the available adaptations to make Cookie Game easier or harder to accommodate the needs of your students. Whether the adaptation is easier or harder depends on each student’s math or executive function (EF) skills.

	Make It Easier	Make It Harder
EF	<ul style="list-style-type: none"> Use the role cards or the activity step icons. 	<ul style="list-style-type: none"> Omit the role cards and the activity step icons.
Math & EF	<ul style="list-style-type: none"> Use a smaller number of target chips (less than 5). Use a dot cube with only 1-2 or 1-3 dots repeated on the faces. 	<ul style="list-style-type: none"> Use a larger number of target chips (greater than 5). <p>Use more challenging cubes. In order of increasing difficulty: 1-6 dot cube, 1-6 numeral cube, 5-10 number cube, two dot cubes, one numeral cube and one dot cube, or two numeral cubes.</p>

Explore The Executive Function And Math Skills In This Activity

Visit the website for resources to support teaching this activity.

What to Do Next

Keep playing this activity in Centers throughout the year. Students who played the **One Big Cookie** version may switch to the **Share the Chips** version once they’ve been introduced to it in Small Group and can create and count sets of up to 10 objects using one-to-one correspondence. Do some students need more support or more challenge? Try the adaptations provided above for Centers.