

Counting Together

Players 1-20



Ages 2+



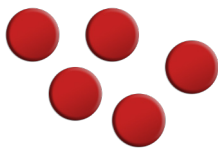
1-5 min

GOAL

Children count the number of objects in your hand.

MATERIALS

Small counters, like tokens or figurines



QUESTIONS

How many are there in all?

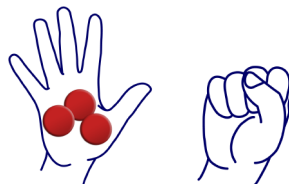
How do you know?

Can you show me how you counted?

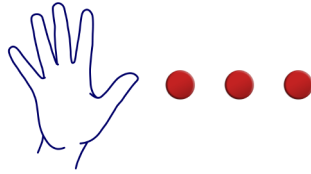
Do you know how many without counting one by one?

HOW TO PLAY

1. Hide 3 objects in your hand. Tell children you hid some objects in your hand and they are going to help you count aloud to find out how many.



2. Take one object from your hand and place it where children can see. Count together, "one, two, and three."



3. Show your empty hand and ask children how many tokens there are in all. Reiterate that there are 3 tokens in all.
4. Try this with different numbers of counters, making sure the children count with you. Play in small group and whole group settings.

WHAT CHILDREN ARE LEARNING

- This is a quick and simple counting game that even very young children can play. As children play, notice where their counting skills are. Some children may just be learning to count or learning counting words. Others may be ready for higher numbers, like five or seven. And some might just like to watch others count the tokens before they play themselves. All of these are great ways for children to be interested in counting!
- When children label a set size by saying, "three tokens in all," they are practicing their cardinality skills.

MATH TOPICS

Number: Counting and Cardinality

Number: Operations

VIDEO



Watch Game Video

View the QR code in your smartphone's camera app or QR code reader to watch a video that shows how to play Counting Together.

Copy My Dots

Players 1-4



Ages 3+

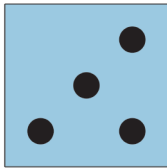


5-10 min

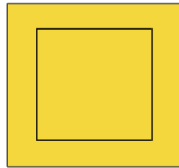
GOAL

Use tokens to copy the dot card.

MATERIALS



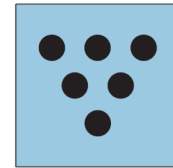
Large Dot Cards: 0-5



Blank Square



Tokens



Large Dot Cards: 6-10

VOCABULARY

Arrangement/configuration

Straight line

Up/down

Across

Diagonal

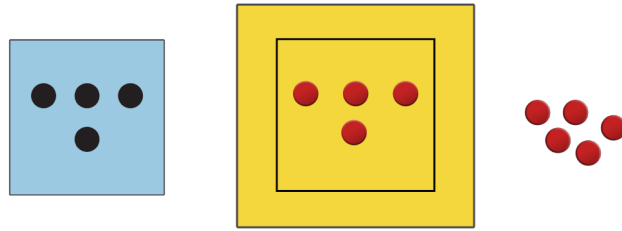
QUESTIONS

Do you have the same number of tokens on your card as on the dot card?

Did you arrange the tokens on your square in the same arrangement as the dot card or in a new way?

HOW TO PLAY

1. Choose a large dot card from the deck.
2. Say, "Let's make a copy of this card with our tokens on this blank square."



3. Watch how children copy the arrangement. Do they lay out the same number of tokens? Do they organize the tokens in the same arrangement or in a different way?
4. Continue with a new card.

TIPS FOR PLAYING

- To start, children may want to place their tokens directly on top of the dots on the dot card instead of using the blank square. This is a great first step and helps them practice one-to-one correspondence.
- The frame provides boundaries to help children arrange their dots. The sides provide a reference for where the dots go.
- Once children are comfortable copying the 1 to 5 dot cards, use higher number cards.

WHAT CHILDREN ARE LEARNING

- Notice if children know the number order when counting (1, 2, 3, 4, ...) and can coordinate the number word said while pointing to one dot at a time. When they are able to count one object at a time in the correct number order, they are using one-to-one correspondence.
- As children count out their tokens to match the number of dots on the card, they're practicing cardinality: knowing how many in all. You can help them by saying, "How many dots are on the dot card in all?" And if they're not sure, say, "You counted 1, 2, 3, 4 dots. So there are 4 dots in all!"

- You can also help children see that cardinality stays the same no matter how the tokens are arranged. For example, once they know that there are four dots in all, you can line the tokens up, or arrange them in the square's four corners, or even stack them. Each time there's a new arrangement, have children remind you how many tokens there are in all.
- As children gain experience with with the larger cards, you can use smaller dots cards. This helps them see that the arrangement can be transferred even when the size of the dots is different.

MATH TOPICS

Number: Counting and Cardinality

Patterns and Structure

VIDEO



Watch Game Video

View the QR code in your smartphone's camera app or QR code reader to watch a video that shows how to play Copy My Dots.

How Many Are Hiding?

YM | YOUNG MATHEMATICIANS

Players 1-4



Ages 4+



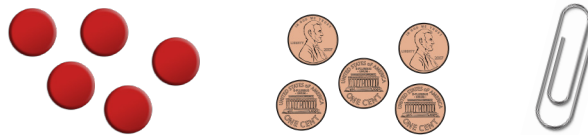
5-10 min

GOAL

To name how many tokens are hiding underneath the covering.

MATERIALS

5 tokens: counters, pennies, or other small items



1 cloth, piece of paper, or other covering



VOCABULARY

How many
Token
Hiding
Underneath

QUESTIONS

How did you remember there were five in all?
How did you figure out how many were hiding?

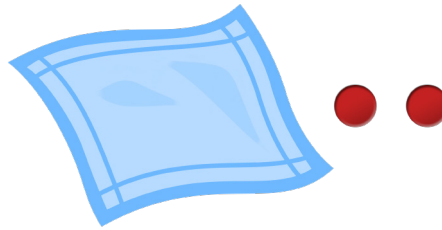
HOW TO PLAY

1. Ask children to place the tokens on the table or floor.



2. Have children count the number of tokens. Ask, “How many tokens are here?”
3. Once children have counted the five tokens, say, “Close your eyes!”

Use the cloth to cover up three of the tokens.



4. Have children open their eyes. Ask, “How many tokens are hiding?”



Some children might quickly recognize that three tokens are hiding. Others will need your help to remember that there were five tokens in all. Have them count to five by pointing to or tapping the two visible tokens and then tapping the cloth one time for each hidden token.

5. Once children identify the number of tokens hiding, continue playing by hiding different quantities of tokens underneath the cloth. Try hiding all of the tokens and none of the tokens! This makes children laugh and give silly answers.

Note: Have children take on the role of the “hider.” They will enjoy hiding the tokens for you!

TIPS FOR PLAYING

- When first playing this game, if 5 objects is too challenging, you can use 3. If 5 objects is too easy, you can use 6 or more.
- Starting with 5 objects is helpful because children have 5 fingers on their hand. They start to realize that they can

represent quantities with their fingers, and that if they see five of something, it's the same number of things as they have fingers on their hand.

- Encourage children to count the objects they can't see by pointing to each item beneath the cloth and whispering its number name "1, 2, 3..."

WHAT CHILDREN ARE LEARNING

- Children are practicing not saying how many objects they see and instead saying how many they don't see. This is hard. If it seems too challenging, you can have children say how many they do see until they are ready to say how many are hiding.
- Children are practicing early addition and subtraction skills. They are learning that 5 is composed of smaller numbers like 3 and 2; or 4 and 1. This is part of understanding what it means to be 5 of something.

MATH TOPICS

Number: Counting and Cardinality

Number: Operations

VIDEO



Watch Game Video

View the QR code in your smartphone's camera app or QR code reader to watch a video that shows how to play How Many Are Hiding.