



How Many Are Hiding?

HOW TO PLAY: HOW MANY ARE HIDING?

Math children are practicing:

- Reciting number words in the correct order
- Using one-to-one correspondence when counting
- Using the number name of the last object counted to represent the number of objects in the set (cardinality)
- Identifying the number of dots without counting (subitizing)
- Comparing numbers
- Composing and decomposing numbers
- Working memory: creating a mental image of the initial string and notes what is missing after some are covered

Materials

- 20 tokens (plus 30 from Dot Card games) – Try hiding other objects such as teddy bears or ducks or monkeys.
- small felt piece (or other cloth or cover to hide tokens)
- (optional) Other materials to hide: cars, animals, trucks, jems, anything the children are interested in.
- (always available) your hands

Note on materials: While great learning materials, tokens are sometimes boring to preschoolers. Hiding more engaging material can help kids be more engaged in the game.

Suggested plan for playing <i>How Many Are Hiding?</i>	
Game	Materials
Counting together	Tokens or other objects
Number Jump	
How Many Are There?	
How Many Do You See? (some are hiding)	
How Many Are Hiding?	
Play Finger Games	

Tips from the classroom:

- Hide other objects, not just the tokens. Children often like hiding dinosaurs or little people.
- Hide children! At circle time, 5 children could come to the front. The group can count them together. Then when everyone has their eyes closed, you can hold up a sheet or

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How Many Are Hiding?

blanket in front of some of the children. The class has to say how many children they see and how many are hiding!

- Start with just 3 tokens or objects and slowly move up to 5. If children are strongly proficient with combinations of 5, then you go use numbers 6 to 10.

Questions to ask:

- How many tokens do you see?
- How do you know?
- Do you know how many without counting one by one?

Praising the process:

- You're working hard!
- Good idea!
- Keep trying!
- I like how you took your time and worked hard on that.

Counting Together (whole group or small group)

1. Hide 3 tokens in your hand. Tell children you are hiding some tokens and they are going to help you count aloud to find out how many.
2. Take out one token and place it where children can see. Count together "one", then "2", and "3". Show your empty hand and ask children how many tokens there are in all. Reiterate that there are 3 tokens in all.
3. Try this with different numbers of counters, making sure the children count with you. Do in small group and whole group settings.

About the learning in this game. While you may already know how well the children in your class count, subitize, and understand cardinality (how many), you can still start with having children close their eyes, lining up the tokens and having them tell you how many there are. Some children may know immediately (subitize) while others may need to count. Notice what they are and are not yet able to do and how that has changed since the beginning of the year. You can make this playful, challenging, whatever meets the needs of the children in your room.

The variation where children keep their eyes open while you add a token or take a token away helps practice the idea of one more or one less than a given number.

Number Jump (whole group or small group)

1. Hold up 3 fingers and write the numeral. Ask children to jump safely that number of times. Count the jumps together. Repeat for another small number.



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About the learning in this game. This is a fun way for children to practice knowing how many by jumping that many times. They have to recognize the number you showed them with your fingers or the written numeral, synchronize their counting with their jumping, count correctly, and remember to stop when they reach the given number. It's a lot of skills in a simple game!

How Many Are There? (focus on subitizing and cardinality)

2. Have children close their eyes, place 2-5 tokens on the **table or paper plate**. Have children open their eyes and ask children *how many?* Some children may know immediately (subitize) while others may need to count.
3. Start with 5 or less. For older students you can use higher numbers such as up to 10.
4. Try laying the tokens in different configurations—linear, rectangular array, circular, scattered—and see what children are able to do.
5. **Children can play this game with each other**—enjoying being the one to place out the tokens or the one to close their eyes while a friend puts out the tokens.
6. *Variation:* Have children keep their eyes open as you add one more token or take one away—this helps children practice the idea of one more or one less than a given number.

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How Many Do You See? How Many Are Hiding? (focus on subitizing, cardinality, and decomposing numbers)

1. Ask children to put out 5 tokens on the table (vary the number as needed). Observe what they do, you learn a lot about their counting skills including whether they can “count out” to a certain number. When children indicate they are done ask, “*So how many do we have again?*”





How Many Are Hiding?

2. Ask children to close their eyes. Using your hand or the felt, cover up some of the tokens. Have children open their eyes and ask, *how many do you see now?*
3. Try asking children: *how many are hiding?*

About the learning in this game. By asking the children to set up the game (set out the tokens) you will observe if they can “count out” to a certain number. This skill includes knowing the number list, having one-to-one correspondence with counting, and cardinality.

When you introduce the question; “How many do you see now?”, it will take some children a few tries to figure out what you’re asking. They may not be sure if you’re really asking them how many they see now or how many *were* there (including the ones you covered). You’ve added a twist and changed the rules. This is good—it is important for children to respond flexibly to different situations—but it may take a few tries.

If they are ready, you can ask the next question of *how many are hiding?* Or more explicitly, *how many am I covering up?* Feel free to have children count ‘through the felt’ or ‘through your hand’ so they are counting one-by-one from memory what they can no longer see. This is a great step for them to be able to hold the image in their head.

It is sometimes helpful to use 5 tokens, children have 5 fingers and can use their fingers to represent the missing tokens.

How Many Are Hiding? (focus on subitizing, cardinality, decomposing numbers, working memory)

1. Place some tokens on the table (start with 5). Ask children to close their eyes.
2. Using your hand or the felt, cover up some of the tokens. Have children open their eyes and ask, *how many are hiding?*
3. Try hiding all the tokens or none of the tokens—both usually generate laughs and funny answers.
4. **Have children take the role of the teacher: Children enjoy playing this game in pairs and hiding the tokens for each other.**

About the learning in this game. It is often helpful to start with 5 tokens because children have 5 fingers on one hand and their fingers can help them keep track of the number of tokens they can see and that are hiding. It is also helpful to have them count the tokens they can’t see by whispering as they count ‘through the felt’ or ‘through your hand’.

Fingers: How many do you see? (subitizing; for quick play or transition time; 1-5 minutes)





How Many Are Hiding?

1. Hold your hands behind your back. Chant "*Fingers, Fingers 1, 2, 3. How many do you see?*"

Hold up 3 fingers .

2. Children can call out "3" and/or show "3" with their fingers.
3. Keep playing with different numbers of fingers, focusing on 1-5, but eventually going up to 10.

4. Vary how you show the number on your fingers, for example like  or  or with 2 hands like .

5. *Variation 1:* Hold up any number of fingers on your hands and ask children to hold up that same number of fingers on their hands but in a different way.

6. *Variation 2:* Ask children to hold up one more than you or one less than you.

About the learning in this game. This is a great game to play during transitions, as part of your circle time routine, or when you have just a couple minutes. Fingers are the only material you need. Kids are practicing subitizing (or counting) the fingers you are holding up then counting on their own fingers. They are also practicing combinations of numbers that partner to make other numbers (i.e., 2 and 1 make 3). Being able to take apart and put numbers back together is a skill they need for later addition and subtraction. Research has shown that when children use their fingers in math it helps them develop a physical and visual feeling for numbers that helps them in math later on.