

RESPONDING TO COUNTING ERRORS

How you respond to children's math errors can help them progress to the next level of the learning trajectory. Let's consider some common counting errors children make and how you can respond in a way that helps them correct those errors and move to the next level of the learning trajectory.

COUNTING MISTAKES

When a child makes a counting error ask yourself three questions:

- 1. What is the key error?
- 2. Why do you think the child made the mistake?
 - If the error is an uncommon simple slip-up with no consequence, it may not be useful to correct it.
 - If the child makes the error repeatedly or shows a misunderstanding, correct it.
- 3. How can you help the child avoid the mistake?
 - If the child is often making small slips, ask yourself if the child needs help directing attention, controlling impulses, or checking their work.
 - Start by encouraging the child to count carefully and slowly.
 - If they repeat the error, use the tips on the following page.



WHAT TYPES OF COUNTING GAMES?

Racing style board games—those that involve rolling dice, spinning a number spinner, or drawing a number card and moving a game piece a specified number of spaces—let you observe children's counting skills and respond to errors in a way that helps them learn.



HOW SHOULD I RESPOND WHEN CHILDREN MAKE A COUNTING MISTAKE?

COUNTING ERROR	WHAT IT LOOKS LIKE	TEACHING STRATEGIES
Omits a number or counts in the wrong order	The child is supposed to move 9 spaces and counts, "1, 2, 3, 5, 6, 7, 9."	Count 1-9 aloud with the child while they move their piece. Allow him to try independently on the next turn. In other contexts, challenge the child to count exactly 8 objects (or whatever is the number they frequently skip).
Skips something or counts something more than once	The child is supposed to move 4 spaces, but while sliding his piece along the board he says "2" and "3" while only moving over 1 space, so he ends up moving 3 spaces instead of 4.	Remind the child that it's important to carefully and slowly count each jump to a new space and encourage him to pick up his piece and count the jumps while saying a number. Then have the child count again from his starting space.
Counts the initial space	The child is supposed to move 2 spaces but counts the space she is on as "1" and then only moves forward 1 space.	Have the child move his piece back to its starting space. Then say, "This is where you start. Zero! We count 1 when you move."
Keeps counting past the target number	The child is supposed to move 4 spaces but keeps counting and moving forward until you stop him.	Have the child move his piece back to his starting space and remind him of how many spaces he's supposed to move. Then ask him to move again.
Doesn't count high enough	The child is supposed to move 8 spaces but stops after moving 5 spaces.	Have the child move the piece back to the starting space and remind him of how many spaces he is supposed to move. Then have the child try again. Remind him of the target ("You need to move 8 spaces") and recount the spaces he did move aloud and state the number ("1-5, 5"). Then, ask the child to move another space. Say, "And that makes 6." Continue having the child move forward and state the total number of spaces moved until the child reaches the target or continues on his own.