

## Their testing includes you!

The age of two can be a very difficult time for parents and caregivers. Children at this age are growing more independent and sometimes they do things adults don't want them to do. If it seems like children are intentionally disobeying or disregarding their caregivers' wishes—it's because they are! But they are not trying to drive you crazy on purpose.



While two-year-olds' behavior is difficult to deal with at times, it is only part of the story. It may seem hard to believe, but these children actually have good reasons for their actions. They are learning what happens when people want different things and they are fascinated by these differences. In other words, they are learning about conflict and are using a powerful learning mechanism: hypothesis testing. The age of two is really just a part of children's experimental program to figure out the world and their need to understand other people. And primary caregivers are the main test subjects (Gopnik, Meltzoff & Kuhl, 1999).

### They want to learn how conflict works

By the age of two, children are trying to understand conflict. At younger ages, children believe that their desires (what they want, what they like) are the same as everyone else's desires. When everyone wants and likes the same things, there's no real conflict. But at around 18 months, children begin to understand an important new concept—people have different desires (Gopnik et al., 1999).

How do we know this? One creative experiment, using crackers and broccoli, gives us solid evidence (Repacholi & Gopnik, 1997). Researchers showed 14-month-old and 18-month-old children two different bowls of food—one filled with Goldfish crackers and one filled with raw broccoli. When given the choice between the two foods, both the 14-month-old and 18-month-old children chose the crackers.

Next, a researcher tasted the foods in front of the children. When she ate the crackers, she made a disgusted face and said "Yuck." With the broccoli, she smiled and said "Yum." Then, with both bowls of food in front of her, she put out her hands and asked the babies to give her some food. This was the experimental question: would the babies give her some crackers or some broccoli?

The 14-month-old babies gave the researcher crackers, even though she said "yuck" when she ate them before. They didn't yet understand how another person could want or prefer something different from their own tastes and desires.

The 18-month-old babies gave the researcher broccoli, showing that despite their own preference for crackers, they understood that the adult preferred the vegetable. They understood that the adult had different desires for food.

In other words, 18-month-old children are beginning to understand that people are truly different, and that what they want is not necessarily what adults want (Repacholi & Gopnik, 1997). And this is a recipe for conflict. Children need to learn how conflict works—and how to resolve it.

## Testing 1, 2, 3

The age of two is an essential time of exploration for young minds



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# Be consistent with your responses

## Helpful parenting tips

### How children learn—hypothesis testing and conflict

To learn about conflict, two-year-old toddlers launch a series of experiments. This process is called hypothesis testing, and it is a powerful way children (and scientists) learn about the world. It starts with what children already know about people and their desires. With this knowledge, children make predictions (hypotheses) and test them to see if their ideas are correct.

### Hypothesis testing involves five steps:

1. Making observations
2. Asking questions
3. Creating hypotheses (what they think will happen based on what they know)
4. Testing hypotheses
5. Evaluating the evidence

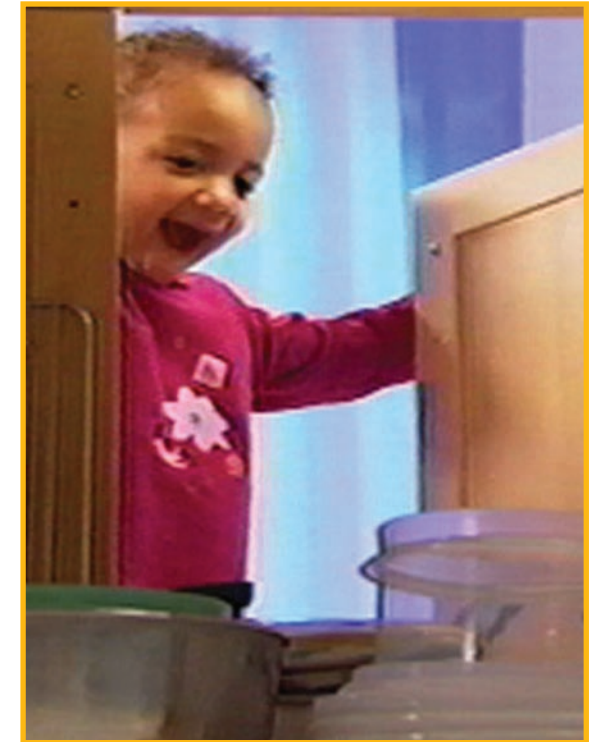
For example, let's take a two-year-old who has just noticed a new house plant. She's touching the leaves and patting the dirt. She wants to dig in the dirt, like in the garden, but she thinks her mother might not like it if she does. She's trying to learn how her mother might react.

### Hypothesis testing involves five steps:

1. "I like this dirt and it would be fun to dig my hands in it. I know my mom doesn't want me to get dirt all over the floor or hurt the plant." (**Observation**)
2. "What will happen if I do what I want and make a big mess with the dirt?" (**Question**)
3. "When I spilled my oatmeal all over the floor, mom got angry. I think she might get angry again." (**Hypothesis**)
4. "Here I go even though mom has a bad look on her face!" (**Testing**)
5. "Oh, oh, Mom is getting angry--yes, this is what it's like when she's angry." (**Evaluating the evidence**)



- ★ Understand that young children are constantly testing their environment. These children aren't bad, they're curious. Expect them to test you often.
- ★ Provide consistent responses. When children test their hypotheses, they are gathering evidence about how people deal with conflict. The best evidence is communicated in a reliable, consistent and loving way.
- ★ Don't let hypothesis testing escalate your emotions. Keep emotions in check and remove a child (or tempting object) from a situation if the conflict continues.
- ★ Focus on the positive aspects of this age. These toddlers are not only learning how conflict happens, but how conflict gets resolved. If they are surrounded with healthy, consistent models, children can learn how to handle future disagreements in constructive and effective ways.
- ★ Hang in there! The age of two, and the difficult challenges it can bring, doesn't last forever.



For more information on parenting and early learning, or to order copies of this Spotlight, visit [www.ParentingCounts.org](http://www.ParentingCounts.org).

#### References:

- Gopnik, A., Meltzoff, A. N., & Kuhl, P. K. (1999). The scientist in the crib: Minds, brains, and how children learn. New York: William Morrow.
- Repacholi, B. M., & Gopnik, A. (1997). Early reasoning about desires: Evidence from 14- and 18-month-olds. *Developmental Psychology*, 33(1), 12-21.

Of course, these steps seem very rationale and they don't describe how quickly things happen, nor does it include the tears and frustration that normally accompany situations like this. Despite the intensity of these emotions, children learn more about how conflict works and how it gets resolved by doing these kinds of tests. Your job is to keep them safe, be consistent in your response, and help them to learn what's right and what's wrong. They will learn as much from your response as they do from their little experiment.

