

TODAY'S RESEARCH IN Living Laboratory®

How does an object's name affect children's expectations during play?

This study asks: Do children explore more when the evidence they see conflicts with their assumptions about the physical properties suggested by an object's name?

We showed preschoolers a set of blocks called 'blickets.' Children learned that these blocks were magnetic and would stick to a metal stage. We then showed them a second set of blocks that looked identical, but were not magnetic. Half the children were told these new blocks were also called 'blickets', and half of the children were told these new blocks were called 'feps'. Children were then allowed to play with the new blocks on their own.



When the new blocks were called 'blickets' children assumed they were magnetic (like the first set of 'blickets'), and were surprised when they did not stick to the stage. Children in this condition explored more, trying to stick multiple blocks to the stage. However, when the new blocks were instead called 'feps', children did not assume they were magnetic, and were not surprised when they did not stick. Children in this condition explored less, trying fewer of the blocks on the stage.

This study suggests that children are sensitive to the relationship between the name of an object and its properties. If children explore more when the evidence they encounter contradicts what they 'know' about an object, this may be one way that children learn through play.

This research was conducted at the Museum of Science, Boston. The research was supported by a James H. Ferry and a McDonnell Foundation Collaborative Initiative Causal Learning grant to Laura Schulz, Primary Investigator at the Early Childhood Cognition Lab at MIT: web.mit.edu/eccl.



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ACTIVITIES TO TRY IN THE DISCOVERY CENTER:

Become a Geologist!

Explore the rocks and minerals in and around the Geology Field Station in the Discovery Center. Many of the rocks have hidden properties that make them stand out from the other rocks.



Has your child ever smelled a rock? Find five yellow-green rocks in the Field Station and try to figure out which one is the rock with a funny smell. Does your child explore the rocks more, or try to smell other rocks, after finding one with a unique scent (sulfur)?

ACTIVITIES TO TRY AT HOME:

Spoons

Gather some materials from around your home: a refrigerator magnet, metal spoon, plastic spoon, and wooden spoon. First, show your child how a magnet can stick to a metal spoon. Then let your child play with several metal spoons and a magnet for about 30 seconds to observe this magnetic attraction for his/herself. Next, present your child with several plastic or wooden spoons, and let them discover through play that the second group of spoons are not attracted to the magnet.

What name does your child call the second group of spoons? Do they call them 'spoons' even if they are not magnetic? What makes a spoon a 'spoon'?

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