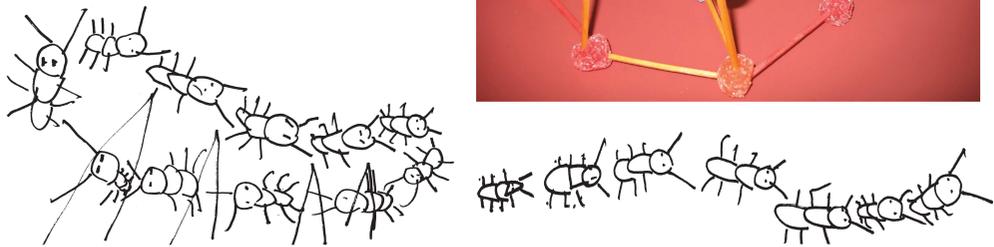
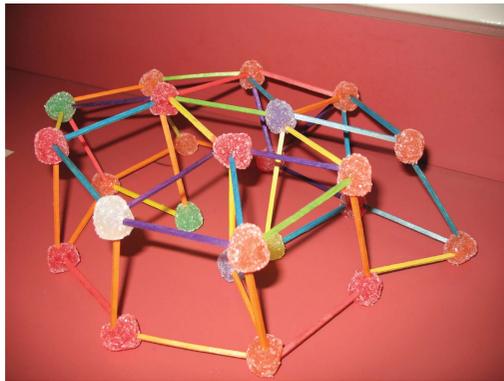


# What is problem solving for young children?

## Rayann's Gum Drop House

As Rayann began experimenting with gum drops and toothpicks, she quickly decided to build a house. She started with the bottom of the walls that would outline the perimeter of her house and then she began making each of the walls one toothpick tall. Having finished her walls, she decided to put a roof on her house. Working toward the middle from the edges she began constructing her roof, but each time her roof would near completion, it would collapse into the middle of the house.

Although initially frustrated, she persisted and continued to experiment until she learned that columns (toothpicks) were required in the middle of the house to support her roof.



"The ants were back today! The children wondered if we accidentally left food out over the weekend and thought that was probably the reason they came back. The children started shouting out different things that ants might eat which led into this conversation..."

**Cameron:** "Miss Bradley, we could have a food contest!"  
**Miss Bradley:** "What kind of food contest?"  
**Cameron:** "For the ants! Let's see what kind of foods they like."  
**Miss Bradley:** "That would be interesting!"  
**Jacob:** "I think they just like leaves."  
**Cameron:** "We can see what they like the best."  
**Miss Bradley:** "Why don't we talk to our other friends about our idea and come up with a list of what kind of food we could leave out for them."  
**Tyler:** "I will bring in Lifesavers, I know they love Lifesavers."  
**Sophia:** "They like marshmallows, remember?"

## The Food Contest

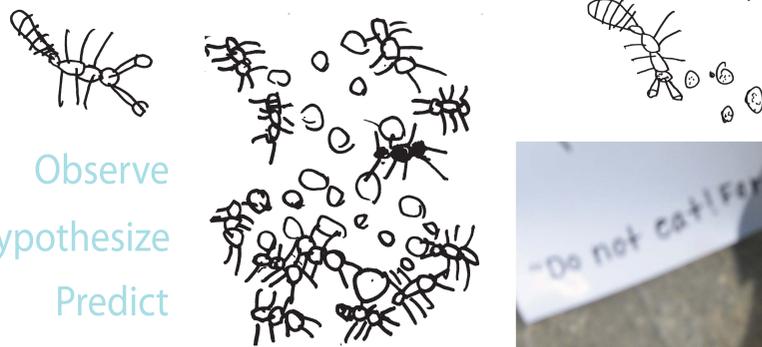
**Group Meeting**  
**Miss Bradley:** "Do you think the ants will like our strawberries and Ants on a Log?"  
**Cameron:** "They will like it."  
**Noble:** "Ants like every food."  
**Sophia:** "The ants will like the strawberries because they have sugar."  
**Tyler:** "Of course, everyone likes strawberries, even ants."  
**Jeremiah:** "The Ants on the Log will melt."  
**Aaron and Riley:** "The ants might get stuck in the peanut butter."  
**Tyson:** "The ants will just take the raisins."  
**Logan:** "The ants will love the green thing."

What is problem solving for young children? What kinds of problems should they be solving? How can a teacher support students' abilities to solve problems? These are difficult questions for any teacher to answer for him/herself.

The problems children solve do not have to be big, but they should be relevant to the child in some way. Often the best opportunities for problem solving are the problems children create for themselves.

The children in these vignettes demonstrated the intellectual dispositions to observe, experiment, investigate and persist until they found the solutions for which they searched. The teachers in these stories supported problem solving by creating classroom cultures that made risk taking safe and by offering open ended learning activities through which there were multiple solutions and multiple ways to arrive at those solutions.

Observe  
 Hypothesize  
 Predict  
 Experiment



## Garrett's Revolving Door



It was important to Mrs. Bucher's students that the Bank One Building (a representation on which they were working) have a working revolving door just like the door at the real building downtown. The children designed and built the door you see above, on their own, by selecting the materials needed and experimenting until they found a way to make the door work.



How can a teacher support students' abilities to solve problems?



These are difficult questions for any teacher to answer for him/herself.