

Stick with the Kid: Supporting and Extending Moves to Build on Children's Fraction Thinking

The teachers we watched interacting with children allowed plenty of think time and did not insist that a child answer a certain question or solve a problem using a specific strategy. They also used a variety of questioning to explore the details of the child's thinking.

Supporting and Extending Moves	Example
Ask a starter question	<ul style="list-style-type: none"> • <i>How did you solve it?</i> • <i>Tell me about your picture.</i>
Press for detailed explanation, even on incomplete strategies	<ul style="list-style-type: none"> • <i>Why did you decide to split the banana into thirds?</i>
Invite child to connect representations in their strategy to quantities in the problem	<ul style="list-style-type: none"> • <i>What are these little squares?</i> • <i>You're saying that's how much of that cup she drank? How far has she gone when she drinks that much?</i>
Invite child to compare final share to a benchmark fraction	<ul style="list-style-type: none"> • <i>Is that piece bigger or smaller than $1/2$ of a banana?</i> • <i>Is it enough for each kid to have a whole pizza? How about $1/2$ a pizza?</i>
Invite child to reason about quantitative relationships in their strategy	<ul style="list-style-type: none"> • <i>How much more than $1/2$ is $5/8$? What would that fraction size be?</i> • <i>Would you say this is true or false: $1 \frac{1}{3} = 1 + 1/3$</i>
Invite child to anticipate next step, at a strategic growth point	<ul style="list-style-type: none"> • <i>(After Ryan had partitioned the first pizza into 8ths): Do you know how much each person is going to get?</i>

Problems we explored:

- The zoo keeper has 8 bananas to feed to the 6 monkeys. If she wants to use up all the bananas and give the same amount to each monkey, how much should she give each monkey?
- There are 5 pizzas for 8 kids to share equally. How much pizza could each kid get?
- Mackenzie loves to go on hikes with her friends. She knows it's important to drink water when she hikes. She drinks $\frac{3}{4}$ cup of water for every mile she hikes. Her water bottle holds 4 cups of water. How many miles could she hike before her water runs out?