

## CORE SKILL: THINK

# Problem-Solving with Tasks



### What You Need to Know

Learning to solve problems is a critical thinking skill. Infants develop problem-solving skills by examining new objects that they encounter: How can I reach that interesting toy? How do I make this tambourine rattle? How can I get the animals that are inside the box? Learning to solve problems requires infants to use a lot of thought and trial-and-error. You can support infants' problem-solving skills by providing them with challenging objects and tasks, such as a ring stack, stacking cups, or a busy box. Carefully observe infants' efforts to "solve the problem" that the object or task presents. Provide infants with the support that they need to accomplish the task, rather than simply doing it *for* them. In sum, introduce objects and tasks that challenge infants "just enough," and help them see you as a resource!

### Things to Consider

Infants need lots of opportunities to practice using their problem-solving skills. It can be easy for adults to jump in right away and/or do tasks for infants when they are facing a problem. But when adults are too quick to fix the problem, infants miss the opportunity to try things and learn that *they* can do it! When you are tempted to help an infant "too much," refrain yourself by picturing the joy in their face when they eventually solve a problem (e.g., they get the jack-in-the-box to pop up)! If infants become frustrated or upset during the problem-solving process, offer support and then prompt them to try again.

### Development of Problem-Solving Skills

Between birth and 9 months, infants may:	Between 8 and 18 months, infants may:
Use actions or movements to solve simple problems (e.g., roll to reach an object or kick to make something move).	Try different solutions to everyday problems until discovering one that works.
Use actions and senses to examine people and objects (e.g., mouth, touch, shake, or drop).	Try the same strategy multiple times even if it does not work.
	Act intentionally to achieve a goal or when manipulating an object (e.g., trying to get an adult to do something or trying different ways to reach a ball).

### Setting the Stage

Activities and materials that support the development of problem-solving skills:

- ◆ Provide naturally challenging materials (e.g., puzzles, shape sorting boxes, ring stack, or magnet blocks).
- ◆ Provide challenging tasks. For example:
  - Encourage infants to roll over as far as they can to reach an object.
  - Help infants develop balance by holding on to objects (e.g., a sturdy chair) when they are cruising. Over time, move the supports (e.g., the sturdy chair) a few inches away to challenge them.



## Intentional Teaching Practices to Support Problem-Solving with Tasks

OBSERVE	<b>OBSERVE</b>  Observe how you are supporting infants' problem-solving skills. Do you provide babies with challenging objects or tasks? Do you jump in right away when they are experiencing a challenge? Also, take time to notice how infants approach problems. Do they engage in trial-and-error? Do they benefit from the supports (e.g., bring an object close enough for them to explore it, and model how to use a toy) you provide to solve problems? Who could benefit from extra support?
FOCUS	<b>Acknowledge Effort</b>  <b>Narrate and celebrate</b> infants' efforts to solve the problem that the object or task presents. When you focus on the <i>efforts</i> , you are supporting infants' confidence and encouraging them to try out different solutions. For example: <ul style="list-style-type: none"><li>◆ Smile and clap to acknowledge an infant's effort while saying, "You are working so hard to reach your doll."</li><li>◆ "You're trying to make a ball with your play dough. Good job! Let's play with it!" Roll the play dough ball to the infant to prompt a back-and-forth exchange.</li></ul>
SCAFFOLD I	<b>Help Children See You as a Resource</b>  Help infants see you as a <b>resource, a helper, and a partner</b> in problem-solving with tasks. Be attuned to infants and offer assistance when they need it. <ul style="list-style-type: none"><li>◆ "Those pages are stuck together. Let me help you (<i>while you separate the pages of the book a little bit</i>). Let's try it now. Good job!"</li><li>◆ Say, "Let's do it together (<i>when holding an infant's hand to help them stand on the stool</i>). See, now you can reach the sink!"</li></ul>
SCAFFOLD II	<b>Promote Child Autonomy</b>  Carefully observe infants' efforts to accomplish a task. When possible, instead of doing the task <i>for</i> them, <b>provide infants with the supports that they need to solve it on their own</b> (even if it takes longer!). For instance: <ul style="list-style-type: none"><li>◆ If an infant is trying to get the blocks that are inside a container, show them how to get the lid off the container. When doing this, look to make sure the infant is watching and make the movement exaggerated. Then put the lid on and let them try and reach the blocks by themselves, before you do it.</li><li>◆ When an infant is playing with a shape sorter toy, model and narrate how you push the round block into the round hole. Encourage the infant to try the other shapes.</li></ul>
KEEP IT GOING	Consider what you learned from observing infants as well as their reaction to your Focus and Scaffold. Find ways to intentionally support infants' problem-solving skills throughout the day.