



EXPLORING MOTION

EARLY INTERVENTION WITH YOUR YOUNG CHILD

Every child is different. Do what works best for encouraging your child's independent exploration of this suggested activity.



ACTIVITY DESCRIPTION:

During playtime (with several objects), help bring your child's attention to how the different objects move and why. For example, if your child is playing with a ball, talk about how the ball rolls and that round things roll. Try testing out how other objects move!

STEM LEARNING AREA:

Physical Science (concepts related to objects/things, what they do, and how they move):

- Force & Motion (concepts related to objects moving, how they move, and how to make them move)
- Motion Identification (knowing that things move, how they move, and why they move.)

STEM PROGRESSION STEP:

Motion Distinguisher: Distinguishes different types of movement, with an intuitive understanding that this is related to the properties of an object (e.g., round things roll)

WHAT CAN I SAY?:

- Move, Slide, Roll, Round, Flat
- "Do the ball and the block move the same way? I wonder what we could do to test it out?"
- "Which object will roll? Which object will slide?"

IDEAS TO SUPPORT MY CHILD'S GOAL:

Image credit: Pexels



IDENTIFYING MOTION

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ACTIVITY DESCRIPTION:

Take a round and a flat object (like a ball and a wood chip) when you and your child go to the playground. Encourage your child to place the objects down the slide and ask them how the objects move

STEM LEARNING AREA:

Physical Science (concepts related to objects/things, what they do, and how they move):

- Force & Motion (concepts related to objects moving, how they move, and how to make them move)
- Motion Identification (knowing that things move, how they move, and why they move.)

STEM PROGRESSION STEP:

- **Motion Type Recognizer:** Understands that objects move differently but may identify the motion incorrectly
- **Motion Type Identifier:** Correctly identifies types of object movement when they see it.

WHAT CAN I SAY?:

- Block, Move, Slide, Roll, Bounce, Bump, Round, Flat
- "It rolls/They roll! The ball rolled down the slide."
- "It slides/They slide! The block slid down the slide."
- "How did the ball move on the slide? How did you move on the slide?"
- "I wonder what will happen when we put the ball at the top of the slide?"

IDEAS TO SUPPORT MY CHILD'S GOAL:

Image credit: Microsoft Stock





NOTICING AN ERROR

EARLY INTERVENTION WITH YOUR YOUNG CHILD

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ACTIVITY DESCRIPTION:

Gather stacking materials (e.g., blocks, books, containers). Build a tower with your child. Miss placing a block on the tower and pause to see if your child notices your error. Help your child notice the error you made.

STEM LEARNING AREA:

Computational Thinking (early concepts involved in programming computers and coding):

Debugging (figuring out what is wrong and fixing it)

STEM PROGRESSION STEP:

Simple Error Recognizer: Identifies a simple error in someone's actions by recognizing that an intended outcome has not been reached

WHAT CAN I SAY?:

- Problem, Error, Step, Sequence
- "I put the block on top."
- "Uh oh! What happened?"
- "I messed up! Can you help?"
- "What can we do?"

IDEAS TO SUPPORT MY CHILD'S GOAL:

Image credit: STEMIE



FIXING THINGS

EARLY INTERVENTION WITH YOUR YOUNG CHILD

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ACTIVITY DESCRIPTION:

Play a back-and-forth game with the child such as rolling a ball. Then add a "roadblock" (with a box, block, or another object that will stop the ball) so that the ball gets stuck. Help your child solve the problem and clear the way for the ball (or object you are rolling back and forth).

STEM LEARNING AREA:

Computational Thinking (early concepts involved in programming computers and coding):

Debugging (figuring out what is wrong and fixing it)

STEM PROGRESSION STEP:

Simple Error Fixer: Identifies a simple error in someone's actions and makes a change - reorganizing two steps into correct order when out of order or fixing an error with adult help

WHAT CAN I SAY?:

- Problem, Fix, Solve
- "Go! Stop!"
- "Uh oh, I think the ball is stuck! What can we do?"
- "How can we make the ball roll again?"
- "How can we fix this problem?"
- "You did it! You solved it! You thought it through and solved the problem!"

IDEAS TO SUPPORT MY CHILD'S GOAL:

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