

## Occupational Therapy Tip Sheet IN-HAND MANIPULATION



#### What is in-hand manipulation?

It is the ability to hold and move an object within one hand.

#### Why are in-hand manipulation skills important?

- They allow a child to move the pencil from the palm to the fingers, make needed adjustments to the pencil for writing and turn the pencil from writing to erasing with one hand.
- In-hand manipulation skills are divided into three major categories: translation, shift and rotation.
- Each category may include "stabilization" which is the ability to hold objects with the ring and pinky fingers while moving an object with the thumb, index and middle fingers.

**Translation** is the ability to move objects between the fingertips and the palm (e.g. moving coins from the palm to the fingertips to place in vending machine or picking up pennies and moving them from the fingertips to the palm).

**Shifting** is the ability to move an item within your grasp (e.g. moving your fingertips along the pencil closer to the pencil point or moving your fingers along a key to insert it into a lock).

**Rotation** is the ability to turn an object around with the pads of the fingers and thumb (for example, flipping a pencil from writing end to eraser).

### Practice the following activities to develop in-hand manipulation skills:

**Towel Scrunch:** Keep wrist on the table with a towel (or paper) laying flat and scrunch it into a long roll or ball using only the fingers.



**Tops**: Grasp a top with the thumb and index finger and twist to spin the top.



**The Caterpillar:** Hold a pencil using thumb, pointer and middle fingers. Walk your fingers to the other end of the pencil and back again.



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**The Helicopter**: Hold the middle of a pencil with thumb, pointer and middle fingers. Twirl the pencil around like the blade of a helicopter by switching the fingers one at a time from one side of the pencil to the other.



Coins: Pick up a coin, hide it in the palm of the hand and then move it back to the fingertips.











**Pom Poms**: Hold two pom poms in the hand. Rotate them so the pom poms switch positions and repeat (increase difficulty by substituting marbles).





