

### Definition

In-hand manipulation involves manipulating an object within one hand. The fingers and thumb are used to best position the object for the activity. For example, picking up a pen and moving it into position with your fingers for writing.

Some daily activities in-hand manipulation is used for include: positioning a pencil when drawing; adjusting the paper when cutting with scissors; doing up buttons; tying shoelaces and using a knife and fork.

In-hand manipulation is one of the most complex fine motor skills. Children who have difficulty with in-hand manipulation may be slow or unable to complete some everyday activities.



### Helpful strategies

- ▶ Show and explain to your child how to do the activity in the correct way before your child does the activity.
- ▶ Sit with your child when he is doing in-hand manipulation activities so you can give him feedback to help him become aware of his finger and thumb positions.
- ▶ By doing the activities in the correct way and with regular practice your child will develop his in-hand manipulation skills.



Please talk to your occupational therapist if you have any queries about the above information.

### General activities

Encourage your child to do these activities with her preferred hand and use her thumb and index finger (and middle finger if required). Discourage your child from using her other hand, chest or the table to help.

- ▶ Place a small object between the tips of your child's finger and thumb and ask her to hide the object in her hand. Two-dollar coins, buttons, marbles, dice or small pieces of food (tiny teddies) are good objects for hiding. Practise this activity with a variety of objects (Figure 1).
- ▶ Ask your child to pick up a small object with her fingers and thumb and hide it in her hand. Then while still holding the first object, encourage her to pick up another object with the same hand and hide it. If successful, try picking up a third object. This activity could be made more interesting by asking your child to remove coins from a purse and hide them in her hand.
- ▶ Encourage your child to move an object placed in the palm of her hand to the tips of her fingers and thumbs. Objects that may be useful include small pieces of food, coins, game pieces, beads for stringing and texta lids. It may be easier for your child to hide the object in the palm of her hand first and then try to manipulate it to her fingertips.
- ▶ Ask your child to hide a coin in her hand and then put it in a moneybox. Practise with five to ten coins (Figure 2).
- ▶ Try incorporating some of the above activities when playing board games, marble race or bead threading. For example, before moving a game piece, ask your child to hide it in her hand then bring it back to her fingertips.



Figure 1: Hiding coins in your hand.



Figure 1: Putting coins in a moneybox.

- ▶ Undo a lid from a drink bottle or jar with thumb and fingers.
- ▶ Select a key, from keys on a key ring, and put it in a lock.
- ▶ Hold and adjust the paper while cutting with scissors (Figure 3).
- ▶ Do and undo buttons.
- ▶ Play Connect 4, however ask your child to pick up 3 counters one at a time and hold them in her hand. When it is her turn, ask her to move one counter back to her fingertips and place it into the frame.
- ▶ Use a dice or place a sticker on one side of a wooden cube. Encourage your child to hold the dice or cube between the tips of her fingers and thumb and turn it around and over to find “the number 6” or the sticker. Ensure your child does not use the table or other hand to help (Figure 4).

**Please talk to your occupational therapist if you have any queries about the above activity ideas.**



**Figure 3:** Holding and adjusting the paper.



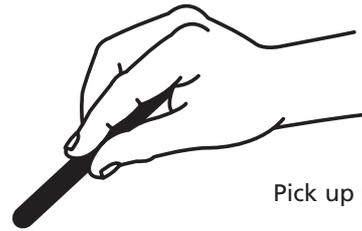
**Figure 4:** Manipulating a dice.

### Pencil activities

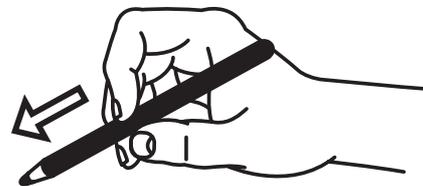
Encourage your child to do these activities without using his other hand, chest or table to help.

- ▶ Pick up a pencil and hold it ready for writing. Practice walking your fingers to the other end and back.
- ▶ Using a click pen or a multicoloured pen, click the top of the pen then walk your fingers back to hold it ready for writing.
- ▶ Sharpen a pencil.
- ▶ Using a pencil with a rubber on the end, encourage your child to write a letter, turn the pencil around to rub out and then turn it back for writing again.
- ▶ Pencil windmill – hold a pencil up in the air and try to turn it like a windmill. Try clockwise and anti-clockwise.
- ▶ Place some coloured pencils on the table in front of your child. Ask your child to pick up a pencil and write the first letter of his name. Encourage him to use his preferred hand only and pick up and position the pencil for writing. Repeat using a different coloured pencil for each letter of your child's name (Figure 1).

Please talk to your occupational therapist if you have any queries about the above activity ideas.



Pick up pencil



Rotate pencil and move fingers towards tip



Ready for writing

Figure 1: Picking up a pencil for writing.