

# Drag and Split Tap

## Action

The Split tap gesture activates the selected item.

## Why Is This Gesture Important?

A touchscreen device provides constant spatial awareness, allowing users to always know their position on the screen and the location of other items in relation to them. Unlike traditional computers, touchscreen devices offer a unique advantage—users can **drag their finger** around the screen to explore, helping them develop spatial concepts and build a mental map of the screen. The **drag and split tap** gestures work together to:

- Encourage spatial concepts and mental mapping.
- Help users locate and activate items efficiently.

### To perform a split tap:

- Drag one finger around the screen to find the desired item.
- Keep that finger in place on the screen.
- Tap anywhere on the screen with a second finger to activate the item.

Drag and split tap are used in conjunction to find and activate an item while building spatial awareness of where that item is physically located on the screen.

Since drag and split tap work together, the user must first drag to the item before using the split tap to activate it.

## Comparing Gestures

The drag and split tap are like the swipe and double tap gestures. Both gestures are used to navigate to and then open or activate the item on the screen.

- **Drag & Split Tap:** Encourages spatial awareness by requiring users to find an item's location.
- **Swipe & Double Tap:** Moves through items sequentially but **does not reinforce spatial concepts**.

**Important:** Do **not** introduce left/right swipe gestures until the child has fully mastered the drag gesture. Dragging helps build spatial awareness and develop a mental map of item locations on the screen.

## Prerequisites

Teach the drag and tap gestures before introducing the split tap.

## Warm Up Activities

- Review the Tickle Touch activity before teaching split tap.
  - Repeating the Tickle Touch warm up will help build **muscle memory**.

## Physical Gesture

- Use the index finger to drag to the desired item and hold it in place.
- Listen for VoiceOver to announce the item.
- While holding the first finger on the screen, tap with a second finger (typically the middle finger).

## Modifications

- **Right-Handed Child:** If the item is on the far-right side of the screen and there's no room for a middle finger tap, use the thumb instead.
- **Physical Struggles:** If holding the index finger while tapping the middle finger is difficult, the child may use the **index finger of the other hand** (two-handed modification).

## Earcons

- A **click** sound plays when dragging over items.
- A **double tone** plays when an item is selected.

## Common Issues

- **VoiceOver does not recognize the split tap:**
  - **Cause:** The index finger did not drag to the item.
    - **Fix:** Must drag the finger to the item before tapping with the second finger.
  - **Cause:** The index finger is released before the second finger taps.
    - **Fix:** The index finger should be held on the screen while the second finger taps.
  - **Cause:** The second finger is held on the screen.
    - **Fix:** The second finger must be a quick tap and release, rather than holding on the screen.

## Lessons

Lessons without detailed explanations were covered in previous lessons.

Lesson 1: Drag in a straight line with sonification (Horizontal)

Lesson 2: Drag in a straight line without sonification (Horizontal)

Lesson 3: 1-finger tap

**Lesson 4: Split Tap**

- **Goal:** Learn to use drag and split tap together.
- **Screen Layout:**

- A large drum set is in the bottom left of the screen.
- A monkey with cymbals is in the top right corner.
- **Breakdown:**
  - Lightly drag your index finger to the bottom left of the screen to hear drum roll sound.
  - While holding the index finger on the screen, tap with a second finger to hear the cymbal crash.
  - Repeat five times to complete the activity.

This structured approach ensures children develop **spatial awareness** and confidently navigate a touchscreen interface while practicing the split tap gesture.