

Rows Concept

Definition

A row is a spatial arrangement of items in a horizontal format.

Why Are Digital Rows Important On An iPad?

App developers design apps using familiar and predictable spatial layouts, often placing items in rows across the screen. Understanding these layouts helps children:

- Navigate apps efficiently
- Develop a mental map of screen organization
- Play games and access information with ease

Reading Connection

Rows support reading skills—the ability to track a straight line from left to right across a page. Digital rows on a touch screen are navigated by dragging a finger left to right through the items in the row. Rows are taught before columns, and it's crucial to master dragging in a straight line before advancing to more complex layouts.

Rows and columns are initially taught separately; when combined, rows and columns become tables or grids.

Prerequisites

Before introducing digital rows, children should first learn:

- Rows using tactile materials
- The drag gesture (including dragging in a straight line)
- Spatial locations on the screen

How Does VoiceOver Announce Rows?

- VoiceOver should announce the number of rows on the screen.
- When moving between rows, the row name, e.g., “Row #2”, is announced.
- Typically, VoiceOver first announces the item, then the row number. However, since VoiceOver Playground activities are teaching the concept of rows, the row number is intentionally announced first.

To Find And Navigate Rows

Since rows run left and right, follow these steps:

- Drag a finger downward from the top left corner of the screen.
- Stop when VoiceOver announces an item in the first row.

To explore items in a row:

- Drag a finger right or left in a straight line to find all the items in the row.

To find all rows on the screen:

- Start at the top left and drag straight down to find the first row.
- Continue dragging down and VoiceOver will announce each row name or number.

Listen carefully to hear the row name or number!

Earcons

- A “click” sound plays when navigating between items across the row.
- An ascending double tone signals when moving forward to the next row.
- A descending double tone signals when moving backward to the previous row.

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: Row Activity

- **Goal:** Learn to navigate and identify rows of objects.
- **Screen Layout:** 3
 - The screen displays 3 rows, each containing 4 animals.
 - The rows take up the entire screen.
- **Breakdown:**
 - Start at Row 1 (top left of the screen).
 - Drag a finger left to right across the top row while listening to each animal name and sound.
 - Once a row is completed, that row disappears.
 - Repeat the process for all three rows, in order.
 - If the finger moves off a row, restart at the left side of that row.

This structured approach ensures children develop spatial awareness, improve reading-related tracking skills, understand the concept of rows, and navigating digital rows on the screen, while practicing dragging in a straight horizontal line.