

Spatial Awareness: 5 Locations on the Screen and Corners

Children develop an understanding of screen layout by using the physical edges of the device. This helps them navigate efficiently and build a mental map of the iPad screen.

Definition

In VoiceOver Playground lessons, **spatial awareness** means knowing five key locations on the screen:

- **Top** means the top center of the screen
- **Middle** means the center of the screen
- **Bottom** means the bottom center of the screen
- **Left** means the middle of the left side
- **Right** means the middle of the right side

After learning the main areas of the screen, the lessons move on to the **four corners**:

- Top left corner
- Top right corner
- Bottom left corner
- Bottom right corner

Why Is Spatial Awareness Important?

Spatial terms are used to label and then remember the various areas on the iPad. Understanding spatial locations on the iPad is crucial for navigation. The VoiceOver Playground app introduces simple, age-appropriate terms—top, middle, bottom, left, right—along with corner identification.

The physical edges of the iPad help children directly locate specific areas without dragging or swiping around the screen. These spatial concepts and terms are the first steps in learning how to create mental map of the screen.

This spatial foundation supports learning more advanced spatial concepts, such as:

- **Rows and columns** – Many apps use structured layouts with rows and columns.
- **Grids** – The iPad's Home screen and various educational apps follow a grid structure, which is navigate by rows.
- **Toolbars and buttons** – Commonly positioned elements, like the Toolbar at the top of the screen and the Back button in the top left corner.

By recognizing these spatial patterns, children can navigate apps more effectively and improve accessibility. The VoiceOver Playground app intentionally designs games with common spatial layouts and specifically teaches spatial awareness, terms, and concepts.

Developing spatial awareness

At first, children explore the screen by dragging their fingers. As spatial concepts develop, children learn to associate where desired items are located, and they start their drag gesture at the specific locations. For example, if an item is at the bottom of the screen, they begin their search there.

To reinforce spatial awareness:

- Encourage using the iPad's physical edges as guides.
- Teach children to locate objects on the right side of the screen by finding the right edge, then moving the finger on the screen, and dragging vertically along that edge.
- Help them locate corners by finding both the physical horizontal and vertical edges, then touching just inside the corner.

Prerequisites

Before learning spatial awareness, children should be comfortable using the drag gesture.

Warm Up Activities

- Hide and Seek
- Hot and Cold
- Two-Dimensional Hide and Seek or Hot and Cold
- Squigz Spatial Game
- Tactile Models

Lessons

Lessons without detailed explanations were covered in previous lessons.

Lesson 1: 1-finger tap

Lesson 2: 5 Locations

- **Goal:** Recognize and tap five key areas: top, middle, bottom, left and right sides of the screen.
- **Screen Layout:**
 - A balloon appears in a named corner. The child taps the correct spot, and the balloon moves to another corner.
- **Breakdown:**
 - The game announces the balloon's location, choosing from five possible areas.
 - Without dragging, the child uses a 1-finger, light "tickle touch" to tap the specified area.
 - The balloon is positioned at the center of each named location.
 - Example: If the instruction is: "Find the balloon on the left of the screen," the child must tap midway down the left side of the screen.
 - The game is completed when all five locations have been found.

Lesson 3: Corners

- **Goal:** Identify the four corners of the screen: top left, top right, bottom left and bottom right corner.
- **Screen Layout:**
 - A colorful balloon appears in a specified corner of the screen. When the child taps the correct location, the balloon moves to another corner.
- **Breakdown:**
 - The game announces the location of the balloon.
 - Without dragging, the child uses a 1-finger, light "tickle touch" to tap on the named corner of the screen.
 - After correctly identifying all four corners, the game ends.

This activity reinforces spatial awareness and helps children develop a mental map of the screen, making digital navigation easier.