



indi

indi Supports Learning Outcomes: Literacy and Math Development

indi Supporting Literacy Development

indi incorporates problem solving and computational thinking to support early learning in literacy and language development.



Decomposition

Activity Ideas

Language and literature is made of small parts that work together to create meaning.

A story is the sum of its events and characters.

Learn to tell your story.

- Create paths/programs that represent the parts of a word or words as part of a phrase or sentence.
- Place letters/letter sounds on the floor and ask students to create a path for indi to follow that connects letters/letter sounds to create words.
- Help students break down a story into specific parts represented by different indi color tiles. As indi goes from color to color, have students retell the story out loud.
- Help students identify important events in their own life and have each color tile represent an event. As indi goes from color to color, have students share their personal story.

Pattern Recognition



Activity Ideas

A compelling story follows the narrative arc.

The organization of language follows different patterns.

- Help students begin to recognize the basic arc of a story. Assign a color tile to each basic part of the narrative arc. As indi goes from color to color, have students retell a story.
- Create paths that put certain language patterns or parts of speech in the correct order and let indi show the way.

Algorithmic Thinking



Activity Ideas

A compelling story follows the narrative arc.

- Help students begin to recognize the basic arc of a story. Assign a color tile to each basic part of the narrative arc. As indi goes from color to color, have students retell a story.



Abstraction

Activity Ideas

Learn to read unfamiliar words.

- Help students learn to piece together unfamiliar words by focusing on the important parts. Recreate the words and use indi to help go through each part.

Bring your story to life.

- Use indi as a way to tell or convey your story. Help students learn to imagine abstract thoughts or ideas and share them using concrete resources such as indi and the color tiles.

indi Supporting Math Development

indi supports the development of big ideas in early mathematics.



Young learners love to count and it leads to better understanding of ideas like “how many.”

Activity Ideas

- Count the tiles in indi’s path. Count tiles between start and stop. Count the number of turns, etc.



Nearly all mathematics is based on patterns and structure. The grouping, finding of similarities, and binding together in a whole innately occurs in each learner.

Activity Ideas

- Identify what each color tile directs indi to do.
- Identify the results of each combination/sequence of color tiles.
- Create different patterns or sequences using indi and the color tiles.



Measurement

Questions as simple as “Which is bigger?” engage our ability to measure. Measurement is meant to create a quantitative description.

Activity Ideas

- Measure the distance of the indi’s path using:
 - Color tiles
 - Hands
 - Steps
 - Etc.
 - Shoes
- Use all 20 color cards to make the path that indi takes the longest amount of time to navigate. Rearrange the cards to make the path that indi takes the shortest amount of time to navigate.



Spatial Relationships

Important spatial relationships include getting from here to there, locating items, or identifying where you are in space (in relation to other objects or people).

Activity Ideas

- Estimate how many tiles are needed to get indi from point A to point B (or a series of points).
- Identify a start and end point that students must navigate using the color tiles.
- Create an obstacle course or maze for students to navigate using the color tiles.

Shape



Indi can provide a hands-on introduction to geometry.

Activity Ideas

- Create paths for common shapes including triangles, squares, rectangles, and more. What is the shape with the most sides that students can create?
- Challenge students to make shapes with equal side lengths.