



# INSIDE THE TUMMY

Teacher Manual

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# **Goals/Objectives**

**English Language Arts Standard(s)** 

Vocabulary Acquisition and Use: students will be exposed to common shape and color terms while manipulating colored shapes.

# Language/ **Reading Skills**

Students will be able to...

- recognize and apply knowledge of words and word parts such as morphemes and phonemes (word structure & knowledge)
- quickly and automatically recognize high-frequency words (high-frequency words)

## **Cognitive Skills**

Students will be able to...

- focus on specific information, sustain that focus, and ignore distractions while carrying out a task (attention)
- rapidly interpret and integrate auditory and visual information to match shapes while applying sensory-motor skills to position those shapes on the screen (processing)

## Social-Emotional/ **Executive Function Skills**

Students will be able to...

- selectively focus and sustain attention on a lesson or an activity
- inhibit impulsive responses
- build visual/verbal working memory skills
- build confidence in listening and sorting information

**Icon Key** 













Audio

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**English Learner** 

**Quick Check** 

Settings

# **Exercise Screen**



## 1 Menu

#### Shows:

- Time Spent / Time Scheduled for the exercise.
- Network connection status.
- Exit: Returns student to the Assignments screen.
- Continue: Returns student to the exercise.

## Points

Shows total points awarded across all of a day's sessions.

- Correct answers: 2 points for each correct answer.
- Bonus points: 5 points after completing a puzzle.
- High score: Animates when the student surpasses the highest score ever achieved in one session.

# 3 Time

Bar decreases from right to left, counting down the time remaining in the exercise.

# 4 Progress Meter (Stars)

Tracks and celebrates every 10% of exercise content completion.

# 5 Answer Buttons (Objects)

Multiple objects with various attributes. The student must drag each object into its matching outline inside the bear's tummy.



# **Exercise Overview**

# **Task**

In this exercise, a bear with a large tummy appears on the screen. Colored shapes appear as puzzle pieces outside the bear's tummy. Each piece has a corresponding outline inside the bear's tummy. The student drags each puzzle piece into its matching outline. When a puzzle piece is correctly placed in its outline, the bear orally confirms it's color and shape. After the student completes a puzzle, the pieces combine into a fun picture as a reward for correctly completing the puzzle.

## **Content**

Inside the Tummy presents 15 puzzles using various combinations of shapes, colors, sizes, requirements for preciseness in dragging and dropping shapes in a specific location, and number of puzzle pieces.

Shapes	Circle, Square, Triangle
Colors	Blue, Green, Red, Yellow
Sizes of Shapes	Very Large, Large, Medium, Small, Very Small
Drag & Drop Skills	Approximate, More Precise, Precise
Number of Puzzle Pieces	1-9

As the student progresses in the exercise, the shapes become smaller, the puzzle patterns become more complex, and the placement requirements become more precise.

# Did you know?

Executive functions are an integral part of the learning process. The executive functions of selective attention to relevant auditory and visual details are early foundational cognitive skills. Inside the Tummy provides practice with attention to details necessary for sorting by features like color and shape.

Selective attention depends on the student's ability to purposefully attend to critical stimulus features and ignore others. Task switching is required when selection criteria change in any task. Sorting tasks that vary sorting criteria by object shape, size, and/or color provide an excellent method for building selective attention as well as task flexibility. Providing verbal feedback for each correct visual sorting response reinforces visual/verbal retention.



# **Exercise Overview**

## **Progression**

The student progresses through 5 levels of difficulty, with 3 puzzles in each level.

Progression	Shape Size	Placement	Puzzle 1	Puzzle 2	Puzzle 3
Very Large Objects, Approximate Drag & Drop	Very Large	Approximate	1 piece	2 pieces	3 pieces
Large Objects, More Precise Drag & Drop	Large	More Precise	3 pieces	4 pieces	5 pieces
Medium Objects, More Precise Drag & Drop	Medium	More Precise	5 pieces	6 pieces	7 pieces
Small Objects, More Precise Drag & Drop	Small	More Precise	6 pieces	7 pieces	8 pieces
Very Small Objects, Precise Drag & Drop	Very Small	Precise	7 pieces	8 pieces	9 pieces

The student must correctly complete the first puzzle by placing all shapes correctly before advancing to the next puzzle. When all 3 puzzles have been completed, the student advances to the next level. To complete Inside the Tummy, the student must successfully build all of the puzzles in the exercise.

# **Introduce**

## **Engage**

To introduce the exercise to your students, start by saying: In this exercise you will be matching shapes to their outlines. Gather together a number of items of different shapes. Hold up one item and ask students, What shape is this? If students don't know, show how to look at the sides (or other features) to identify the shape of the object. For example, say, This building block is a square shape. See, there are one..., two..., three..., four sides. Squares always have four sides. Have students do this for each item.

Using copies of the Inside the Tummy Sample Shapes in <u>Student & Teacher Resources</u> call out a shape by its name and color. Have students trace the outline of the shape with their finger. Ask them to describe the shape and say its name focusing on the important features of the shape.

Go on a "shape hunt" around the classroom to look for other items that are a specific shape or shape and color.

#### Demo

- 1. Say: Today, we're going to practice matching colors, shapes, and sizes. Together, we'll work on an exercise called Inside the Tummy. I'll get us started, and then I'd like for you to try.
- 2. Project the "Introduction English or Spanish" demo for Inside the Tummy.
- 3. Follow along with the demo, which explains how the exercise works.
  - Demonstrate how to drag and drop the shape into the outline. Also show what happens if you let go too soon so they understand that they will need to try again to get it into the bear's tummy.
    - o On a computer, say: Click the shape and hold down the mouse button. Then drag the shape into its outline and let the button go.
    - On an iPad, say: Put your finger on the shape and hold it down. Then drag the shape into its outline and let go.
  - When you get to more than one shape, explain how to choose the matching shape. Say: Remember, you have to find the matching shape first. Then hold that shape, drag it into the outline, and let go.
- 4. This exercise does not include any keyboard shortcuts.

Direct students to log in and work individually on the Inside the Tummy Demo for approximately 10 minutes. This time period mimics the timing of the exercise once it's assigned. Debrief with students to ensure they understand the task and objective of the exercise. Ask: What did you notice? Have students share anything that they have questions about.





Inside the Tummy includes instructional audio for the exercise introduction and instructions. By default, these are presented in English. You can, however, select Spanish instructions for all, some, or individual students on the Manage page in mySciLEARN.



# **Monitor Student Progress**

Review Inside the Tummy reports regularly to monitor student progress. Use the data to determine which students are succeeding and which students might be struggling to make progress.

#### Where to look...

#### **PROGRESS: Reading Readiness Exercise Progress -Inside the Tummy**

The colored line shows student progress and their percent complete. Each dot indicates a day the student worked on the exercise.



#### What to look for... what it means

#### Is the line going up?

The student is completing content accurately and making progress.

#### Is the line flat across several dots?

The student may be struggling and you need to find out why.

#### Are there long lapses between dots?

The student may be skipping this exercise.

#### **USAGE: Usage Details - Schedule**

Schedule		Minutes/Questions		Start Time		Total Minutes		
Days of Use \$	Date	Coaster	Houndini	Hungry Tummy	Inside the Tummy	Packing Pig Goes to Work	Packing Pig Has Lunch	
12	10/30/2020		•			•	•	
11	10/27/2020		•	•		Sched	ule	×
10	10/22/2020		•	•		See if th	e student ha	s met their daily schedule,
9	10/19/2020		•	•		and che	ck what's pla	nned for the next few days
8	10/13/2020		•	•			ne completed ne not comple	
7	10/09/2020		•	•			ercise Skippe	
6	10/05/2020		•	0		O Pla	nned for day	
5	10/01/2020			•	•	•		
4	09/30/2020			0	0	0		
3	09/25/2020			_		_		

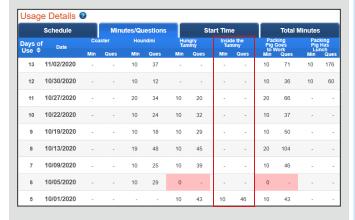
#### Do you see half-filled gray circles?

The student is working on this exercise, but not meeting the scheduled time. Make sure that they have time to complete their daily schedule. If fatigue is an issue, add some breaks to their schedule.

#### Do you see red circles?

The student is skipping this exercise. Provide support to help them re-engage.

#### **USAGE: Usage Details - Minutes/Questions**



#### Are many days highlighted in red?

The student is not meeting their daily schedule. Check the Schedule tab in this report to investigate further.

#### Is the student answering fewer questions than usual?

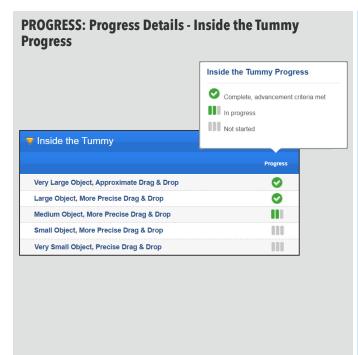
They may be distracted or losing focus. In comparison to their previous activity, a low number of questions to minutes may indicate the student is not applying themselves to the task.

### Is the student answering more questions than usual?

They may be rushing. In comparison to their previous activity, a high number of questions to minutes may indicate that the student is trying to amass points or progress through the content without actually learning it. Remind them that making progress depends on accuracy, not speed.



#### Where to look...



#### What to look for... what it means

#### Is the student showing progress on the Exercise Progress **Graph?**

The student must precisely position 6 shapes to complete the first level. Each subsequent level includes 6 additional shapes and requires more precise positioning, eventually reaching 24 shapes and the most precise placement at the highest level.

Most students complete the exercise within 3 days. Check the Exercise Progress graph (see above). If the line is going up, the student is making progress. If the line is flat, or if the student has spent more than five days on the exercise, the student may be struggling to align the shape within the target placement area.

See the "Adjust Instruction/Intervene" section in this teacher manual for suggestions on supporting struggling students.



Reading Readiness Progress Monitoring Chart in <u>Student & Teacher Resources</u>

# **Adjust Instruction/Intervene**

#### **Differentiation Activities**

Differentiating instruction requires continually striving to know and to respond to each student's needs in order to maximize learning. Use the data in Inside the Tummy reports to adjust instruction to meet each student's needs and respond to variance among learners. The activities below are suggestions to support students who might be struggling with their progress in Inside the Tummy.



## Does the student understand the exercise goal/task?

Observe the student as they work through the exercise demo to determine where their understanding may be breaking down. There is no "Go" button in this exercise and students may lose attention. Remind students that they must continue to correctly place all the shapes into Hungry's tummy to move on to the next puzzle.



## Is the student having difficulty clicking and dragging the puzzle pieces?

Many younger students have a lot of experience with using touch skills on tablets, but limited experience using a computer mouse. Have students practice their mouse skills using the exercise demos, or if possible, have them use a tablet.



## Can the student match the shape and color of the puzzle piece to its corresponding outline in Hungry's tummy?

Listen in as the student works on the Inside the Tummy exercise. Have the student point to each shape and name the shape and color. Then ask the student to point to where the object should be placed in Hungry's tummy. Have the student use the mouse to click, hold, and drag the shape correctly once he or she has demonstrated where it should be placed.



## Is the student frustrated because it doesn't seem like they are making progress in the exercise?

Explain to the student that it takes just 15 correct answers in a row to get another "star" and move on to the next set of puzzles.



# **Adjust Instruction/Intervene**

#### **Student Resources**

You may decide to use the following worksheets with your students:



Inside the Tummy Sample Shapes in <u>Student & Teacher Resources</u>

Use this sheet when you first introduce & demo Inside the Tummy to your students, or to help you adjust instruction/intervene when needed. Students will need one copy.



Reading Readiness Completion Chart in <u>Student & Teacher Resources</u>

Students can self-monitor their progress in each Reading Readiness exercise by filling in the bar each day with their actual completed percentage. This provides students with an overall view of how much content they've completed compared to how much they have left to do. Students will need one copy.