# TACTILE TREASURES

Math and Language Concepts for

Young Children with Visual Impairments

GUIDEBOOK



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# TACTILE TREASURES

Math and Language Concepts for Young Children with Visual Impairments

#### **GUIDEBOOK**

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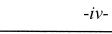
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# TABLE OF CONTENTS

INTRODUCTION	v v
Instructions for Use	
Extended Activities	
CONCEPT CATEGORIES	
Shape [Binder I]	1-12
Size [Binder I]	3-30
Comparing [Binder II]	1-37

-iii-

TABLE OF CONTENTS (continued)	
Amount [Binder II]	
Position [Binder III]	
Pre-Reading [Binder III]	





# INTRODUCTION

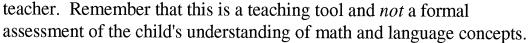
#### **Overview of Materials**

Tactile Treasures: Math and Language Concepts for Young Children with Visual Impairments is an informal assessment and teaching tool for use with children having little or no vision at the preschool, kindergarten, or early elementary level. It includes thermoformed sheets with pictures made from real objects to illustrate concepts related to shape, size, amount, comparison of two or more objects, position, and pre-reading/page-orientation. This guidebook provides, for every concept, two suggested scripts or stories which can be read to the child as the tactile pages are presented. These materials are based on the idea that exposure to abstract concepts and pictorial presentation of real things is an essential starting point for understanding math and language.

#### **Instructions for Use**

The order of presentation of the tactile pages should be determined by the teacher based upon the child's readiness for a given concept. The number of tactile pages introduced in one sitting should also be determined by the





- The tactile page should always be removed from the binder and placed on a flat, secure surface within comfortable reach of the child.
- ❖ Each concept is depicted twice using tactile illustrations. In most cases both depictions of the concept are presented on the same tactile page. The raised bar in the center of the tactile page divides it into top and bottom halves. The top half corresponds with Script 1 and the bottom half corresponds with Script 2. Occasionally the pictorial depictions of a concept are found on two separate tactile pages. The page number on the tactile sheet (in both print and braille) corresponds with the page number in the guidebook where the accompanying scripts can be found.
- Sometimes concepts which are synonymous in meaning (e.g., largest and biggest) are presented via the same scripts and accompanying tactile page(s). Interchanging the use of these concepts is recommended.
- ❖ In some cases, multiple concepts (e.g., first, second, third, and last) or concepts opposite in meaning (e.g., nearest and farthest) are presented on the same tactile page(s). All concepts on these pages need not be presented in one sitting.

- Do
- ❖ Before reading the accompanying script allow time for the child to explore and describe the tactile page. Does he/she recognize what the object is before the script is read? Then proceed to read the script which names the displayed object. Let the child respond to the script's prompt (e.g., "Find the longest straw," etc.) by touching the object of his/her choice. Encourage the child to explain the reason for his/her selection.
- ❖ Enhance the use of the tactile pages by incorporating some of the suggestions outlined in the next section, "Extended Activities."

#### **Extended Activities**

- Let the child explore a real object mentioned in the provided script (e.g., a real pretzel, a real button, etc.), pointing out the differences between the actual object and the thermoformed object.
- \* Recreate the tactile page layout using real objects.
- ❖ Encourage descriptive language. Before reading the script, ask the child to describe what he/she feels on the tactile page (e.g, bumpy, rough, smooth, curved, pointed, etc.) and discuss similarities and differences between the objects shown.
- Compose original scripts to accompany the tactile pages.





- Substitute the proper name in the script with the child's name or a relative's name.
- ❖ Introduce or reinforce other concepts besides the one presented in the script using the same tactile page. For example, the following questions might be posed using the tactile page (i.e., Page 1) that introduces the concept of "circle": What shape is to the *left/right* of the circle? What is the *first/second/third/last* shape in the *row*? What shape is *between* two *other* shapes? Where is the *square*? Where is the *triangle*? What shape is *next to/beside* the square? Are any of the shapes the *same*? Are there *more* or *fewer* shapes *below* the raised bar? Are the number of shapes *above* the raised bar *equal* to the number of shapes *below* the raised bar?, etc.
- ❖ Challenge the child to create a story incorporating both objects shown above and below the raised bar on the tactile page, no matter how silly the resulting tale.
- \* Rotate the page to the left or right, or even upside-down, to present the objects on the tactile page from different perspectives.
- Outline the objects on the tactile page with a permanent black marker for the low vision child and provide adequate lighting.





- ❖ If the child seems distracted by the tactile objects shown below the raised bar, when focus should be on the tactile objects above the raised bar (or vice-versa), cover the unused portion of the tactile page with a half sheet of paper. [Note: Repeatedly folding the tactile page in half to accomplish this same goal might permanently damage the page.]
- After introducing the child to the real object and a thermoformed representation of the real object, provide a more abstract depiction of the object by creating your own simple raised-line drawings made with puff ink.

Special attention was given to making the tactile pages very versatile. *Be creative* and use a given tactile page to introduce or reinforce as many concepts as possible and not just the concept presented in the accompanying script.







Circle Oval Straight
Square Star Curved
Triangle Heart Underline

Rectangle Diamond X

BINDER I

**CATEGORY:** SHAPE **CONCEPT:** CIRCLE

#### **SCRIPT 1**

Many things in our world are shaped like a *circle*, such as coins, plates, cookies, and jar lids. Find a *circle* among these shapes.

#### **SCRIPT 2**

Brrr, it is cold outside! I'd better button my coat! My coat has *circle*-shaped buttons. Find the buttons shaped like *circles*.

**CATEGORY:** SHAPE **CONCEPT:** SQUARE

#### **SCRIPT 1**

A *square* has four straight sides of equal length and four corners. Find a *square* among these shapes.

# **SCRIPT 2**

The children wanted to have peanut butter on *square* crackers for a snack. Find the *square* crackers.



**CATEGORY:** SHAPE

**CONCEPT:** TRIANGLE

#### SCRIPT 1

A *triangle* has three sides and three corners. Find a *triangle* among these shapes.

#### **SCRIPT 2**

Tammy's mother cut the sandwiches into fancy shapes for the party. Some of the sandwiches were even shaped like *triangles*. Find the *triangles* among these shapes.



**CATEGORY:** SHAPE

**CONCEPT:** RECTANGLE

#### **SCRIPT 1**

A *rectangle* has four straight sides like a square, but they are not all the same length. A *rectangle* has two long sides and two short sides. Find a *rectangle* among these shapes.

#### **SCRIPT 2**

Carlos found a box full of game pieces in the toy closet. There were round checkers, square tiles, and *rectangle*-shaped dominos. Find the game pieces shaped like *rectangles*.



**CATEGORY:** SHAPE **CONCEPT:** OVAL

#### **SCRIPT 1**

An *oval* has no corners and is kind of like a stretched circle. Find the *oval* among these shapes.

#### SCRIPT 2

Carrie's favorite candy is jellybeans, especially the cherry-flavored kind. Jellybeans are shaped like *ovals*. Find the *oval*-shaped candy.



**CATEGORY:** SHAPE **CONCEPT:** STAR

#### **SCRIPT 1**

Vanessa liked playing dress-up in her fairy godmother costume with the *star*-shaped magic wand. Find the *star* among these shapes.

#### **SCRIPT 2**

Shelby collected *star* fish as she walked down the beach. The fish were actually shaped like 5-pointed *stars*! Find the *stars* among these shapes.

**CATEGORY:** SHAPE **CONCEPT:** HEART

#### **SCRIPT 1**

The *heart*-shaped picture frame fell and broke while Wendy was dusting the mantel. Find the *heart*-shaped picture frame.

#### **SCRIPT 2**

Franz brought *heart*-shaped candies to school on Valentine's Day to share with his friends. Find the *heart*-shaped pieces of candy.



**CATEGORY:** SHAPE

**CONCEPT:** DIAMOND

#### **SCRIPT 1**

Maddie's mother has lost one of her *diamond*-shaped earrings. Here it is! Find the earring shaped like a *diamond*.

#### **SCRIPT 2**

Dustin couldn't wait to become a Cub Scout like his older brother and earn *diamond*-shaped badges. Find the *diamond*-shaped badges.

**CATEGORY:** SHAPE

**CONCEPT:** STRAIGHT

#### **SCRIPT 1**

A *straight* piece of spaghetti can quickly become a wiggly wet noodle once it is cooked. Find the *straight* piece of spaghetti.

#### **SCRIPT 2**

Marie and her mom were replacing some old nails on the barn. The new nails were *straight*, but the old nails were bent or curved when they pulled them out. Find the *straight* nails.

**CATEGORY: SHAPE** 

**CONCEPT:** CURVED

#### **SCRIPT 1**

Bart and Morgan were using toy blocks to build a road for their cars. They wanted to add some *curved* pieces. Find a *curved* block.

#### **SCRIPT 2**

Most of the track pieces in Chris's electric train set were straight, but a few pieces were *curved*. Find the *curved* pieces of train track.





**CATEGORY:** SHAPE

**CONCEPT:** UNDERLINE

#### **SCRIPT 1**

Lucy put a line under her favorite shape. Was Lucy's favorite shape a square, triangle, or circle? Find the *underlined* shape and you'll know Lucy's favorite shape.

#### **SCRIPT 2**

Stephen colored in only the circles with a line under them. Find all the *underlined* circles.







**CATEGORY:** SHAPE

**CONCEPT:** X (the shape)

# **SCRIPT 1**

The location of the treasure chest was marked by an *X* on the map. Find an *X* among these shapes.

#### **SCRIPT 2**

Oliver placed the *X*-shaped game pieces in a row on the Tic-Tac-Toe board. Find the *X*'s among these shapes.



Smaller/est
Larger/est
Taller/est
Bigger/est
Thinner/est
Medium-sized
Wider/est
Longer/est
Fatter/est

BINDER I

**CATEGORY:** SIZE

**CONCEPT:** SMALLER

#### **SCRIPT 1**

Christine can easily tell her parents' wedding rings apart from one another. Her mother's ring is *smaller* than her father's ring. Find the *smaller* ring.

#### **SCRIPT 2**

Matthew hung the *smaller* of two candy canes on the tree branch as a decoration. Find the *smaller* candy cane.



**CONCEPT:** SMALLEST

# **SCRIPT 1**

Jessica glued the *smallest* button on her paper man. It made the perfect nose! Find the *smallest* button.

#### **SCRIPT 2**

The carpenter used the *smallest* screw to fasten the broken leg back onto the stool. Find the *smallest* screw.



**CATEGORY:** SIZE

**CONCEPT:** LARGER/BIGGER

# SCRIPT 1

It took more than one bite to eat the *larger/bigger* pretzel. Find the *larger/bigger* pretzel.

#### **SCRIPT 2**

Amy liked to use the *larger/bigger* pair of scissors for her art projects. Find the larger/bigger pair of scissors.





**CONCEPT:** LARGEST/BIGGEST

#### **SCRIPT 1**

Michael dumped the coins out of his sister's change purse. The *largest/biggest* coin was a half dollar. Find the *largest/biggest* coin.

#### **SCRIPT 2**

Jenna was delighted that her Christmas present was wrapped inside the *largest/biggest* box. Find the *largest/biggest* box.



**CATEGORY:** SIZE

**CONCEPT:** MEDIUM-SIZED

#### **SCRIPT 1**

Troy placed three different coins next to each other on the table. He noticed that one of the coins wasn't the largest coin and it wasn't the smallest coin. It was the *medium-sized* coin. Find the *medium-sized* coin.

#### **SCRIPT 2**

The largest piece of chalk had never been used. The smallest piece of chalk had been used a lot. But the *medium-sized* piece of chalk had been used only a few times. Find the *medium-sized* piece of chalk.



**CATEGORY:** SIZE

**CONCEPT:** LONGER

#### **SCRIPT 1**

Juan had only two pencils in his desk drawer. The *longer* one he borrowed from his friend. Find the *longer* pencil.

#### **SCRIPT 2**

Of the two barrettes, the *longer* barrette held Susan's hair better. Find the *longer* barrette.





**CONCEPT:** LONGEST

#### **SCRIPT 1**

Alyssa hunted for the broken pieces of her pearl necklace. She found the *longest* strand of pearls under the bed. Find the *longest* strand of pearls.



**CONCEPT:** LONGEST

#### **SCRIPT 2**

Antonio needed the *longest* drinking straw to sip the lemonade from the tall glass. Find the *longest* drinking straw.



**CONCEPT:** SHORTER

#### **SCRIPT 1**

Jake's toothbrush is *shorter* than his father's toothbrush. Find the *shorter* toothbrush.

# **SCRIPT 2**

Simone has two keys on her key chain. The *shorter* key opens the front door of her house. Find the *shorter* key.



**CONCEPT:** SHORTEST

# **SCRIPT 1**

Charlie used his favorite crayon so often that it is now the *shortest* crayon in the box. Find the *shortest* crayon.

#### **SCRIPT 2**

Samantha helped her uncle find the *shortest* nail in the toolbox. Find the *shortest* nail.



**CATEGORY:** SIZE

**CONCEPT:** TALLER

#### **SCRIPT 1**

Mindy's gingerbread man was *taller* than Luke's. Find the *taller* gingerbread man.

# **SCRIPT 2**

Scott pretended the *taller* stack of blocks was an office building. Find the *taller* stack of blocks.

**CATEGORY:** SIZE

**CONCEPT:** TALLEST

## **SCRIPT 1**

Stephanie put the *tallest* birthday candle in the center of the cake. Find the *tallest* birthday candle.

# **SCRIPT 2**

The person who can make the *tallest* stack of pennies within a minute will be the winner. Find the *tallest* stack of pennies.



**CATEGORY:** SIZE

**CONCEPT:** THINNER

# **SCRIPT 1**

One of the square picture frames was *thinner* than the other. Find the *thinner* picture frame.

#### **SCRIPT 2**

The *thinner* stick of chewing gum is peppermint flavored. Find the *thinner* stick of gum.



**CATEGORY:** SIZE

**CONCEPT:** THINNEST

#### **SCRIPT 1**

It was impossible to drink the chocolate milkshake with the *thinnest* straw. Find the *thinnest* straw.

#### **SCRIPT 2**

Carl wanted to use the *thinnest* type of noodle in his casserole dish. Find the *thinnest* noodle.

**CATEGORY:** SIZE **CONCEPT:** WIDER

## **SCRIPT 1**

The tongue-depressor that the doctor used to examine Sean's throat was *wider* than a popsicle stick. Find the *wider* stick.

# **SCRIPT 2**

The strap on Kate's backpack is *wider* than the strap on her friend's backpack. Find the *wider* strap.



**CATEGORY:** SIZE

**CONCEPT:** WIDEST

#### **SCRIPT 1**

Marty wanted the toy train with the *widest* track for his birthday. Find the *widest* train track.

## **SCRIPT 2**

Francine liked the watch with the *widest* wristband. Find the watch with the *widest* wristband.





**CATEGORY:** SIZE

**CONCEPT:** FATTER

#### **SCRIPT 1**

Brooke's gingerbread man is *fatter* than Todd's. Find the *fatter* gingerbread man.

#### **SCRIPT 2**

Both pretzel sticks were salted, but the *fatter* pretzel stick was tastier. Find the *fatter* pretzel stick.



**CATEGORY:** SIZE

**CONCEPT:** FATTEST

## **SCRIPT 1**

Larry thought that if he used the *fattest* crayon he could finish coloring his picture faster. Find the *fattest* crayon.

#### **SCRIPT 2**

Claire taped the *fattest* candy cane to the top of the present. Find the *fattest* candy cane.



# **COMPARING**

Same

Different

Alike

Match

With

Without

Other

BINDER II



**CATEGORY: COMPARING** 

**CONCEPT:** SAME

## **SCRIPT 1**

Kelsey and Kyle bent their pipe cleaners into the *same* shape. Find the shapes that are the *same*.

#### **SCRIPT 2**

Lindsey bought some nuts from the store. Most of the nuts she chose were the *same*. Find the nuts that are the *same*.



**CATEGORY:** COMPARING **CONCEPT:** DIFFERENT

# **SCRIPT 1**

One of the crayons in Aaron's crayon box was *different* from the other crayons. Find the crayon that is *different* from the other crayons.

# **SCRIPT 2**

Valerie found some seashells on the beach, but her favorite was the one that was *different* from the others. Find the seashell that is *different* from the others.

**CATEGORY:** COMPARING

**CONCEPT:** ALIKE

# **SCRIPT 1**

At the dentist's office the twins chose toothbrushes that were *alike*. Find the toothbrushes that are *alike*.

# **SCRIPT 2**

Before Lydia went swimming she pulled her hair back with barrettes. The barrettes she wore were *alike*. Find the barrettes that are *alike*.



**CATEGORY:** COMPARING

**CONCEPT:** MATCH

# **SCRIPT 1**

Josh thinks that both keys must open the same door because they *match*. Find the keys that *match*.

#### **SCRIPT 2**

Carmen found at least two earrings in her messy jewelry box that *match*. Find the earrings that *match*.

**CATEGORY:** COMPARING

**CONCEPT:** WITH

## **SCRIPT 1**

Ben's mouth watered when he smelled the doughnut *with* chocolate sprinkles. Find the doughnut *with* chocolate sprinkles.

# **SCRIPT 2**

Daddy found a screw *with* some nails on top of his workbench. Find a screw *with* some nails.

**CATEGORY:** COMPARING **CONCEPT:** WITHOUT

# **SCRIPT 1**

Holly still had all the cups to her tea party set, but one of the cups was broken and *without* a handle. Find the cup *without* a handle.

# **SCRIPT 2**

Nathan likes pretzels without salt. Find the pretzel without salt.

**CATEGORY:** COMPARING

**CONCEPT:** OTHER

#### **SCRIPT 1**

Whoops! Anthony just dropped one of his gingerbread men on the floor and broke off an arm and a leg. That's okay. . .he can eat the *other* gingerbread man. Find the *other* gingerbread man.

#### **SCRIPT 2**

Kara had three cookie cutters she could use to make her cookies. She didn't want to use the heart-shaped cookie cutter and she didn't want to use the star-shaped cookie cutter. She wanted to use the *other* cookie cutter. Find the *other* cookie cutter.



Many Some, Not Many All Half Most As Many None Whole Least Several Equal Pair More Few/Fewer Unequal Less Every Almost

BINDER II

CATEGORY: AMOUNT

**CONCEPT:** MANY

## **SCRIPT 1**

Gayle made a wreath by gluing uncooked macaroni onto a circular piece of cardboard. It took *many* pieces of macaroni to finish her wreath. Find the group that has *many* pieces of macaroni.

# **SCRIPT 2**

Many nails are needed to fix the porch floor. Find the group that has many nails.



**CATEGORY:** AMOUNT

**CONCEPT:** MOST

# **SCRIPT 1**

At the fall festival, Coco won a prize during the pumpkin carving contest for gathering the *most* pumpkin seeds. Find the group that has the *most* pumpkin seeds.

#### **SCRIPT 2**

Shawna was such a slow eater! She had the *most* Cheerios<sup>®</sup> left in her breakfast bowl. Find the group that has the *most* Cheerios.



**CATEGORY:** AMOUNT **CONCEPT:** LEAST

#### **SCRIPT 1**

Although Alexander found the *least* number of seashells on his family's trip to the beach, his seashells were by far the prettiest and most interesting to feel. Find the group that has the *least* number of seashells.

#### **SCRIPT 2**

Briana is the youngest in her family and has the *least* number of candles on her cake. Find the group with the *least* number of candles.



**CATEGORY:** AMOUNT

**CONCEPT:** MORE

#### **SCRIPT 1**

One doughnut had *more* sprinkles than the other. Find the doughnut with *more* sprinkles than the other.

## **SCRIPT 2**

There were *more* rings in one box than there were in the other boxes. Find the box that has *more* rings than the other boxes.



**CATEGORY:** AMOUNT

**CONCEPT:** LESS/FEWER

## **SCRIPT 1**

One of the hair combs had *less/fewer* teeth than the others. Find the comb with *less/fewer* teeth than the others.

# **SCRIPT 2**

There were *less/fewer* beads on Jan's bracelet than there were on Lynn's. Find the bracelet with *less/fewer* beads than the other.



**CATEGORY:** AMOUNT

**CONCEPT:** SOME, NOT MANY

## **SCRIPT 1**

Trent was disappointed that by the end of the year he had some, not many dimes. Find the group that has some, not many dimes.

# **SCRIPT 2**

Cassie wore *some*, *not many* rings on her fingers. Find the group that has *some*, *not many* rings.





**CATEGORY:** AMOUNT **CONCEPT:** AS MANY

## **SCRIPT 1**

There were *as many* Cheerios in one box as there were in another. Find a box that has *as many* Cheerios in it as another.

# SCRIPT 2

There were *as many* sprinkles on one doughnut as there were on another. Find a doughnut with *as many* sprinkles on it as another doughnut.



**CATEGORY:** AMOUNT **CONCEPT:** SEVERAL

# **SCRIPT 1**

When trick-or-treaters came to her door on Halloween night, Johanna gave each goblin *several* pieces of bubble gum. Find a group that has *several* pieces of bubble gum.

## **SCRIPT 2**

There were *several* pushpins on Ted's bulletin board. Find a group that has *several* pushpins.

**CATEGORY:** AMOUNT

**CONCEPT:** FEW

## **SCRIPT 1**

Elizabeth needed only a *few* buttons to sew onto a sock to make the eyes and nose of her hand puppet. Find the group with a *few* buttons.

#### **SCRIPT 2**

Wesley's grandmother told him he could eat just a *few* M&Ms<sup>®</sup> before dinner. Find the group with a *few* M&Ms.



**CATEGORY:** AMOUNT **CONCEPT:** EVERY

#### **SCRIPT 1**

Ashley and Jim helped each other pick up the spilled game pieces off the floor. Ashley picked up *every* game piece shaped like a circle. Find the group in which *every* game piece is shaped like a circle.

#### **SCRIPT 2**

Every cup in the cupboard had a handle. Find every cup with a handle.

**CATEGORY:** AMOUNT

**CONCEPT:** ALL

## **SCRIPT 1**

Casey removed *all* the bent nails from the toolbox. Find the group in which *all* the nails are bent.

#### **SCRIPT 2**

Rob hadn't taken a single bite of his gingerbread man. *All* of it was still on his plate. Find the gingerbread man that is *all* there.

**CATEGORY:** AMOUNT

**CONCEPT:** NONE

#### **SCRIPT 1**

Oliver's baby sister yanked on his mother's necklace so hard that it broke, sending the pearls rolling and bouncing on the floor. *None* of the pearls were left on the necklace. Find the necklace that has *none* of its pearls.

#### **SCRIPT 2**

*None* of the buttons on Kelly's sweater were square. Find the group in which *none* of the buttons are square.

**CATEGORY:** AMOUNT **CONCEPT:** EQUAL

#### **SCRIPT 1**

Two of the bracelets had an *equal* number of beads. Find two bracelets with an *equal* number of beads.

#### **SCRIPT 2**

Mike and Katie found an *equal* number of seashells on the beach. Find two groups in which there are an *equal* number of seashells.



**CATEGORY:** AMOUNT **CONCEPT:** UNEQUAL

#### **SCRIPT 1**

The children separated the M&Ms into three groups, but the number of M&Ms in one group was *unequal* to the number of M&Ms in the other groups. Find the group with an *unequal* number of M&Ms.

#### **SCRIPT 2**

The number of bubble gum pieces was *unequal* to the number of lollipops. Find the group in which there is an *unequal* number of bubble gum pieces than there are lollipops.

**CATEGORY:** AMOUNT **CONCEPT:** ALMOST

## **SCRIPT 1**

Lucy decided it was time to buy herself a new comb. The one she has is missing *almost* all of its teeth. Find the comb missing *almost* all of its teeth.

### **SCRIPT 2**

It was taking Chad a long time to eat his candy cane, but it was now *almost* gone. Find the candy cane that is *almost* gone.



**CATEGORY:** AMOUNT

**CONCEPT:** HALF

# **SCRIPT 1**

Peter unselfishly broke his oatmeal cookie in *half* and shared it with his best friend. Find *half* of a cookie.

#### **SCRIPT 2**

Shannon zipped her jacket *half* way up on the breezy day. Find the zipper that is zipped *half* way up.



**CATEGORY:** AMOUNT **CONCEPT:** WHOLE

## **SCRIPT 1**

To Melissa's delight the *whole* doughnut was covered with chocolate sprinkles. Find the *whole* doughnut covered with chocolate sprinkles.

# **SCRIPT 2**

Max wanted to eat a *whole* gingerbread man . . . not just a part of one. Find a *whole* gingerbread man.



**CATEGORY:** AMOUNT

**CONCEPT:** PAIR

#### **SCRIPT 1**

After searching through the box of old toys, Stacy finally found a doll with a *pair* of legs. Most of the old dolls were missing a leg and sometimes an arm or two. Find the doll with a *pair* of legs.

#### **SCRIPT 2**

Neil carved a *pair* of triangles in the pumpkin to make the jack-o-lantern's eyes. Find a *pair* of triangles.



# **POSITION**

Inside Through Bottom First Second Away From Upside-Down Outside Third Around Next To Right Beside Left Last Over

Above Nearest Center Beginning
Under Farthest Middle End

Below Separated Row Between Top Line

BINDER III

**CATEGORY:** POSITION

**CONCEPT:** INSIDE

## **SCRIPT 1**

The ball bounced a few times and landed *inside* the box. Find a ball *inside* a box.

# **SCRIPT 2**

There were many circles on the page, but only one had an X *inside* of it. Find a circle with an X *inside* of it.

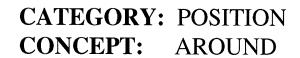
**CATEGORY:** POSITION **CONCEPT:** OUTSIDE

### **SCRIPT 1**

Adam tried many times to roll the marble inside the circle on the floor, but it kept landing *outside* of the circle. Find a marble *outside* of a circle.

### **SCRIPT 2**

The children were asked to glue macaroni inside of the triangle for their art project, but some forgot and glued their macaroni *outside* of the triangle. Find the macaroni *outside* of the triangle.



## **SCRIPT 1**

Nina made the door of her gingerbread house with a rectangle-shaped cookie. She also put M&Ms *around* the cookie. Find M&Ms *around* a rectangle-shaped cookie.

### **SCRIPT 2**

The jeweler carefully placed the bracelet *around* the ring in the gift box before wrapping it. Find a bracelet that is *around* a ring.



**CATEGORY:** POSITION

**CONCEPT:** OVER/ABOVE

### **SCRIPT 1**

C.J. held a sugar cube *over/above* his father's hot coffee and counted to three before he let it plop into the cup. Find a sugar cube *over/above* a cup.

### **SCRIPT 2**

Sheila made a house with her cardboard shapes. She placed a triangle *over/above* a square to make the roof. Find a triangle *over/above* a square.

**CATEGORY:** POSITION

**CONCEPT:** UNDER/BELOW

#### **SCRIPT 1**

Lucia thought the triangle *under/below* the circle looked like an ice cream cone with one scoop of ice cream. Find a triangle *under/below* a circle.

### **SCRIPT 2**

Ben hung the heart-shaped picture frame *under/below* the square picture frame on the wall. Find a heart-shaped picture frame *under/below* a square picture frame.



**CATEGORY:** POSITION **CONCEPT:** BETWEEN

### **SCRIPT 1**

Rusty made a make-believe town with his blocks and toy train track. He put the train track *between* his blocks. Find a train track *between* blocks.

### **SCRIPT 2**

Fran's necklace had a large bead *between* small beads. Find a large bead *between* small beads.

**CATEGORY:** POSITION **CONCEPT:** THROUGH

### **SCRIPT 1**

Keisha made her own necklace by putting a string *through* some beads. Find a string going *through* beads.

### **SCRIPT 2**

Henry was acting silly at the breakfast table and put his juice straw *through* his Cheerios. Find a straw going *through* Cheerios.



**CATEGORY:** POSITION

**CONCEPT:** AWAY FROM

# **SCRIPT 1**

Vinny put the seashell he wanted to give his friend *away from* the seashells he wanted to keep for himself. Find the seashell away from the other seashells.

**CATEGORY:** POSITION

**CONCEPT:** AWAY FROM

## **SCRIPT 2**

Dana shook all the coins out of her piggy bank onto the floor to count them, but one of the coins rolled *away from* the other coins. Find a coin *away from* the other coins.

**CATEGORY:** POSITION

**CONCEPT:** NEXT TO/BESIDE

### **SCRIPT 1**

Phillip had only a coin and key in his shirt pocket. He pulled the coin and key out of his pocket and laid them *next to/beside* each other on the counter. Find a coin *next to/beside* a key.

### **SCRIPT 2**

Kaitlyn placed the jigsaw puzzle pieces *next to/beside* each other to find out if they fit together. Find jigsaw puzzle pieces *next to/beside* each other.



**CATEGORY:** POSITION

**CONCEPT:** NEAREST/FARTHEST

# **SCRIPT 1**

When Monica's jewelry box fell on the floor, some of her rings fell out. Find the ring that is *nearest* the box. Find the ring *farthest* from the box.



**CATEGORY:** POSITION

**CONCEPT:** NEAREST/FARTHEST

# **SCRIPT 2**

The winner of the game tossed the coin *nearest* to the string. Find the coin that is *nearest* to the string. Find the coin *farthest* from the string.

**CATEGORY:** POSITION

**CONCEPT:** SEPARATED

## **SCRIPT 1**

The square is *separated* from the circle by a dotted line. Find a square *separated* from a circle by a dotted line.

### **SCRIPT 2**

A dotted line *separated* one group of circles from another group of circles. Find the groups of circles *separated* by a dotted line.

**CATEGORY: POSITION** 

CONCEPT: TOP

## **SCRIPT 1**

Jamaal tried to balance the marble on *top* of the block. Find a marble on *top* of a block.

## **SCRIPT 2**

Francine signed her name on the top line. Find the top line.

**CATEGORY:** POSITION **CONCEPT:** BOTTOM

# **SCRIPT 1**

Min was worried that the *bottom* of the cup might scratch the tabletop. Find the *bottom* of the cup.

# **SCRIPT 2**

Louisa pushed the *bottom* of the candle into the birthday cake. Find the *bottom* of the candle.



**CATEGORY: POSITION** 

**CONCEPT:** UPSIDE-DOWN

### **SCRIPT 1**

Bryan placed the clean teacups *upside-down* on the shelf. Find the cup that is *upside-down*.

#### **SCRIPT 2**

Chloe found out that it is impossible to hang an *upside-down* candy cane on a Christmas tree branch. Find an *upside-down* candy cane.



**CATEGORY:** POSITION

**CONCEPT:** RIGHT

### **SCRIPT 1**

Trina always turns her teacup so that the handle is on the *right* before she picks it up. Find the teacup with the handle on the *right*.

### **SCRIPT 2**

On the snack counter are a doughnut, a pretzel, and a gingerbread man. Hannah wanted the snack to the *right* of the pretzel. What snack is to the *right* of the pretzel?





**CONCEPT:** LEFT

# **SCRIPT 1**

Yvonne laid the triangle to the *left* of the circle. Find a triangle to the *left* of a circle.

# **SCRIPT 2**

On the table were a screw, a coin, and a key. Find what is lying to the *left* of the coin.





**CONCEPT:** CENTER/MIDDLE

# **SCRIPT 1**

The *middle/center* button on Bradley's sweater was loose. Find the *middle/center* button.

## **SCRIPT 2**

There was a knot in the *middle/center* of the rope. Find the rope with a knot in the *middle/center*.



**CATEGORY:** POSITION **CONCEPT:** ROW/LINE

### **SCRIPT 1**

Abby removed all the seeds from her slice of watermelon and placed them in a *row/line* on the picnic table. Find a *row/line* of watermelon seeds.

# **SCRIPT 2**

The seamstress sewed a *row/line* of tiny satin buttons down the back of the wedding gown. Find a *row/line* of buttons.



**CATEGORY: POSITION** 

**CONCEPT:** FIRST/SECOND/THIRD/LAST

### **SCRIPT 1**

Luke laid some seashells in a row on the table. Find the *first* seashell in the row. Find the *second* seashell in the row. Find the *last* seashell in the row.

### **SCRIPT 2**

Kristi put four cookie cutters on the counter in the order she wanted to use them. Find the *first* cookie cutter Kristi wanted to use. Find the *last* cookie cutter Kristi wanted to use. Find the *third* cookie cutter Kristi wanted to use. Find the *second* cookie cutter Kristi wanted to use.

**CATEGORY:** POSITION

**CONCEPT:** BEGINNING/END

### **SCRIPT 1**

Dean placed his cardboard shapes in a row. Find the shape at the *beginning* of the row. Find the shape at the *end* of the row.

### **SCRIPT 2**

Dominque was thrilled that there was a row of star-shaped stickers next to her name on the classroom chart. Find the star at the *beginning* of the row. Find the star at the *end* of the row.



Top Right Front Bottom Center Back

Side Middle Left Corner

BINDER III

**CATEGORY: PRE-READING** 

**CONCEPT:** TOP/BOTTOM/LEFT/RIGHT/MIDDLE/

CENTER/CORNER/SIDE

### **SCRIPT 1**

In art class Bridget made a collage of some of her favorite foods: On a piece of paper she glued a Cheerio in each *corner*. Find a Cheerio in each *corner* of the page. Along the *top* and *bottom* of the paper she glued M&Ms. Find the M&Ms along the *top* of page. Find the M&Ms along the *bottom* of the page. Along the *right* and *left sides* of the paper she glued macaroni. Find the macaroni along the *left side* of the page. Find the macaroni along the *right side* of the page. She finished her collage by gluing a pretzel in the *center/middle* of the page.

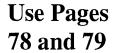
**CATEGORY:** PRE-READING

**CONCEPT:** TOP/BOTTOM/LEFT/RIGHT/MIDDLE/

CENTER/CORNER/SIDE

#### **SCRIPT 2**

Jeremy made his own gift wrapping paper by decorating it with different shapes: He put a circle in each *corner* of the paper. Find a circle in each *corner* of the page. He then added some triangles along the *top* and *bottom* of the page. Find the triangles along the *top* of the page. Find the triangles along the *bottom* of the page. Next he decorated the *right* and *left sides* of the paper with squares. Find the squares along the *left side* of the paper. Find the squares along the *right side* of the paper. He finished by putting a diamond in the *middle/center* of the page. Find the diamond in the *middle/center* of the page.



**CATEGORY:** PRE-READING **CONCEPT:** FRONT/BACK

Using either of the "Pre-reading" tactile pages, introduce or review the concepts of *front* and *back* of a page with the child by pointing out that the *front* of the page is the bumpier side with the raised pictures or the side of the page they are feeling first. Ask the child to turn the page over and explain that this is the *back* of the page.

Note: Any of the other tactile pages can also be used to introduce the concepts of *front* and *back*, especially those with a separation bar in the center of the page. The bar will always feel raised on the *front* of the tactile page and the bar will always be recessed like a groove on the *back* of the tactile page.