

**Rosie Revere, Engineer**  
by Andrea Beaty

# LEARNING THROUGH STORIES



# Rosie Revere, Engineer

	Monday	Tuesday	Wednesday	Thursday	Friday
<p><b>Literacy</b></p> <p>Rosie Revere wants to become an engineer, but do you know what an engineer is? There are many other big and exciting words to explore in this book.</p>	Reading Emotions	Up, Down, and All Around	Draw It Out	Looking for Letters	Cloud Writing
<p><b>Math</b></p> <p>Rosie loved to use recycled materials to create her inventions. This week we are using recycled materials to review shapes and do math problems</p>	Shadow Shapes	Shape Matching	Shape Sorting	Sorting by Size	Making Patterns
<p><b>Art &amp; Sensory</b></p> <p>One person's trash is another person's treasure, they say! This week is all about how we can reuse everyday materials and scraps to make beautiful works of art.</p>	Art: Beautiful Scraps Sensory: Pom-Pom Tube Drop	Art: DIY Paintbrushes Sensory: Bottle Top Matching	Art: Tinfoil Sculptures Sensory: Junk Yard Band	Art: Tracing Shapes Sensory: Recycling Sensory Bin	Art: Circle Painting Sensory: Cleaning Up the Trash
<p><b>STEM &amp; MakerSpace</b></p> <p>Just like Rosie, we are going to put on your thinking hats and turn your imagination dial all the way up, let's get to making!</p>	Sink or Float	Paper Airplanes	Build a Trash Tower	Make a Hovercraft	Recycled Inventions
<p><b>Gross Motor</b></p> <p>"You can discover more about a person in one hour of play than a year of conversation." -Plato</p> <p>Let's have fun and use our imagination to help our brains and bodies grow!</p>	Helicopter Spins	Hide-and-Seek	Balancing Act	Kick the Can	Trash-to-Treasure Relay Race



## LITERACY

**Learning Outcome:** The children will enhance literacy and language development. The children will strengthen their fine motor skills through these activities.

Monday	Tuesday	Wednesday	Thursday	Friday
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**Vocabulary Words:** engineer, treasure, stash, gadget, dismayed, daring, perplexed  
*(Note to Parents: This book has many high-level vocabulary words that make the text both challenging and exciting. Practice saying the words out loud to your child while showing them the vocabulary cards to help familiarize them with the words. Also, be sure to help your child use context clues in the text to decipher each word's meaning!)*

<p><b>Reading Emotions</b>  <i>Listen carefully to the story. Can you tell how Rosie feels during different parts of the story?</i></p>	<p><b>Up, Down, and All Around</b>  <i>Practice using positional language to play a treasure hide-and-seek game.</i></p>	<p><b>Draw It Out</b>  <i>Pick your favorite part of the story and draw it out or draw how it made you feel!</i></p>	<p><b>Looking for Letters</b>  <i>Using recycled bottle caps, can you find the letters that make up the vocabulary words?</i></p>	<p><b>Cloud Writing</b>  <i>Practice writing out letters in shaving cream for some good clean fun!</i></p>
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<p><i>Materials:</i> digital book, printed emotion picture cards</p>	<p><i>Materials:</i> an object to hide (like a doll or toy)</p>	<p><i>Materials:</i> digital book, paper, pencils, crayons, markers</p>	<p><i>Materials:</i> recycled bottle caps, large shallow empty container, permanent marker, vocabulary word cards</p>	<p><i>Materials:</i> shaving cream</p>
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<p><b>Instructions:</b>  <b>Step 1:</b> Have the emotion picture cards ready for your child. <i>(Tip: If you cannot print the cards, you could make simple face drawings to depict the different emotions.)</i>  <b>Step 2:</b> As you read the story, help your child understand how Rosie feels in each of the situations she goes through.  <b>Step 3:</b> Have your child match the described emotion to the correct picture card.  <b>Step 4:</b> Have fun and enjoy this time with your child as they begin to learn about empathy.</p>	<p><b>Instructions:</b>  <b>Step 1:</b> Rosie liked to hide her found treasures UP in her attic to keep them safe, and she would store her inventions UNDER her bed. Review the different types of positional words that help us understand where things are locate (i.e. under, over, behind, beneath, between, on, above, up, down, etc.)  <b>Step 2:</b> Now to play the game, take the treasured object your child chose and hide it somewhere in the room.  <b>Step 3:</b> Use positional language to provide clues to your child to help them find the treasure.  <b>Step 4:</b> Take turns hiding and giving clues to find the treasure, and don't forget to have fun!</p>	<p><b>Instructions:</b>  <b>Step 1:</b> Reread the story with your child.  <b>Step 2:</b> Ask questions you read to help them with their understanding.  <b>Step 3:</b> Ask your child what their favorite part of the book was? How did that part make you feel?  <b>Step 4:</b> Let them have fun and use their creativity to draw their favorite scene or draw how it made them feel.  <b>Step 5:</b> Have them describe their picture to you and enjoy!</p>	<p><b>Instructions:</b>  <b>Step 1:</b> Parents, use a permanent marker to write out the letters to the vocabulary words on recycled bottle caps. <i>(Tip: If you do not have enough bottle caps, you can write the letters on scraps of cardboard or other materials instead.)</i>  <b>Step 2:</b> Place the letter caps in the container and mix them around.  <b>Step 3:</b> Read the vocabulary word to your child and have them hunt for the letters to spell out the words.  <b>Step 4:</b> Keep encouraging them and have fun together!</p>	<p><b>Instructions:</b>  <b>Step 1:</b> Squirt some shaving cream onto the table.  <b>Step 3:</b> Call out alphabet letters and let your child practice writing them out in the shaving cream.  <b>Step 4:</b> Have fun and get messy!</p>
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## MATH

**Learning Outcome:** The children will develop and strengthen their mathematical thinking, communication, and social skills.

### Monday

#### Shadow Shapes

Explore the different shaped shadows that different recycled materials create.

*Materials:* paper, variety of recycled materials in different shapes and sizes, light source

#### Instructions:

**Step 1:** Place your paper on the ground and hold your hand over it. Help your child notice the shadow that appears.

**Step 2:** Next create a shadow with one of the recycled materials.

**Step 3:** Does the shadow make a familiar shape, like a rectangle or circle? Let your child describe the shadow shapes they see.

**Step 4:** Let your child try making their own shadow shapes using the different materials.

\*Try practicing those fine motor skills and see if they can trace the shadows on the paper!

### Tuesday

#### Shape Matching

Can you match the objects to their outlines and name their shapes?

*Materials:* paper, markers, variety of recycled materials in different shapes and sizes

#### Instructions:

**Step 1:** Parents, ahead of time you will need to trace out a variety of different recycled materials onto a large sheet of paper (or onto several sheets).

**Step 2:** Have your child help you identify each of the different traced out shapes on the paper (square, rectangle, circle, oval, etc.).

**Step 3:** Next, let your child grab one of the recycled objects that you used and try to match it to its correct outline. Help them identify the different shape attributes, such as number of sides, length of the sides, and the different sizes of shapes.

**Step 4:** Continue letting your child match the different objects to their outlines and remember to have fun!

### Wednesday

#### Shape Sorting

How can we sort the different shaped recycled objects?

*Materials:* variety of recycled materials in different shapes and sizes, 2 index cards, marker

#### Instructions:

**Step 1:** Ask your child to look at the different recycled objects. What kinds of shapes do you see?

**Step 2:** Have your child help you identify the two main types of shapes that you see. (Perhaps rectangles and squares, or round objects and square objects?)

**Step 3:** Once you have identified your two main shapes types, write them on each of your index cards and place the cards on the floor with room between them.

**Step 4:** Have your child sort the objects into the two categories. Help them with more confusing shapes if necessary.

### Thursday

#### Sorting by Size

Can you sort the different recycled objects by size?

*Materials:* variety of recycled materials in different shapes and sizes, 2 index cards, marker

#### Instructions:

**Step 1:** Write "Big" on one index card and "Small" on the other, then place them on the floor with room between them.

**Step 2:** Ask your child to pick up one of the recycled objects. Is that object big or small?

**Step 3:** Point to the correct column on the chart and have them place their object in that column.

**Step 4:** Continue sorting the objects by size into their two categories.

**Step 5:** Have fun and explore other objects around the house, comparing their sizes.

### Friday

#### Making Patterns

Let's see if we can make some fun patterns using shapes and colors!

*Materials:* variety of recycled materials in different shapes, sizes, and colors

#### Instructions:

**Step 1:** Parents, before doing this activity, you want to make sure you have a good variety of objects to create different types of patterns with.

**Step 2:** Have your child look at the different recycled materials. Do they notice some that are the same and some that are different?

**Step 3:** Begin creating a simple AB pattern using the objects (e.g. big, small, big, small, etc.)

**Step 4:** Ask your child to help you pick out the next object to add to the pattern.

**Step 5:** Mix it up with different patterns, such as alternating colors or shapes.

**Step 6:** Have fun!



## ART

**Learning Outcome:** The children will develop and strengthen their creativity with this week's activity.

Monday	Tuesday	Wednesday	Thursday	Friday
Beautiful Scraps	DIY Paintbrushes	Tinfoil Sculptures	Tracing Shapes	Circle Painting
<i>Materials:</i> scraps of colorful paper, glue stick, sheet of paper	<i>Materials:</i> recycled materials, scissors, paint, sheet of paper	<i>Materials:</i> tinfoil	<i>Materials:</i> recycled materials, sheet of paper, markers or crayons	<i>Materials:</i> recycled cups or round containers, disposable plates, paint, sheet of paper, newspaper
<p><b>Instructions:</b></p> <p><b>Step 1:</b> Lay out paper scraps on the table or in a box where your child can reach.</p> <p><b>Step 2:</b> Place the sheet of paper in front of them and hand them a glue stick.</p> <p><b>Step 3:</b> Show them how to rub a little glue onto the paper and then stick a paper scrap onto the glue.</p> <p><b>Step 4:</b> Let them have fun gluing the scraps, then admire their beautiful artwork when they are done!</p>	<p><b>Instructions:</b></p> <p><b>Step 1:</b> Have a variety of recycled materials available to experiment painting with different textures.</p> <p><b>Step 2:</b> Try painting with bottle caps, cardboard scraps cut in different ways, or see what fun circle shapes you can paint with cups and containers.</p> <p><b>Step 3:</b> Use your imagination and creativity to have fun!</p>	<p><b>Instructions:</b></p> <p><b>Step 1:</b> Begin by giving your child a sheet of tinfoil.</p> <p><b>Step 2:</b> Let them explore the texture and sounds it can make as they begin to crumple and manipulate the tinfoil.</p> <p><b>Step 3:</b> Show them how they can make different 3D shapes like a ball (sphere) or a cone!</p> <p><b>Step 4:</b> Have fun and let your child enjoy the sensory experience!</p>	<p><b>Instructions:</b></p> <p><b>Step 1:</b> Place an object like a clean, empty tuna can on a piece of paper.</p> <p><b>Step 2:</b> Help your child use the marker or crayon to trace around the object.</p> <p><b>Step 3:</b> After they have traced it, remove the object to see their traced design.</p> <p><b>Step 4:</b> Repeat with several objects and different colored markers to create fun shape patterns!</p> <p><i>*Tie in some math skills by asking them to identify the shapes that they traced out. Or better yet, get them to try to predict what shapes the objects will make!</i></p>	<p><b>Instructions:</b></p> <p><b>Step 1:</b> Lay the newspaper on the ground to protect the floor, then place your sheet of paper in the middle.</p> <p><b>Step 2:</b> Pour some paint onto a plate and let your child dip the cup into the paint.</p> <p><b>Step 3:</b> Press the cup onto the paper to create a circle print.</p> <p><b>Step 4:</b> Let your child repeat this over and over to create fun circle patterns on their paper. Use different colored paints for fun designs!</p>



## SENSORY

**Learning Outcome:** The children will develop and strengthen their creativity.

### Monday

**Pom-Pom Tube Drop**  
A fun way to develop fine motor skills

*Materials:* pom-pom balls (or similar small objects), bucket, empty toilet paper and paper towel tubes, tape, a wall

**Instructions:**

**Step 1:** Parents, you will need to tape the empty tubes vertically or diagonally to the wall in a variety of places, similar to this:



**Step 2:** Demonstrate to your toddler how to put the pompoms or objects into the top of the tube and see it drop. Show them how to use the pincer grasp (thumb and pointer only) to grab each pom-pom one at a time.

**Step 3:** Give your child the bucket of pom-pom balls and let your child have fun dropping the balls through the various tubes! (Older toddlers can practice identifying the colors as they drop them, or counting the pompoms as they go.)

**Step 4:** Have fun and enjoy this time with your child!

### Tuesday

**Bottle Top Matching**  
Create your own DIY recycled busy board

*Materials:* clean empty bottles with lids, sturdy cardboard, hot glue gun

**Instructions:**

**Step 1:** Cut the tops off several clean, empty bottles with lids, and hot glue them to a sturdy piece of cardboard, similar to this:



**Step 2:** Demonstrate to your toddler how to twist the caps on and off.

**Step 3:** Place the board on the floor and let your toddler have fun playing and exploring, all while developing important fine motor skills!

### Wednesday

**Junk Yard Band**  
Music is everywhere and can be made by almost anything!

*Materials:* variety of clean empty containers made of different materials, rice, wooden dowel (or similar object)

**Instructions:**

**Step 1:** Present your toddler with a variety of clean, empty containers made of different materials (plastic, metal, etc.)

**Step 2:** Fill one or two of the containers with rice or other materials that will make noise when you shake them. (Make sure they are sealed tightly.)

**Step 3:** Demonstrate how to bang on the “instruments” with the dowel, or how to shake the filled containers to make music!

**Step 4:** Encourage your toddler to have fun exploring the different sounds and making all kinds of fun musical noise!

### Thursday

**Recycling Sensory Bin**  
A fun sensory bin using recycled materials

*Materials:* large shallow plastic tub, uncooked rice, a variety of recycled materials, scooping utensils

**Instructions:**

**Step 1:** Create a recycled DIY sensory bin using a plastic tub, some rice, and a random assortment of recycled materials (egg cartons, paper tubes, boxes, etc.)

**Step 2:** Add a few scooping utensils (spoons, measuring cups, tongs, etc.) and let your toddler explore!

**Step 3:** Have fun observing your child’s imagination at work and watch their fine motor skills blossom!



### Friday

**Cleaning Up the Trash**  
A little soap and water make this some squeaky-clean fun!

*Materials:* large shallow plastic tub, water, dish soap, a variety of recycled materials, rags or sponges

**Instructions:**

**Step 1:** Time to wash up after a messy week of playing with trash! Create a soapy-fun sensory bin using a plastic tub, water, soap, and a variety of plastic, Styrofoam, or metal materials. (*Caution: Make sure there are no sharp edges on any of the objects!*)

**Step 2:** Add a few sponges or rags to help wash the “trash”, and let your toddler have fun!

**Step 3:** Enjoy the sudsy, good-clean fun with them!



# STEM & MAKERSPACE

**Learning Outcome:** The children will use their creativity and enhance their scientific thinking and communication skills. Children will learn to predict, observe, record, analyze the data.

Monday	Tuesday	Wednesday	Thursday	Friday
Sink or Float	Paper Airplanes	Build a Trash Tower	Make a Hovercraft	Recycled Inventions
<i>Materials:</i> variety of objects to test, container, water, paper, pencil	<i>Materials:</i> sheets of paper	<i>Materials:</i> variety of recycled materials	<i>Materials:</i> paper plate, plastic drinking straw, tape (preferably duct tape), balloon, scissors	<i>Materials:</i> variety of recycled materials, other random objects or craft materials, scissors, tape, glue

*Instructions:*

**Step 1:** Have all materials ready

**Step 2:** Start by creating a chart with three columns. The first column will have the objects you will test. The second column will give your prediction. And the third column will have your results.

**Step 3:** Before you place your first object in the water, record your prediction of whether you think it will sink or float.

**Step 4:** Test your prediction by placing the first object in the water. What was the result? Record your findings.

**Step 5:** Continue with each of the objects, and don't forget to record your predictions and your findings, and of course, have

*Instructions:*

**Step 1:** Review the story and explain that today your child is going to help Aunt Rose fulfill her dream to fly!

**Step 2:** Given a sheet of paper, experiment with different folds to make a paper airplane.

**Step 3:** Give your plane a test flight. How did it do?

**Step 4:** Try making another plane using a different design.

**Step 5:** Compare how the different designs change the flight patterns of the planes. Do different designs help some fly farther than others? Or perhaps they make the plane to loopy-loops? Have fun experimenting!

*Instructions:*

**Step 1:** Using a variety of recycled materials, such as boxes, cans, and bottles, give your child the challenge to build a tower.

**Step 2:** Once they are satisfied with their tower, have them test it to see how strong it is. Try blowing on it - did it fall? What if they poke it gently with one finger? What if they kick it with their foot?

**Step 3:** How well did their tower hold up? What could they do to make a stronger tower?

**Step 4:** Have fun building, destroying, and rebuilding your towers together!

*Instructions:*

**Step 1:** Cut a small hole in the center of the paper plate, then stick the straw through it.

**Step 2:** Flip the plate upside down and adjust the straw so that the plate can lay flat on the table.

**Step 3:** Cut the straw so it only sticks up about 2 inches above the plate.

**Step 4:** Place the balloon over the straw and secure it with the tape.

**Step 5:** Flip the plate over and blow into the straw to inflate the balloon (you may find it helpful to insert another temporary straw into the bottom to help blow up the balloon). Once it is inflated, pinch the end of the balloon to hold the air inside.

**Step 6:** Carefully flip the plate over onto the table and release the balloon and watch your hovercraft go!

**Step 7:** Repeat and have fun!

*Instructions:*

**Step 1:** Present your child with a variety of recycled materials and other random objects or craft materials.

**Step 2:** Allow them to explore the objects and play with them.

**Step 3:** Ask them questions to see what their imaginations came up with for the different objects.

**Step 4:** Assist them with tape or glue as needed to help them build and create their own invention.

**Step 5:** Allow your child to continue tinkering and inventing, asking them questions and helping them explain their thought process as they go. And above all, have fun and enjoy this time with your child!



## GROSS MOTOR

**Learning Outcome:** The children will enhance and develop their gross motor skills by using large and small skills and using their imagination. Children will engage in outdoor and indoor play and learn to take turns.

Monday	Tuesday	Wednesday	Thursday	Friday
Helicopter Spins	Hide-and-Seek	Balancing Act	Kick the Can	Trash-to-Treasure Relay Race
Materials: open space	Materials: children, parent	Materials: random objects to balance	Materials: empty can or bottle, open space	Materials: variety of recycled materials, baskets, open space

**Introduction:**  
Rosie wanted to help her aunt fly, so at the end of the book she makes her a “helio-cheese-copter” for her. Can you spin like a helicopter and practice your balancing and spatial-awareness skills?

**Instructions:**

**Step 1:** Move to an open space where you can spin without bumping into things

**Step 2:** Open your arms and start spinning

**Step 3:** Try spinning slowly, then spin faster.

**Step 4:** Try spinning slowly with your eyes closed. Is it easier or harder?

**Step 5:** Have fun spinning!

**Introduction:**  
Rosie used to search for treasures among the trash and then hide them in the attic for safe keeping. For this activity, YOU pretend to be Rosie’s treasure and play a game of hide-and-seek!

**Instructions:**

**Step 1:** Decide who is going to hide first and who is going to seek

**Step 2:** Whoever is the seeker will close their eyes and count to 20 while the other person hides

**Step 3:** After counting, shout, “Ready or not, here I come!” and start seeking out the person hiding

**Step 4:** Take turns hiding and have fun!

**Introduction:**  
One of Rosie’s inventions was a hat to keep snakes off of her Uncle Fred’s head. She made it with parts of a fan and some cheddar cheese spray! Can you balance silly things on your head?

**Instructions:**

**Step 1:** Find objects around the house that you think you could balance on your head (pillow, book, bowl, etc.)

**Step 2:** Take turns trying to balance the objects

**Step 3:** Try walking around while balancing

**Step 4:** Have fun and get creative!

**Introduction:**  
Who says trash can’t be fun? Rosie had fun with it all the time. Today, turn your trash into a game!

**Instructions:**

**Step 1:** Have the empty can or bottle ready

**Step 2:** Kick the can forward and backward

**Step 3:** Run while kicking the can

**Step 4:** Set up a goal. Can you kick the can into the goal?

**Step 5:** Have fun with your child!

**Introduction:**  
“One man’s trash is another man’s treasure,” they say. How quickly can you get all of your trash into the treasure box?

**Instructions:**

**Step 1:** Place a variety of recycled materials in the “trash” basket on one side of the room

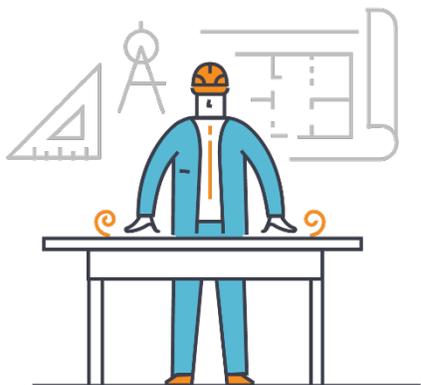
**Step 2:** Place the “treasure” basket on the other side of the room

**Step 3:** The first person grabs one item from the trash basket and races it to the treasure basket, then runs back to the starting point

**Step 4:** Then the next person grabs another piece of trash and races it to the treasure

**Step 5:** Keep taking turns until all the trash has been turned into treasure!

\*Consider competing in teams!



*engineer*

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*treasure*

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*stash*

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*daring*

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*dismayed*

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*gadget*

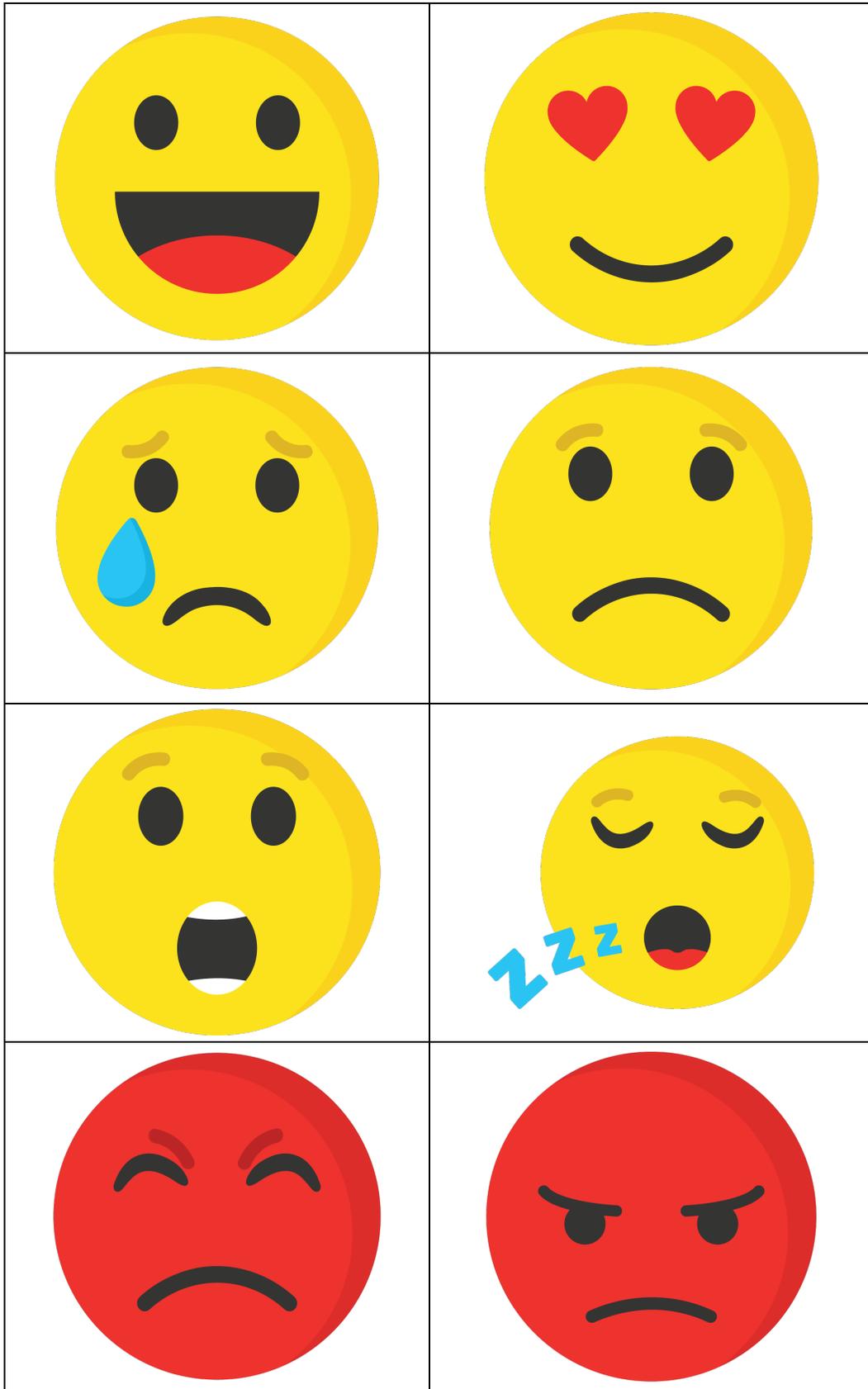
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LEARNING THROUGH STORIES ROSIE REVERE, ENGINEER



# PATTERNS

*Finish the pattern*

# PATTERNS

*Finish the pattern*

## PATTERNS