

BEAUTY IN SHAPES PROJECT (LEVEL 0)












Ages 4 to 5 (Level 0)

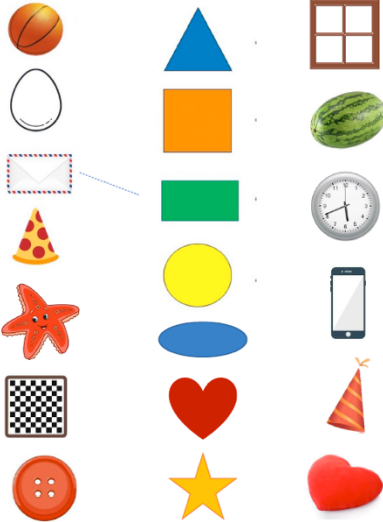
Description:	Learners will learn about shapes while using readily available examples within their homes and their bodies. Learners will also use their body parts to measure various things, learn about the need for standardized measurements, and use what they have learned to create geometric patterns.
Leading question:	Can shapes and measurements be beautiful?
Age group:	4 - 5 years
Subjects:	Mathematics: shapes and measurement, Art and design, physical exercise, and wellness
Total time required:	~4 hours over 4 days
Self-guided / Supervised activity:	Medium supervision from educator/guardian/parent
Resources required:	Paper and pencil, (optional: removable stickers like sticky notes).



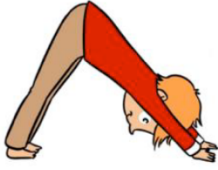


Learning outcomes	<ul style="list-style-type: none"> ▪ List the characteristics of 2-D shapes ▪ Draw 2-D shapes ▪ Write down letters of the alphabet in upper case ▪ Match 2-D shapes with objects that look like those shapes as well as letters of the alphabet that look like those shapes ▪ Learn and practice how to draw a circle, triangle, rectangle, and a square
Required previous learning	None
Inspiration	

Topics/concepts covered, and skills developed
<ul style="list-style-type: none"> ● Identifying and drawing 2-D shapes ● The letters of the alphabet ● Matching objects and shapes

Day	Time	Activity
1	15 minutes	Learners will learn about and explore different aspects of 2D shapes Guide the learners' attention to the shapes below:

	25 minutes	<div style="text-align: center; margin-bottom: 10px;">  </div> <div style="display: flex; justify-content: space-around; text-align: center; margin-bottom: 10px;"> Circle Triangle Rectangle Square </div> <div style="text-align: center; margin-bottom: 10px;">  </div> <div style="display: flex; justify-content: space-around; text-align: center; margin-bottom: 10px;"> Star Heart Oval </div> <p>Source: https://resources.educationaboveall.org/learning-packages/level-0-ages-4-5</p> <p>Spend some time looking closely at each one of them. For each case, ask learners:</p> <ul style="list-style-type: none"> ▪ What do you see? ▪ Can you give one characteristic for each of these shapes? <p>Use the learners' responses to arrive to the following conclusions:</p> <ul style="list-style-type: none"> ▪ A triangle is made of 3 sides, and it has 3 angles or corners. ▪ A circle is a set of points that are all exactly the same distance from one point, which we call the center. ▪ A square has 4 equal sides and 4 right (90 degree) angles. ▪ A rectangle has 4 right angles, but its sides are not all equal. It has two long sides and two short sides. ▪ A star has 5 pointed sides. It is like 5 triangles combined. ▪ A heart has a double rounded top and is pointed at the bottom. ▪ An oval is a stretched-out circle with two long sides and two short sides. <p>Find the Shapes:</p> <p>For each of the shapes, find and draw at least two objects that look like that shape.</p> <div style="text-align: center; margin: 10px 0;">Example</div> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #f2f2f2;"> <th style="padding: 5px;">Shape</th> <th style="padding: 5px;">Object 1</th> <th style="padding: 5px;">Object 2</th> </tr> </thead> <tbody> <tr> <td style="padding: 10px;"></td> <td style="padding: 10px;"></td> <td style="padding: 10px;"></td> </tr> </tbody> </table> <p>Source: https://resources.educationaboveall.org/learning-packages/level-0-ages-4-5</p> <p>Do the same for all the shapes you have learnt about above.</p>	Shape	Object 1	Object 2			
Shape	Object 1	Object 2						
								

	<p>15 minutes</p> <p>10 minutes</p>	<p>Shape Matching: Make a copy of the Shape-Object Matching Worksheet for the learner. Ask the learner to match up the different objects to the shapes they look like. See example below:</p>  <p>Critique and revision: Learner presents their objects for each shape to their parents or family members for feedback and suggestions for improvement. The parents or family members provide feedback using the following format:</p> <ul style="list-style-type: none"> ● Praise: What did you like about the learner’s work done? ● Question: Any questions or clarifications you have about the work? ● Suggestions: In what areas does the learner need to improve their work? <p>What shape are you?</p> <p>How to play the game:</p> <p>To play the game, you will need at least 4 or more players.</p> <p>Instructions:</p> <ul style="list-style-type: none"> ▪ Each player acts out these shapes and lines:
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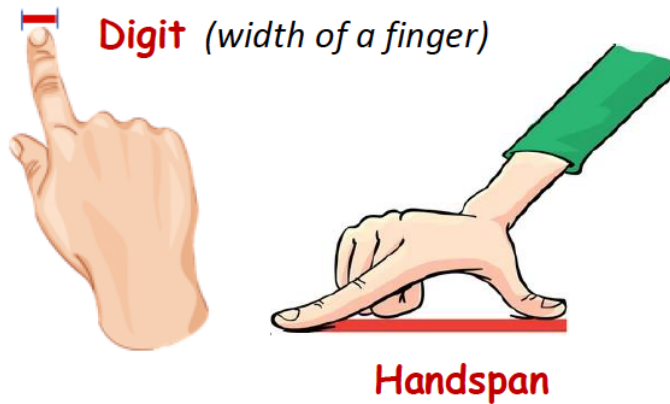
		<div style="text-align: center;">  <p>Triangle Rectangle Square Star</p>  <p>Heart Circle Line</p> </div> <p>Source: https://resources.educationaboveall.org/learning-packages/level-0-ages-4-5</p> <ul style="list-style-type: none"> ▪ If others guess the shape correctly, the player gets a point. ▪ The player with the most points wins the game. <p>Examples of how the learners can act out some of the shapes can be seen below.</p> <div style="text-align: center;">    <p>Triangle Square Star</p> </div>
2	5 minutes	<p>Learners will continue to learn how to identify shapes within their environment, practice drawing the circle and triangles and learn about some measurements that were used in the past.</p> <p>Guide the learners' attention to the drawing below:</p>

	<p>10 - 15 minutes</p>	<div data-bbox="695 268 1252 684" data-label="Image"> </div> <p>Ask the learners: What shapes do you see in the drawing above? (Answers: Circle, triangle, square etc.)</p> <p>Drawing shapes:</p> <p>Let us practice drawing shapes! Trace the following:</p> <div data-bbox="651 974 1276 1209" data-label="Image"> </div> <p>You can print a copy of the Circle and Triangle Tracing Worksheet for the learner to be able to do this activity or draw the shapes yourself</p> <p>Drawing activity: Draw the sun and the clouds at the top of the page using shapes and lines.</p> <p>Critique and revision: Learners present their work to their parents or family members for feedback and suggestions for improvement. The parents or family members provide feedback using the following format:</p> <ul style="list-style-type: none"> ● Praise: What did you like about the learner’s work done? ● Question: Any questions or clarifications you have about the work? ● Suggestions: In what areas does the learner need to improve their work?
	<p>15 minutes</p>	
	<p>30 minutes</p>	

Measurements:

Say to the learner: Measuring lets us know how long or short an object is. Or how heavy or light. Today, we'll learn how to measure how long an object is.

In the past, people used their bodies to tell how long something was. Today we are going to learn about 2 of these ways: The first one is the digit (width of the finger) and the second one the handspan. See the image below:

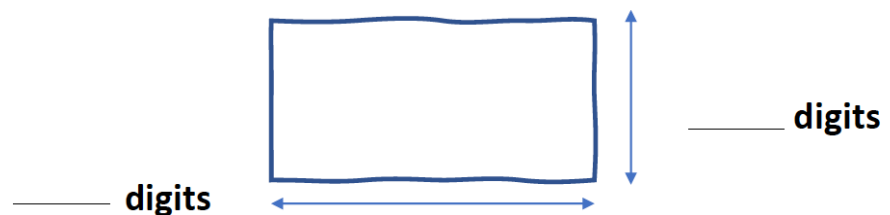


Ask the learner:


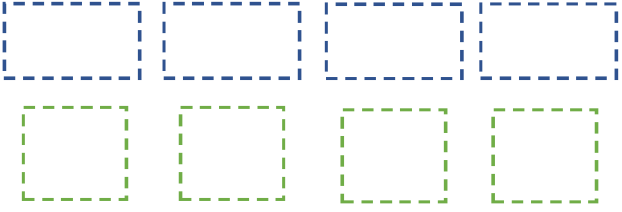
- How many digits are in your handspan? (Answer: _____)
- Which other body parts can we use to measure things?

Exercise: Using Digits for measurements.

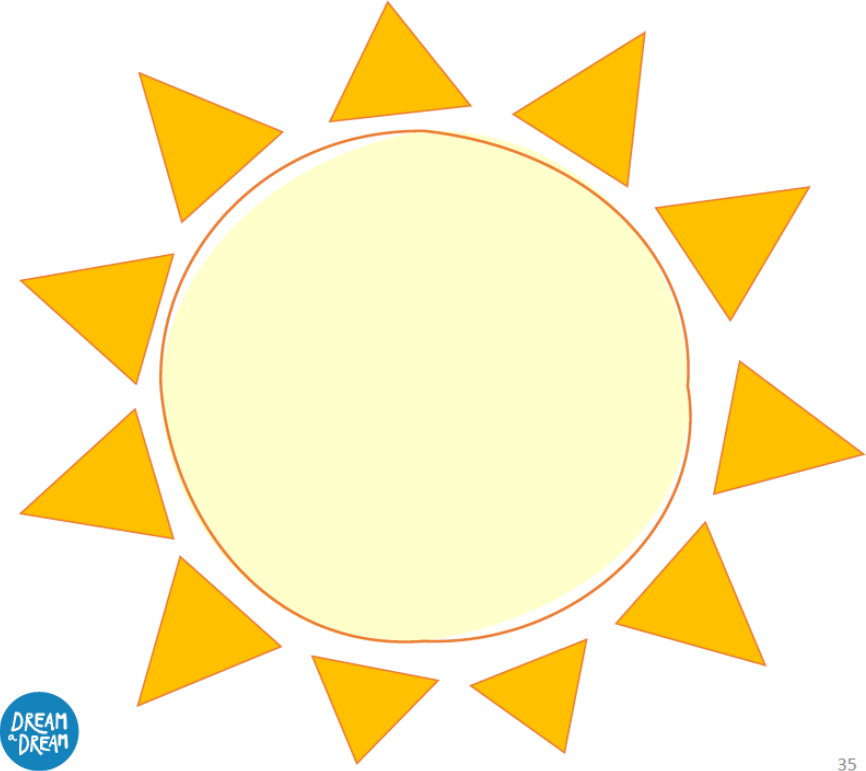
How many digits is your drawing sheet? Use your finger to find out



Exercise: Using hand spans for measurements.

	10 minutes	<p>Ask the learners to draw an outline of a friend's body (it can also be from a family member). Like the image below:</p>  <p>Ask the learners to measure the following using their handspans:</p> <ul style="list-style-type: none"> ▪ Hand Length ▪ Leg Length ▪ Full Body Length <p>Reflection on measurement: Educator/parent meets with the learner(s) and have them reflect on the following questions:</p> <ul style="list-style-type: none"> - What have you learnt from the measurement activities? - What do you remember the most from the measurement activities? - What questions about measurement do you still have? <p>Educator/parent ensures to respond to any questions the learner(s) may still have above measurement.</p>
3	10 minutes	<p>Drawing shapes: Let us practice drawing rectangles and squares! Trace the following:</p> 

	10 minutes	<p>Print a copy of the Circle and Triangle Tracing Worksheet for the learner to be able to do this activity or draw the shapes yourself.</p> <p>Literacy extension: Shapes in the alphabet: Ask the learner to write down all the letters of the alphabet in the upper case. Next, ask the learner to identify the different shapes they can see in the different letters of the alphabet. See example below:</p> <div data-bbox="867 554 1078 716" data-label="Image"> </div> <p>Next, we are going to draw some objects using the shapes we know and have been learning throughout this project.</p> <ol style="list-style-type: none"> 1. Ask the learners to draw a house using triangles, rectangles, and squares. They will need to add details to the house and compound such as a door, windows, roof, trees etc. 2. Ask the learners to draw two potted plants using shapes of their choice. <p>See examples below:</p> <div data-bbox="724 1171 1218 1394" data-label="Image"> </div> <p>The Sunny Side:</p> <p>Ask the learner to get in a relaxing position and then:</p> <ul style="list-style-type: none"> ▪ Take 3 deep breaths. ▪ Close your eyes and think of all the things that make you happy. ▪ What comes to mind? What are you thinking about? <p>Draw what comes to mind in the sun below:</p>
	10 minutes	
	10 minutes	

	10 minutes	 <p style="text-align: right;">35</p> <p>Critique and revision: Learners present their work for the day to their parents or family members for feedback and suggestions for improvement. The parents or family members provide feedback using the following format:</p> <ul style="list-style-type: none"> ● Praise: What did you like about the learner’s work done? ● Question: Any questions or clarifications you have about the work? ● Suggestions: In what areas does the learner need to improve their work?
4	10 minutes	<p>Learners will count the number of shapes in a house and match objects to shapes they resemble.</p> <p>Ask the learners to study the picture below and identify what shapes they can see in the picture. Once they have identified the shape, then ask them to count how many of that shape they can find in the picture.</p>



Learners can use a table like the one below to summarize their responses.

Name of shape identified	Number of shapes found
Circle	4

5 minutes

Bird Shapes: Ask the learner:

- What is your favorite bird or animal?
- Can you draw your favorite bird or animal using shapes?

See some examples below:



Story Time: Who will win?

This is the Shapes Family. In their town, there is a Lantern Competition.

15 minutes



The Shapes are getting ready for it. Circle and his sister, Triangle, got to work.





Circle made a lantern with circles. Triangle made one with triangles.

Mr. Square and Mrs. Rectangle said, "Isn't it boring to use the same shapes all the time?"

"Let us try something new!" said Circle.

Together, they made a lantern with circles and triangles.

	<p>15 minutes</p>	 <p>Mr. Square loved the new lanterns. Who do you think won the competition?</p>  <p>Ask the learner some comprehension questions:</p> <ul style="list-style-type: none"> ▪ Name the characters in the story. ▪ What was the name of the competition? ▪ What did the circle use to make lanterns? ▪ What did Mr. Rectangle and Mr. Square say? ▪ Can you draw your own lantern using shapes? <p>Overall Project Reflection: The learner will now think about all the exercises they have done for the past 3 days and take note of “TWO” of the following:</p> <ul style="list-style-type: none"> ▪ What is the most important lesson you have learnt through this project? ▪ What are you found challenging, puzzling, or difficult to understand? ▪ What question would you most like to discuss? ▪ What is something you found interesting?
<p>Assessment Criteria</p>	<ul style="list-style-type: none"> ● Observation checklists while learners are working on activities 	

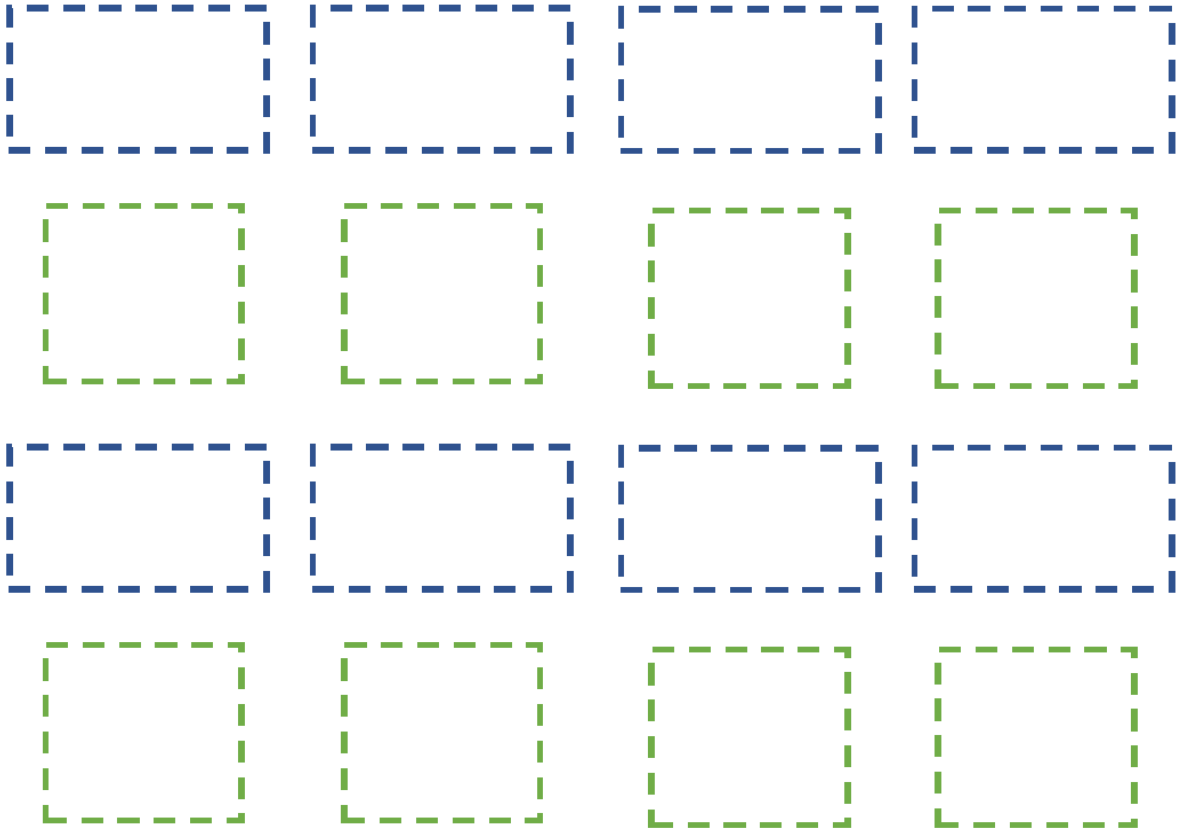
	<ul style="list-style-type: none">• Learners understand the differences between 2D shapes (number of sides, number of angles, etc.)• Learners recognize shapes in objects around them• Learner's answers about their conclusions and reflections• Learner's creativity in the daily activities• Learners review and improve their work based on feedback• Learner's engage in a brief conversation based on their comprehension of a story.
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APPENDIX 1:

Circle and Triangle Tracing Worksheet



Rectangle and Square Tracing Worksheet



Shape Object Matching Worksheet

