**EduTOOLBOX – Pre-K Professional Learning Program Lesson Plan**

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| **Content Area:** | **Math: Geometry** |
| **Lesson Title:**  | **Create New Shapes**  |
| **Time Frame/Lesson Length:** | 15 minutes |
| **Lesson Setting:**  | This lesson is designed to be taught at a small group table or on a classroom rug. |
| **Grouping of Students** | Small groups of 4-5 students are recommended for teaching this lesson. Students could be grouped homogeneously (similar levels of ability) or heterogeneously (mixed levels of ability) for this lesson.  |

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| **Lesson Objective:** | The students will use different shapes and sizes to create new shapes that resemble everyday objects and explain what part of the object each shape represents.*Student-friendly: I can describe objects using the names of shapes.*  |
| **Aligned Standard(s):****(TN-ELDS)** | *PK.G.A.4. Begin to describe objects in the environment using names of shapes.* |
| **Assessment Method:**  | The teacher will make anecdotal notes detailing student ability to create new shapes and objects. This documentation will be used to determine which students need more practice and instruction with recognizing basic shapes and using them to create new ones.  |

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| **Background Knowledge** | Students should have participated in shape activities prior to starting the activity and listened to a read aloud of a book concerning shapes, such as “The Shape of Things,” by Dayle Ann Dodds. An understanding of basic shapes allows students to understand the concept of creating new shapes using the ones with which they are already familiar.  |
| **Intentional Vocabulary:** | **Geometry** – names of the various shapes included in the activity (square, rectangle, circle, oval, triangle)**Positional words** – words that describe the location of something (bigger, smaller, above, below, next to, behind)**Color words** – words that describe a specific but simple hue (red, orange, yellow, green, blue, purple)It is suggested that visual cues are available to help the children understand vocabulary, such as a photo of a dog sitting underneath a chair for “below.” |
| **Materials Needed:** | * A collection of a variety of shapes. The shapes should be large enough that the whole group can easily see. This could be foam shapes, pattern blocks, paper cut outs, etc. There should be a variety of colors, shapes, and sizes.
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| **Considerations for Learning:***possible challenges, management issues, and safety considerations* | Students may be excited to play with big foam shapes (or other objects used). Allow students a minute or 2 to free play with the objects at the start of the lesson. This allows them autonomy with the objects before direct instruction and will help cut down on management issues that could arise.  |

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| **Lesson Procedures and Questioning** |
| **Lesson Section** | **Detailed Procedure**[*Sample Teacher script is in italics]* | **Questioning Sequence** |
| **Introduction:** | The teacher will place the shapes in front of the small group.The teacher will give the children a few minutes to explore the shapes on their own. The teacher will ask students to tell her what shapes they see. She will show them how two shapes can come together to make a new object. The teacher will give an example of a house by putting together a square and a triangle of similar sizes. *I can make the shape of a house using a medium square and a medium triangle! Can you make another object with these shapes?* | Knowledge and comprehension questions are recommended for the introduction.* *Look at all of these shapes! Can you tell me what shapes you see?*
* *Do you remember when we learned about different sizes? Which shapes are the biggest? Which are the smallest?*
* *Which shapes can you use to make a new shape?*
* *Which shapes can you use to make an object?*
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| **Exploration:** | The teacher will provide each child with a set of shapes and encourage students to use their imaginations to create something new. The teacher will ask guiding questions using intentional vocabulary to discuss geometric concepts. | Application and analysis questions are recommended for the exploration. * *How many shapes do you have?*
* *Which shapes did you use? Why did you use those shapes?*
* *Can you describe the characteristics in each group?*
* *How did you create that shape?*
* *How do these shapes make a new shape?*
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| **Closing:** | The teacher will reflect on student learning. *Today you created new shapes from shapes you already know.*The teacher will acknowledge various ways that students created new shapes. *Joe used a square and a triangle to create a new shape like a house. Lily used two triangles to create a rectangle.*The teacher will ask students what else in their classroom they can use to make new shapes. | Creation and evaluation questions are recommended for the closing. * *What did you do today?*
* *How did you use your shapes?*
* *What other shapes can we create in our classroom?*
* *Why are shapes important?*
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| **Opportunities for Differentiation:** | For students with limited language exposure, you may need to help provide correct vocabulary for specific characteristics (I.e. large or small). Teachers can use pictures to help children come up with ideas of new shapes. If students are struggling with shapes in more than one way, teachers can ask students to describe multiple characteristics about one item, and then encourage them to find other objects with shared characteristics. For example: *“I notice that you said this triangle was small and red. Can you find another small shape?* For students who are creating new shapes with ease, encourage them to explore and create in as many ways as possible. You can also ask them to find other objects in the classroom to add to their groups.  |
| **Extending the Learning:** | Encourage shape creation at other centers throughout the day. Refer to the vocabulary during all parts of the day. Shape creation and the discovery of how items can work together happens in multiple parts of the classroom. Explore puzzles and how those shapes come together to create a larger picture. Be intentional with language during this time, referencing back to the small group lesson.  |