WEEK 3, Day 2

Math Center: Build Shapes, Match the Flat Shape

Children will use straws and clay to build a shape of their choice.

Big Ideas	Children will communicate mathematically through multiple forms of expression. Children will persevere in solving questions with a growth mindset. Children will solve mathematical problems using a variety of strategies. Children will make sense of the world around them through mathematics. Children will connect math to other learning and real-world examples. A strong, interdependent math community has qualities, such as: ● shared responsibility, collaboration and support for each other.
Guiding Questions	What does it mean to be a member of a math community? How do you use math tools? How do you most effectively communicate your mathematical thoughts and ideas? Why is collaboration and listening to the ideas of others important?
Vocabulary	**alike**: the same, or similar, by having at least one common attribute **attributes**: a trait that describes an object **compare**: to look at and notices similarities and differences between two or more numbers, groups, or objects **revise**: to look over again in order to correct or improve.
Materials and Preparation	● Build Shapes cards Copy and cut apart 2-3 sets. Children will continue to use these throughout the year. Consider copying them on cardstock or laminating them to be used repeatedly. ● straws, stored in bags Each pair of children needs a bag with at least 6 straws of each size: 2 ¾ inches; 1 ½ inch; 1 inch; ½ inch. ● play dough or modeling clay

Intro to Centers	Display cards, clay, and straws. *We will learn a new activity at our Math Center called 'Build Shapes.'* Select a shape card and model how to make shapes with playdough and straws *You work with a partner and will choose a shape card. Then you will both use the straws and clay to build that shape individually. When you are both finished, **compare** your shapes and make sure they both match the shape you chose.* Describe the expectations for cleaning up and leaving the area when finished. *When you are finished at the Math Center, put your supplies back where they belong so they are ready for the next person to use. Organizing materials and cleaning up are important responsibilities in Kindergarten.* Show where the math tools belong when they are put away.
During Centers	Children use straws and clay to build a shape of their choice. Children check with their partner to be sure they both agree that the shapes match. Children practice identifying , and naming, circles, triangles, rectangles, and squares. Children use language to describe shapes and tell what is the same or different about two or more shapes. Children compare the length of objects. Follow the children's lead and use precise mathematical vocabulary to narrate what they are doing. Direct their attention to how the attributes of the shapes help them decide which straws to use in building the shape. Take observational notes about children's exploration and language.
Facilitation	● What shapes did you build today? ● What have you tried in order to build a shape like the shape on this card? ● How are these shapes alike/different? How is your shape alike/different from your partner's? ● If your partner needed help building this shape card, what would you tell them? ● What does this shape remind you of? ● What are you trying to do?

	● I wonder what will happen if you use this straw instead/turn that straw another direction. ● Invite children to notice and compare the lengths of straws. ● Invite children to describe how they constructed their shapes. Model using terms that describe relative position, such as: above; below; beside; in front of; behind; and next to. ● What was the most challenging shape to build? Why? What did you do when it was challenging? Upcoming extension opportunities: Week 4, Day 3: Build Shapes, Describe the Flat Shape Children secretly choose a shape card and describe it to their partner. Their partner then builds the shape described using straws and clay. This Center combines the work that children have done in previous activities with describing shapes while practicing building shapes. With repeated experience, children describe and build shapes with more precision and identify key attributes to highlight in their descriptions (MP8). Other possible extension opportunities: ● How can the shape cards inspire Beautiful Stuff compositions? ● How does Leo Lionni incorporate shapes into his compositions and how can the shapes be incorporated into collages?
Standards	**Addressing:** **GR.C.1** Identify, describe, analyze, compare, create, and compose shapes based on their attributes. ● **K.G.B.5** **Building Towards:** ● **K.G.A.1; K.G.A.2; K.G.B.4** **Standards for Mathematical Practice:** 1-8

Notes