Zero Activities

Math·U·See®

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Here are a few activities that you can use with students working in *Primer* through *Beta* to teach and reinforce the concept of zero.

Introducing the Symbol for Zero

Finding Zero

For this activity you need an index card with the numeral for zero written on it and other visuals with the symbol, such as a computer keyboard, ruler, scale, thermometer, rain gauge, or cell phone.

Show your student the card with the numeral on it and introduce the word zero. Distinguish the visual difference between 0 and the letter O, which is found in the alphabet. Point out that zero is usually more of an oval or egg shape, which is more narrow. Next, invite your child to look at the everyday objects you have collected and find the symbol for 0 on it (alternately, you could walk around the house to look at them). If your child finds the alphabet letter O, redirect him and talk about the difference. For instance, you can explain that zero is used in talking about numbers and that the letter O is used in words.

Distinguish between the numeral 0 and the letter O

Invite your student to use a variety of materials to shape or write zero and the letter O. Remind your student of the visual difference between a zero, which has more of an egg shape than the round letter O in the alphabet. Have your child use clay to roll a rope and pinch the ends together for the numeral and letter. Other practice activities may include drawing the numeral and letter with his finger in a flat bed of salt, in pudding, or with finger paint.

Associating Zero with "Empty" or "Nothing"

Containers and Cards

Write the numeral zero on several cards. Next, take a regular size muffin tin, empty egg carton, or approximately 8-10 small bowls. In a few of the containers, place a Math-U-See® integer block (1-9). Tell your student to place the zero card in front of the containers that are empty.

Fill-a-Grid

Use the grid provided for this activity. Inside every square write a number between 0 and 10. Ask your student to say each number and place the correct Math-U-See integer block on the square. For the squares that have 0 written on them, the student must not place a block.

Basket of Cherries

Draw several circles or "baskets" on a dry erase board or use the paper template provided. Next, draw some "cherries" inside some of the baskets. Tell your student to write the number 0 under the baskets that do not contain any cherries. For extra practice have your student write the number of cherries for the other baskets and find the corresponding integer block to match.

As an extension, can your student find multiple ways to represent numbers with the integer blocks? For example, can he show that a 2-block and 3-block "smooshed" together are the same length as a 5-block?

Understanding Zero in Relation to Other Numbers

Ladder

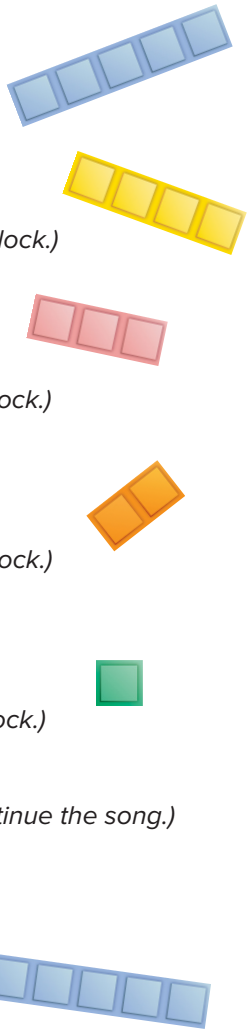
Draw a ladder with up to 20 rungs on the driveway or sidewalk with chalk. Tell you student to stand at the bottom of the ladder. When you call out "one," he must jump one step up. If you call out “four,” he must jump up four steps. If you call out "zero," he must stay where he is. If he jumps backward when you call out 0, the game begins again. The object of the game is to reach the top of the ladder.

Five Little Ducks

Gather the integer blocks 1–5. Sing *Five Little Ducks* together to model zero by counting back from 5. When you sing the first line, have your student either show you or place the 5-block on the table. Continue this sequence each time the number of ducks is mentioned in the song. When you sing “no little ducks”, talk about the number zero. Ask him to describe “no ducks” compared to the other blocks. Remind him that zero represents no ducks.

Five Little Ducks

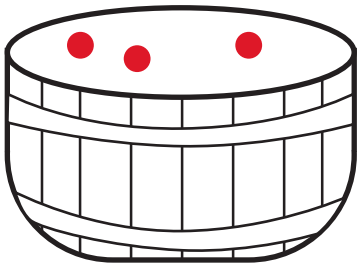
Five little ducks went out to play, Over the meadow and far away. Mother Duck called, “Quack, quack, quack, quack.” Four little ducks came running back.	*(Have your child show the 5-block.)* *(Have your child show the 4-block.)*
Four little ducks went out to play, Over the meadow and far away. Mother Duck called, “Quack, quack, quack, quack.” Three little ducks came running back.	*(Have your child show or point to the 4-block.)* *(Have your child show the 3-block.)*
Three little ducks went out to play, Over the meadow and far away. Mother Duck called, “Quack, quack, quack, quack.” Two little ducks came running back	*(Have your child show or point to the 3-block.)* *(Have your child show the 2-block.)*
Two little ducks went out to play, Over the meadow and far away. Mother Duck called, “Quack, quack, quack, quack.” One little duck came running back.	*(Have your child show or point to the 2-block.)* *(Have your child show the 1-block.)*
One little duck went out to play, Over the meadow and far away. Mother Duck called, “Quack, quack, quack, quack.” No little ducks came running back.	*(Have your child show or point to the 1-block.)* *(Talk with your child about zero; then continue the song.)*
No little ducks went out to play, Over the meadow and far away. Mother Duck called, “Quack, quack, quack, quack.” Five little ducks came running back.	 *(Have your child show the 5-block.)*



For additional practice with this type of activity, sing the song or read the story *Five Little Monkeys.*

Fill-a-Grid

Basket of Cherries



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