

Lesson 3: Numbers 1-5: Ordering and Comparing (2 Days)

Getting Started

? Questions to Explore

- How can we compare numbers?
- How do we explain our thinking mathematically?

Skills

- Order objects and numbers 1 through 5
- Compare objects and numbers 1 through 5

✂ Materials

- abacus (kit)
- base-10 blocks (kit)
- colored pencils or markers
- counters (kit)
- dice (kit)
- items to count
- laminated number line (kit)
- number cards (kit)

Introduction

During this lesson, your child will practice ordering and comparing objects within the quantity of 5. Begin by asking your child to show you the number 5 on his fingers. Once he's shown 5 in one way, challenge him to show you 5 in another way on his fingers. Remind him as needed that he can use both hands to show the number 5. Can he come up with yet another way to show the number 5 on his fingers?

Activities

Activity 1: How Many Do You Have?

Give your child the activity sheet called "How Many Do You Have?" Tell him to color the number of objects that matches the number and word form for the first three items. For the last two, he'll write the number and word form to show the number of objects shaded.

Activity 2: What Comes Next?

Give your child the number cards 1-5, and ask him to name each number as he holds it up. Now, work together as needed to put them in order from least to greatest. Gather up the cards and mix them up. Ask your child to put them in order from least to greatest again. Once they're in order, point to the 1 and ask your child, "What number comes next?" (2) Repeat with all the cards, stopping at 5. Gather the cards up again.

Now, place the 1, 3, and 5 cards down in order but with spaces between them. Ask your child which cards are missing and where they should go. (2 and 4 are missing) Next, choose a card and ask your child what number comes next. Be sure to choose only 1 through 4 for this task. Repeat until you have reviewed all the numbers and your child is able to identify which numbers come next in the series.

Place the cards in order again and point to the 2. Say: "Two is one more than one." Next, point to the 3 and say: "Three is one more than two." Give your child the base-10 unit blocks and ask him to prove that these statements are true. He should create a group of 1 block and then next to it, create a group of 2 block. Have

him arrange the groups, one above the other, so he that can clearly show that the two group is one more than the one group. Repeat to show that three is one more than two.

Next, give your child the abacus, making sure all beads are moved to the left side. Move two beads all the way to the right on the top wire. Ask: "How many beads will be one more than this two?" Have your child prove it by moving two beads plus one more on the second wire to show three. Repeat with other numbers, making sure not to go higher than five.

Activity 3: More or Less

In this activity your child will be comparing the total number of objects in a group. Begin by showing a group of 2 objects and a group of 4 objects. As you point to the groups, say: "This group of 2 is less than this group of 4." Change the order in which you point to the groups, and say "This group of 4 is greater than this group of 2." Repeat this process with two more pairs of groups and be sure to use the "greater than" and "less than" terminology to model how we use mathematical language.

Next, show two more groups of differing amounts within five, and ask your child to use the correct language ("greater than" and "less than") to compare them. When your child has demonstrated the ability to determine the greater and lesser of two groups, give him the appropriate option for the next task. Option 1 is more concrete than Option 2 because the child is given specific sets of objects to work with. In Option 2, the child is given one set of objects and must create the second set based on given instructions.

Option 1:

Show two sets of objects. Ask your child which set is greater and which set is less. Repeat this process comparing all numbers 1-5. Invite your child to show two sets of objects for you to determine which is greater and which is less.

Option 2:

Show one group of objects. Ask your child to create a second group that is either greater or less depending on the number of objects in the original group. For example, if you show a group of five objects, be sure to ask your child to create a group that shows less than five objects as he has not yet worked with numbers greater than five.

Day 2

Activity 4: Mystery Missing Numbers

In this activity, your child will use his knowledge of the numbers 1-5 to fill in the missing numbers on given number lines. Begin by giving your child a set of mixed-up number cards 1-5 and asking him to put them in order. Then ask him to complete the "Mystery Missing Numbers" page.

Activity 5: Which Has More?

In this activity, your child will continue to compare numbers. Use counters to model the first problem:

- Kate has 5 cookies. (5 counters)
- Thomas has 3 cookies. (3 counters)
- Who has more cookies?

Make sure to line the counters up in rows so that he can see and count the differences between the numbers. Here is how the counters should be set up for this first problem:

OOOOO
OOO

Ask your child to compare the number of counters. Ask: "How many more are in the first row?" (2) "So how many more cookies does Kate have than Thomas?" (2 more cookies)

Now, model how to use the abacus to show the problem. Show the first number on the top wire, moving 5 beads all the way to the right. Show the second number on the second wire, moving 3 beads all the way to the right. Help your child count how many more beads are on the wire that has more beads (in this case, the top wire).

If he is interested in doing so, your child can also use base-10 unit blocks to show how to solve this problem.

Repeat this process using the following scenarios, making sure that your child lines the counters and beads up as previously described to show the problems:

1. Jack scored 4 goals, and Sam scored 2 goals. Who scored more goals? (Jack) How many more goals did he score? (2 more goals)
2. Amy caught 1 firefly, and Kacey caught 5 fireflies. Who caught more? (Kacey) How many more did she catch? (4 more fireflies)

When he is ready, give your child the "Which Has More?" sheet.

Activity 6: Which Is Greater Game

Give your child the "Which Is Greater?" sheet. Ask him to roll a die and write the number that he rolls in the left column on his paper. He will roll again and record the second number in the center column. Tell your child that the 6 means "roll again." In the third column, he will fill in the blanks to show which number is more and how much more it is than the lesser number: "____ is ____ more than ____." Make sure that he knows to put the greater number in the first blank and the lesser number in the last blank.

Allow your child to use a number line, counters, base-10 unit cubes, or the abacus to compare the numbers. Help him line up the counters, cubes, or beads up as needed.

Wrapping Up

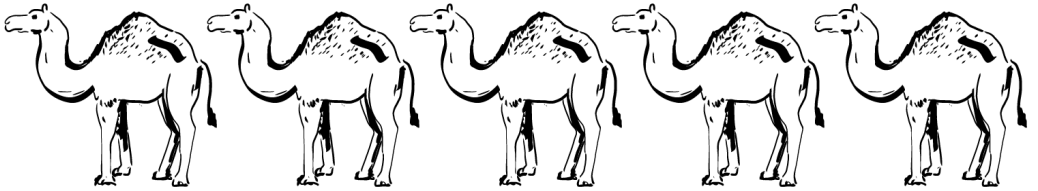
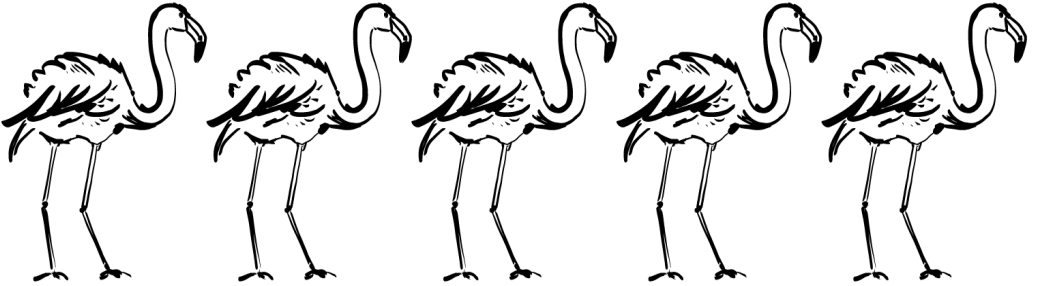
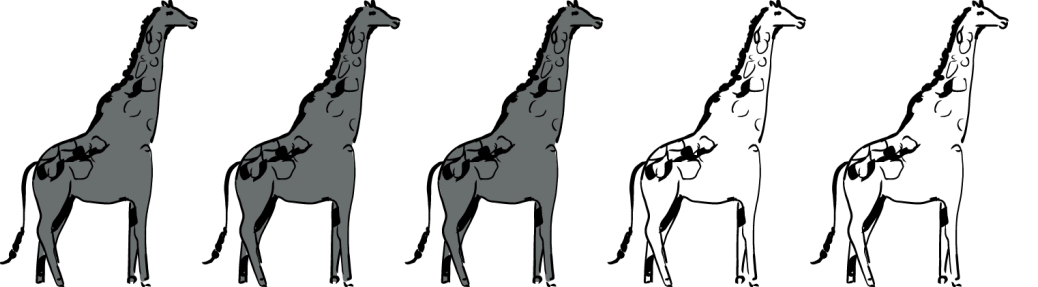
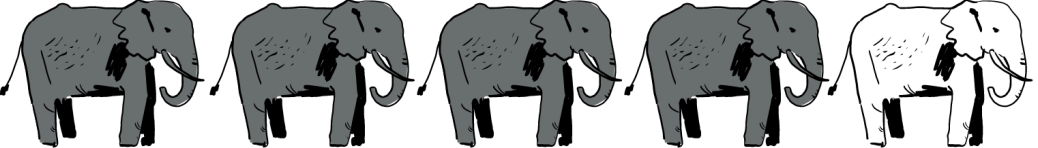
Over the last few lessons, your child has worked with the numbers 1-5 in many ways and has compared and ordered them. If he is still struggling with counting objects to five, give him more opportunities to do so as you go about your daily routines. For example, he might count how many eggs you put into a recipe, how many toothbrushes there are in the bathroom, or how many pages he wants to read in a book.

Learning Gates

Have your child take the [Learning Gates quiz](#) for this lesson.

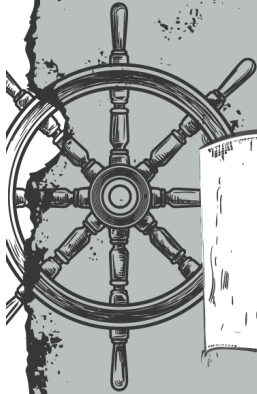
How Many Do You Have?

Directions: Color the correct number of objects as the number given in the first three rows, and write the number and word form to show the number of objects shaded in the last two rows.

2 two	
5 five	
1 one	
	
	

Mystery Missing Numbers

Directions: Fill in the missing numbers in each row.



1 2 _ 4 5



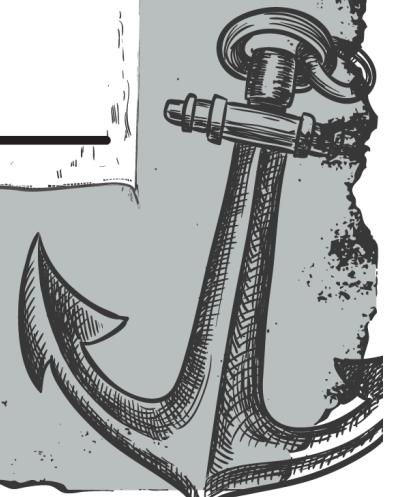
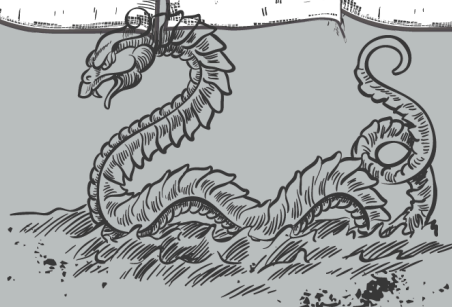
1 _ 3 _ 5

_ _ 3 4 _



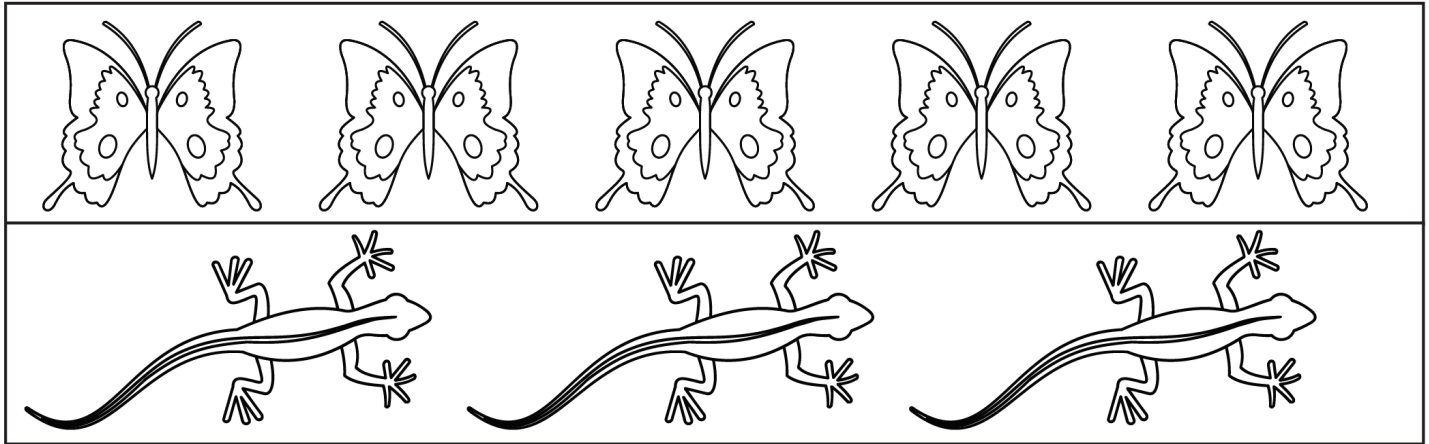
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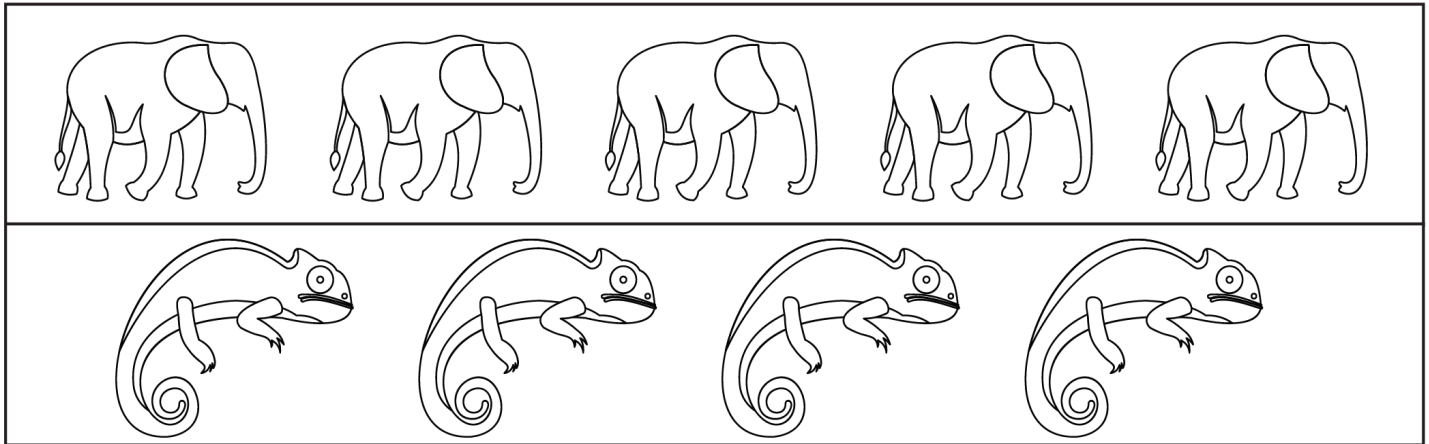


WHICH HAS MORE?

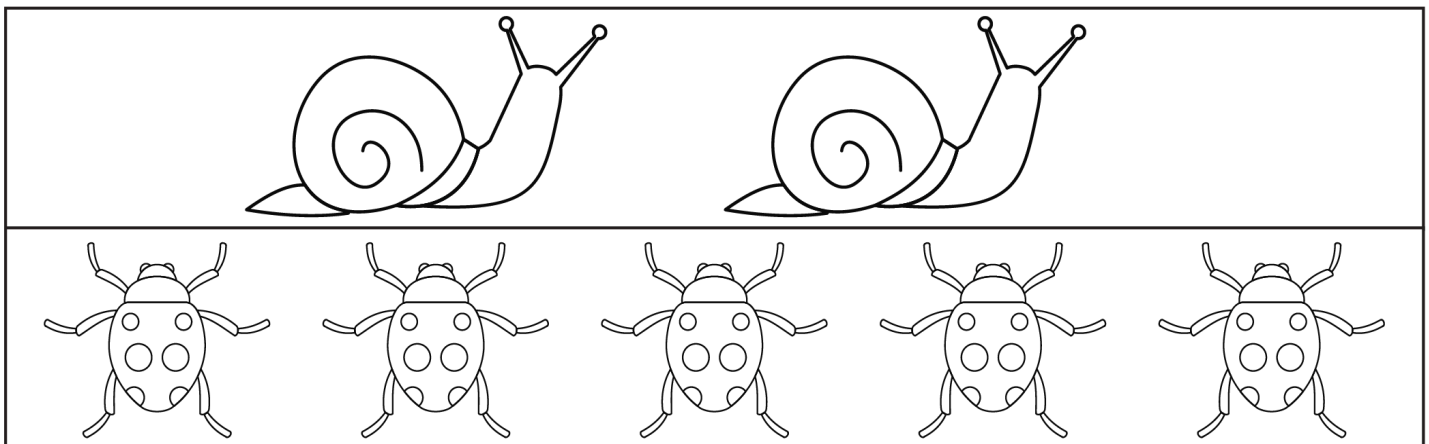
Directions: Look at the two sets of objects and color the set that has more.
Write how many more in the blank.



How many more? _____



How many more? _____



How many more? _____

WHICH IS GREATER?

FIRST ROLL	SECOND ROLL	WHICH IS GREATER?
		___ is ___ more than ___
		___ is ___ more than ___
		___ is ___ more than ___
		___ is ___ more than ___
		___ is ___ more than ___