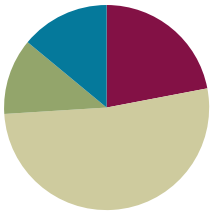
Lesson 1

Objective: Analyze to find two objects that are *exactly the same* or *not exactly the same*.

Suggested Lesson Structure

Fluency Practice	(11 minutes)
Application Problem	(6 minutes)
Concept Development	(26 minutes)
Student Debrief	(7 minutes)
Total Time	**(50 minutes)**



Fluency Practice (11 minutes)

- Counting Beans and Fingers to 3 **K.CC.4a** (5 minutes)
- Show Me Beans **K.CC.4a** (3 minutes)
- Counting with the Number Glove to 3 **K.CC.5** (3 minutes)

Counting Beans and Fingers to 3 (5 minutes)

Materials: (S) Left hand mat (Fluency Template), bag of beans or small counters

Note: This fluency activity was selected in anticipation of future lessons. Although they not work with numbers in this lesson, students need to develop fluency for upcoming lessons in which they work with numbers in depth.

T: Take 1 bean out of your bag, and put it on your mat. Count how many beans are on your mat.

S: 1.

T: Take another bean out of your bag, and put it on your mat. Count how many beans are on your mat now.

S: 1, 2.

T: Yes. Take another bean out of your bag, and put it on your mat. Count how many beans are on your mat now.

S: 1, 2, 3.

NOTES ON FLUENCY PRACTICE:

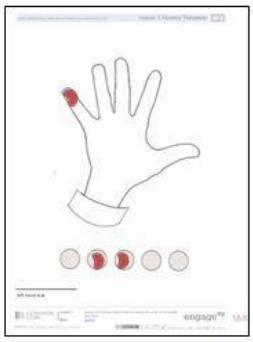
Think of fluency as having three goals:

1. Maintenance (staying sharp on previously learned skills).
2. Preparation (targeted practice for the current lesson).
3. Anticipation (skills that ensure that students are ready for the in-depth work of upcoming lessons). Example of anticipatory fluency: Students must be secure in counting to 5 long before they can be expected to decompose 5.

NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

Any time a new manipulative is introduced, provide children an opportunity to freely explore (play) with it for a few moments before asking them to do anything constructive with it. Students at this age are very excited to use new materials. Allowing them to satisfy their curiosity ensures that you have their full attention when it is time to complete the academic task.

T: Yes. Let's touch and count them one at a time like this: 1, 2, 3.
S: 1, 2, 3 (touch each bean).
T: Move 1 bean to the pinky fingernail. How many fingers have a bean?
S: 1.
T: How many fingernails are under the bean?
S: 1.
T: Is that exactly the same number?
S: Yes!



Continue to 3 in this manner. Give time for students to touch and count, but take notice of which students must recount each time.

Show Me Beans (3 minutes)

Materials: (S) Left hand mat (Fluency Template), bag of beans or small counters

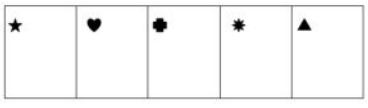
Note: This fluency activity was selected in anticipation of future lessons. Although they are not working with numbers in this lesson, students need to develop fluency for upcoming lessons in which they work with numbers in depth.

T: You're getting very good at counting beans and fingers. Now, we'll play a game called Show Me Beans. I'll say a number, and you put that many beans on the fingernails. Remember to start on the pinky, and don't skip any fingers! Ready? Show me 1.
S: (Place 1 bean on the pinky finger.)
T: Quick… Show me 2.
S: (Place another bean on the ring finger.)
T: Show me 1.
MP.2 S: (Remove a bean from the ring finger.)
T: Show me 2.
S: (Place another bean on the ring finger.)
T: Show me 3.
S: (Place another bean on the middle finger.)

Continue changing the number by 1 within 5 as students demonstrate mastery, taking note of which students need to recount.

NOTES ON MULTIPLE MEANS OF REPRESENTATION:

Since this activity is taught early in the year, the vocabulary might present challenges for some students. Using a 5-frame with a small icon in each corner might aid in focusing students. For example, a frame could have a tree, car, ball, or a triangle in the corner.



Counting with the Number Glove to 3 (3 minutes)

Materials: (T) Right-hand glove with the numbers written on the fingertips from 1 on the pinky finger to 5 on the thumb (looks like left hand from students' perspective)

Note: This fluency activity was selected in anticipation of future lessons. Although they are not working with numbers in this lesson, students need to develop fluency for upcoming lessons in which they work with numbers in depth.

Number Glove Viewed from the Students' Perspective.

T: Watch my number glove and count with me. Ready? (Begin with a closed fist, and then show the pinky finger, followed by the ring finger, and then the middle finger.)

S: 1, 2, 3.

T: Stay here at 3. Let's count back down to 1. Ready? (Put down the middle finger and then the ring finger.)

S: 3, 2, 1.

Continue counting up and down a few more times.

T: You're ready for something harder! This time we'll count up and down, like a wave. Watch my glove, and you'll know just what to do.

S: 1, 2, 3, 2, 1, 2, 1, 2, 1, 2, 3, 2, 3, 2, 3…

Listen for hesitation as students count, rather than counting along with them.

Application Problem (6 minutes)

Materials: (T) Blue sock

Hold up a blue sock.

T: Please draw a picture of this sock.

Note: In the Debrief, students look at all the socks drawn. There might be some that are *exactly the same* (or very, very close), and there are many that are *not exactly the same.* Using the socks that they drew as part of the Debrief helps to engage all students.

Concept Development (26 minutes)

Materials: (T) Pairs of socks (or any other pairs of items available) in a variety of patterns, colors, sizes, and lengths in a laundry bag

Call students to the rug. Display the socks, and allow students to look, touch, and talk about them.

T: I just came back from the laundromat, and now I have to match up all of these pairs of socks. Look at these two. (Hold up two blue socks.) These two are **exactly the same** because they are both…? (Signal to elicit the response.)

S: Blue!

T: So, they are both exactly the same color.

T: (Hold up a red knee sock and a red ankle sock.) What color are these two socks?

S: Red.

T: These two are both red, but they are **not exactly the same**. One is big, and the other one is…? (Signal.)

S: Small!

T: So, they are not exactly the same.

T: (Hold up two socks that are similar.) Who can explain why these are not exactly the same?

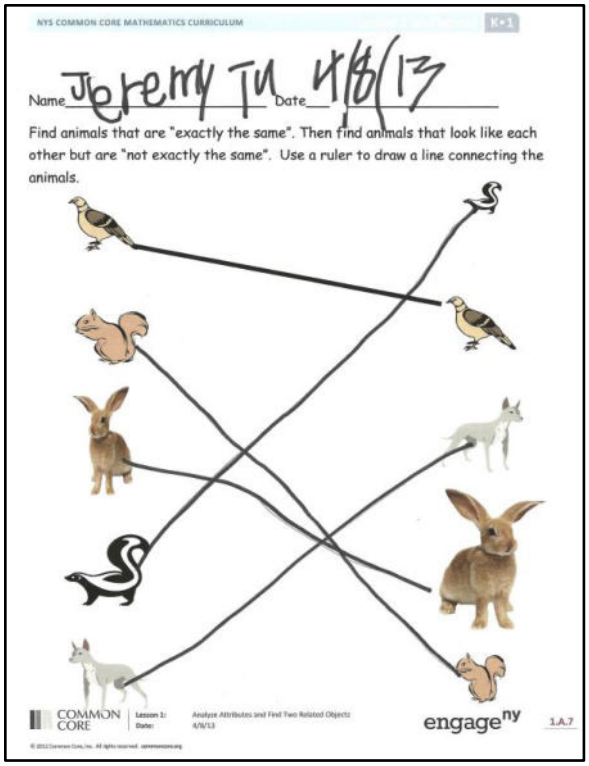
S: They both have kitties on them, but the kitties on this one are orange, and the kitties on that one are black.

Continue to talk about the attributes of the different socks, guiding students to use the new terms *exactly the same* and *not exactly the same*. Allow for varied interpretations and ambiguity. Encourage students to justify their reasoning. A student might offer a clever analysis, e.g., the two socks of a pair are not exactly the same because one is worn on the left foot and the other on the right.

T: Let's play the Exactly the Same Game. When I call you, pick up one sock. (Call students until everyone has a sock.)

T: When the music begins, I want you to slowly and calmly walk around the room until you find a sock that is exactly the same as yours. When you find the sock, link arms with the person who has it like this (demonstrate) and say, "Our socks are exactly the same!" See if you can get together before the music stops! (Start the music. Stop. Check. Clarify.)

T: Very good. Let's play again. (Have students trade so they each get a new sock.)


NYS COMMON CORE MATHEMATICS CURRICULUM K•1

Name Jeremy TN Date 4/8/13

Find animals that are "exactly the same". Then find animals that look like each other but are "not exactly the same". Use a ruler to draw a line connecting the animals.

COMMON CORE Lesson 1: Date: Analyze Attributes and Find Two Related Objects 4/8/13

engage^ny 1.A.7

Problem Set (5 minutes)

Students should do their personal best to complete the Problem Set within the allotted time.

Distribute the Problem Set to students.

Have students draw a line connecting similar objects using a ruler. Demonstrate the use of a ruler as a straightedge. Walk around the room to support those students who need help with the ruler.

Student Debrief (7 minutes)

Lesson Objective: Analyze to find two objects that are *exactly the same* or *not exactly the same*.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience.

Invite students to review their solutions for the Problem Set. They should check work by comparing answers with a partner before going over answers as a class. Look for misconceptions or misunderstandings that can be addressed in the Debrief. Guide students in a conversation to debrief the Problem Set and process the lesson.

Any combination of the questions below may be used to lead the discussion.

- Are your shoes **exactly the same**?
- Does the left shoe look exactly the same as the right?
- Let's look at our pictures of the sock. Is this picture the same as that one?
- Why are our pictures **not exactly the same**?
- How can you tell if two things are exactly the same or not exactly the same?

NOTES ON MULTIPLE MEANS OF EXPRESSION:

Open the Student Debrief with *turn and talk* to your neighbor: Allow students to try out their ideas with a partner first before speaking to the whole class.

Exit Ticket (3 minutes)

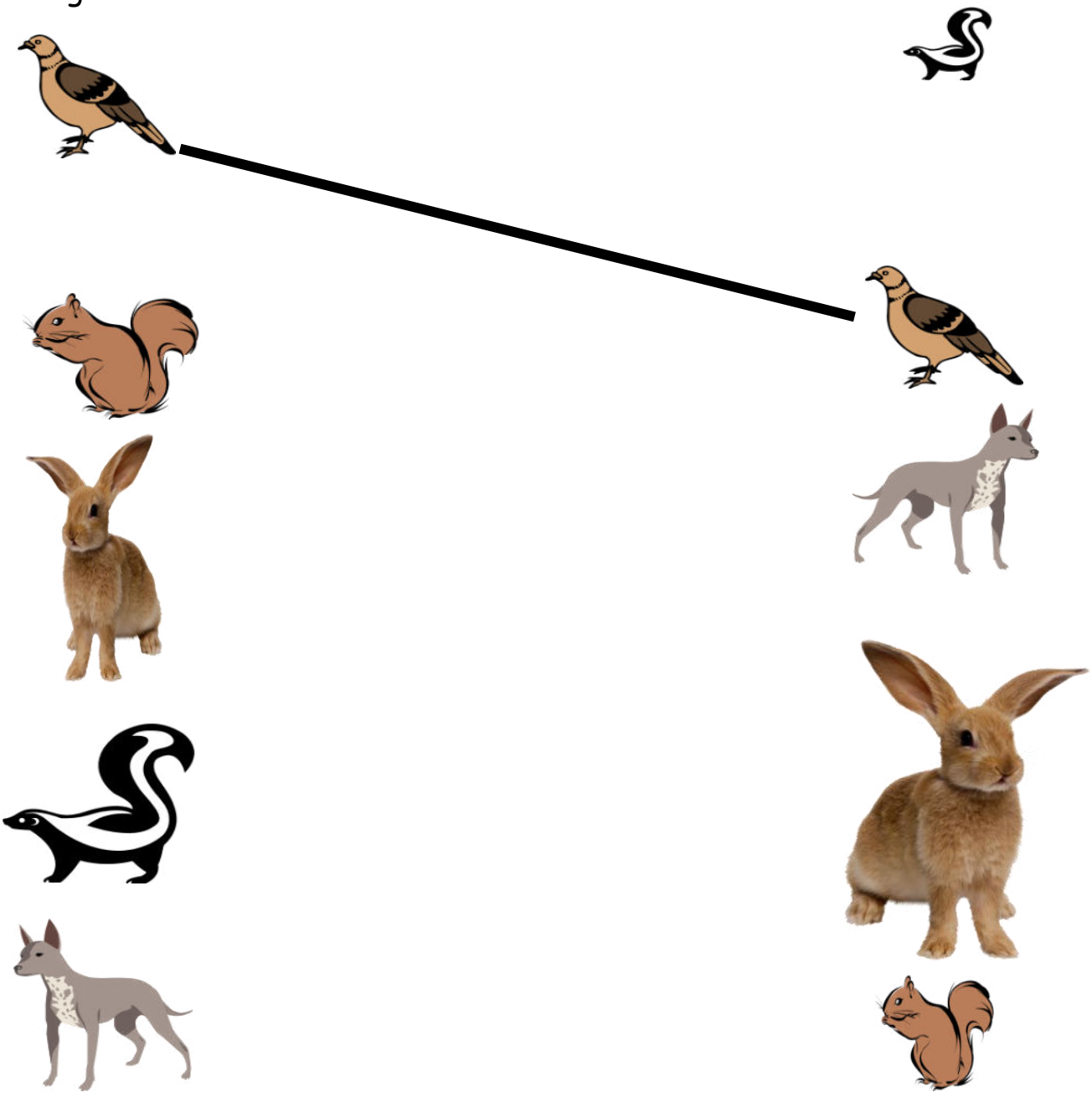
After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help with assessing students' understanding of the concepts that were presented in today's lesson and planning more effectively for future lessons. The questions may be read aloud to the students.

Homework

Homework at the K–1 level is not a convention in all schools. In this curriculum, homework is an opportunity for additional practice of the content from the day's lesson. The teacher is encouraged, with the support of parents, administrators, and colleagues, to discern the appropriate use of homework for his or her students. Fluency exercises can also be considered as an alternative homework assignment.

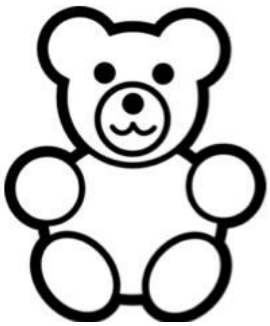
Name _____ Date _____

Find animals that are exactly the same. Then, find animals that look like each other but are not exactly the same. Use a ruler to draw a line connecting the animals.



Name _____ Date _____

Tell a partner why these are exactly the same or not exactly the same.



Name _____ Date _____

Color the things that are the same. Color them so that they look like each other.

left hand mat