

Mathematics Lesson: Let's Explore Equal Groups

Grade 3 Quarter 1 Understanding Equal Groups: Lesson 1

State Standard(s)

NC.3.OA.1 For products of whole number with two factors up to and including 10:

- Interpret the factors as representing the number of equal groups and the number of objects in each group.
- Illustrate and explain strategies including arrays, repeated addition, decomposing a factor, and applying the commutative and associative properties

Student Outcomes

Students will become familiar with mathematical norms and routines. Students will be able to create equal groups given a specific number.

Math Language

Equal groups, skip count

Standards for Mathematical Practice

4C Integration

Communication- Modeling the "how to listen" rules; talking with a partner about equal groups (*Launch, Explore, Discuss*)

Collaboration- Talking with a partner about equal groups (*Explore*)

Materials

- Teacher Copy- "How To Listen" Poster (**keep for future lessons**), "Sentence Frame"; "Math Talk Move- Revoicing"
- Bags of two-color counters (20 counters per bag)
- Blackline Master- "Equal Groups I See"

Homework

- None

Mathematics Lesson

Let's Explore Equal Groups

Teacher Note: This unit is building the foundation for multiplication and division, with emphasis on fluency for numbers 2, 5, and 10. Instruction should focus on equal groups, repeated addition, repeated subtraction and arrays. Students should not be exposed to writing multiplication equations until Lesson 5. They should not be exposed to or assessed on writing division equations during this unit.

Launch: Establishing Norms and Routines

- Bring students together and them that today they begin to build their mathematics community. Remind students that a community is a group of people that have something in common. The commonality we have is being in the same class.
- Next tell students that during the year it will be important to show others that we are listening to them. Discussion is crucial to show our understanding of math. Display the Teacher Copy "How to Listen" poster and explain the three rules that are on the poster.
- Chose 3 students and ask them to come to the center of the circle and show the class what it looks like to listen. Chose 1 person to be the speaker and the others to be the listeners. Have the speaker say "I like math," three times, while the listeners model correct listening behavior.
- Repeat step 3 two more times alternating between having the students model correct behavior and incorrect behavior.
- Display the Teacher Copy "Math Talk Move- Revoicing." Explain that as the lesson continues the students will be using a talk move called revoicing. Revoicing is when you say what their partner has said. Revoicing what someone else has said is important for 3 reasons: 1) it validates the speaker or makes them feel proud of themselves (proud picture), 2) helps us to understand what was said (face with light bulb), and 3) it gives others more time to think

with question marks.)

Lesson Continued Next Page

Mathematics Lesson
Let's Explore Equal Groups
Continued

Explore: Exploring With Manipulatives

- Distribute the two-color counters to the students and tell them that they will be using them today to make groups. Give the student 2-3 minutes to practice making groups with the counters.
- After that time, redirect student's attention to the Teacher Copy "How to Listen" poster. Review the rules on the poster.
- Ask students to tell you something they discovered while making groups with the counters. After a student has shared, have another student revoice what was said. Review the reasons for revoicing a statement.

Explore Continued: Using Counters to Show Equal Groups

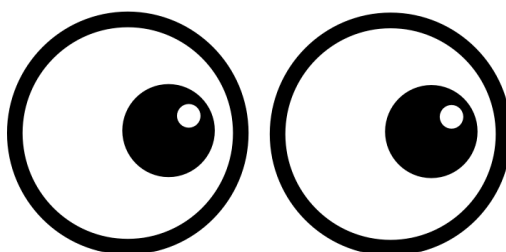
- Have the students Number off using only the number 1 & 2. Two students next to each other will be partners. One should have the number 1 and one should have the number 2.
- Tell the students that they will be practicing being good listeners and practicing using good mathematics language while talking about how they grouped their counters.
- Display the Teacher Copy "Sentence Frame": I have _____ equal groups of ____ counters. There are _____ counters total. I can skip count like this _____. **Example:** I have 5 equal groups of 2 counters. There are 10 counters total. I can skip count 2, 4, 6, 8, 10.
- Count out 10 counters from the bag. Distribute the counters into 5 equal groups. Then model how to skip count by twos.
- Use Teacher Copy "Sentence Frame" to model the sentences the students will be saying to each other.
- Using all 20 of the counters, ask students to make two equal sized groups. Have the students count the number of counters in each group.
- Tell Partner 1 to use the sentence frame to describe the counters: I have _____ equal groups of ____ counters. There are _____ counters total. I can skip count like this _____. Partner 2 should revoice what Partner 1 said.
- Review the Teacher Copy "Talk Moves- Revoicing", and provide positive feedback to a student that repeated what their partner said.
- Repeat steps 4 and 5 using 4, 5 and 10 as the number of groups, and having the partners take turns stating and revoicing the sentences.

Discuss

- Bring students back together and lead the class in a discussion of what they noticed when forming the equal groups.
- Ask students:
 - "What was the same about making equal groups and skip counting?"
 - "What did you notice about the number of groups when the size of the group was larger?"
 - "What did you notice about the number of groups when the size of the group was smaller?"

How To Listen

Eyes looking at speaker



Voice turned off



Body i ntrol



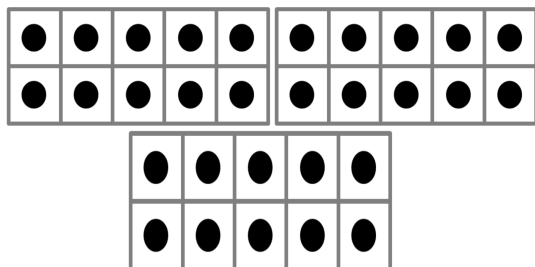
Sentence Frame

I have _____ equal groups
of _____ of counters. There
are _____ total counters. I
can skip count _____,
_____,
_____.

Name: _____

Equal Groups I See

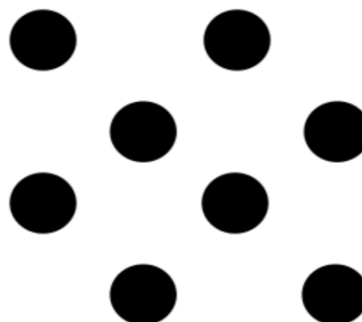
Directions: Complete the sentence to tell how many equal groups.



I have _____ equal groups _____ counters.

There are _____ counters total.

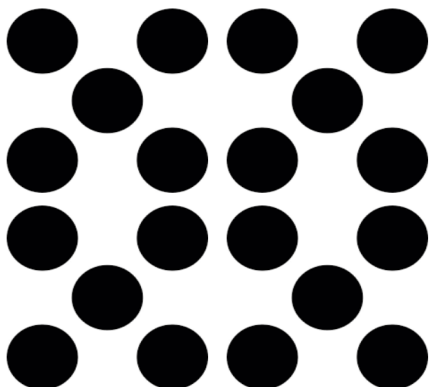
I can skip count _____, _____, _____.



I have _____ equal groups _____ counters.

There are _____ counters total.

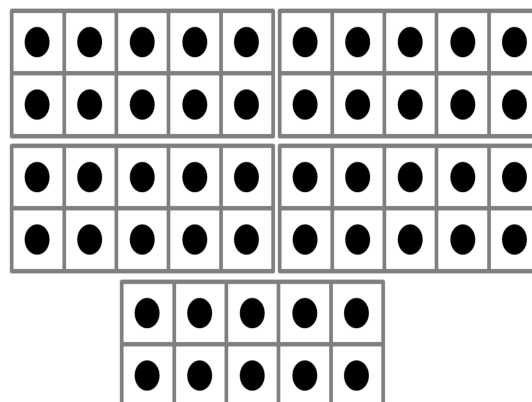
I can skip count _____, _____, _____, _____.



I have _____ equal groups _____ counters.

There are _____ counters total.

I can skip count _____, _____, _____, _____.



I have _____ equal groups _____ counters.

There are _____ counters total.

I can skip count _____, _____, _____, _____.

Math Talk Move- Revoicing

**Validates your classmate's
thinking**



**Helps you understand your
classmate's thinking**



**Gives others more time to think
about what was said**

