Nicks
Monday, Oct. 9th
3rd-5th Grade Teachers

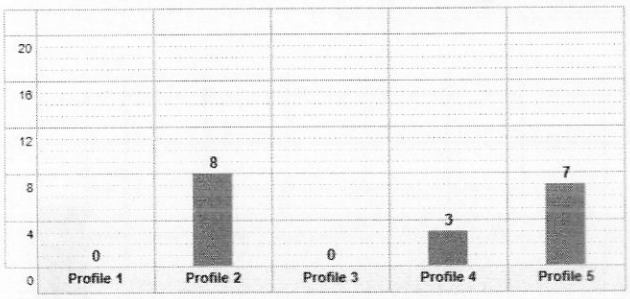
I-Ready Reports Review

Instructional Grouping Profile-

- Shows students arranged into groups by ability level.
- Indicates next steps for instruction by domain
- I-ready Teacher Toolbox lesson numbers that can be used for differentiated lessons for each "Profile" group.

Profile Overview

18 out of 19 Students Tested in Window 1 (08/14/2017 - 09/08/2017)



Profile 1	Below level in Numbers and Operations or Algebra and Algebraic Thinking	Two or more grades below level in Number and Operations or Algebra and Algebraic Thinking
Profile 2		One grade below level in Numbers and Operations or Algebra and Algebraic Thinking
Profile 3	On or above level in Numbers and Operations and Algebra and Algebraic Thinking	Two or more grades below level in Geometry or Measurement and Data
Profile 4		One grade below level in Geometry or Measurement and Data
Profile 5		On or above level in all domains

Students in Each Grouping Profile

Ready Teacher Toolbox-

- https://teacher-toolbox.com/
- Access to all grade level materials
- Can be used in addition to GO MATH for support/differentiation/para

  <u>Practice Book-</u>

  Example: Lesson 1 Understanding the Meaning of Multiplication pg.3-8

  ANSWER KEY: Teacher edition answer key is included
-
-
-

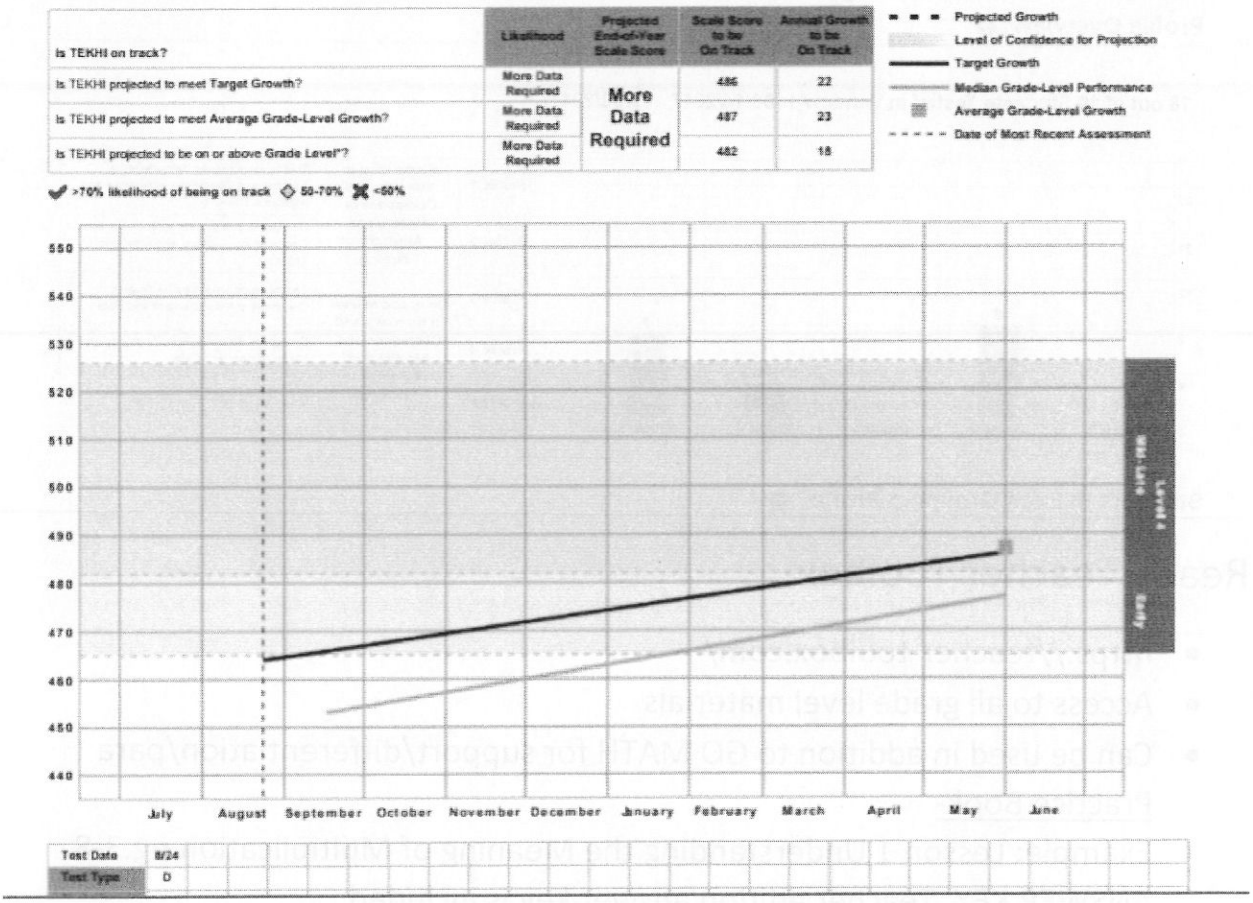
  <u>Teacher Led/ Tools for Instruction-</u>

  Example: Multiplication concepts and sentences pg. 1-2
-

Monday, Oct. 9th
3rd-5th Grade Teachers

Growth Monitoring Report-

- Shows Diagnostic data as well as Growth Monitoring data from "Growth Checks"
- Refer to checklist to help you keep track of students' progress.
- Individually for each student AND class report for all students



Is TEKHI on track?	Likelihood	Projected End-of-Year Scale Score	Scale Score to be On Track	Annual Growth to be On Track
Is TEKHI projected to meet Target Growth?	More Data Required	More Data Required	486	22
Is TEKHI projected to meet Average Grade-Level Growth?	More Data Required		487	23
Is TEKHI projected to be on or above Grade Level?	More Data Required		482	18

Use this report to monitor how your students are progressing against growth targets, and whether your students are on track to meet expected growth by the end of the year (EOY).

Summary

Name	Average Projected EOY Scale Score	Target Growth (to be met by EOY)		Average Grade-Level Growth (to be met by EOY)		On/Above Grade Level (to achieve by EOY)		Number of Students in Summary	Total Students
		Average Scale Score Target	% Students Likely to Meet Target	Average Scale Score to make Growth	% Students Likely to Meet Growth	Average Scale Score to be On Level	% Students Likely to be On Level		
281512 03 Sims	N/A	489	0%	490	0%	482	0%	19	19

Student Detail

>70% likelihood of being on track 50-70% <50%

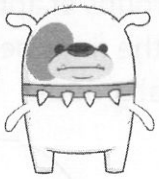
Practice Book

Lesson 1

Understand the Meaning of Multiplication

Name: Paras?

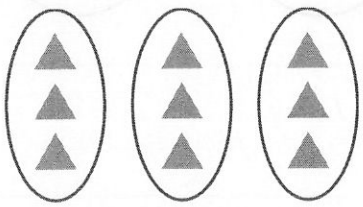
Prerequisite: How do you know if groups are equal?



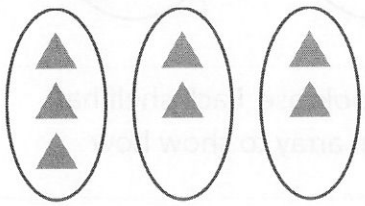
Study the example problem showing equal groups and unequal groups. Then solve problems 1–6.

Example

Tell whether each picture shows equal groups.



This picture shows equal groups.



This picture shows unequal groups.

1 How many triangles are in each group in the first picture from the Example? _____

How many triangles are in each group in the second picture? _____

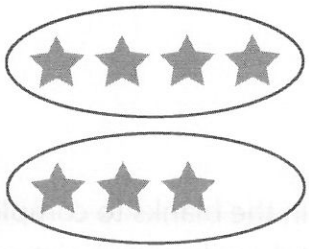
2 Why does the first picture show equal groups?

_____

_____

_____

3 Look at the picture to the right. Does it show equal groups? How do you know?



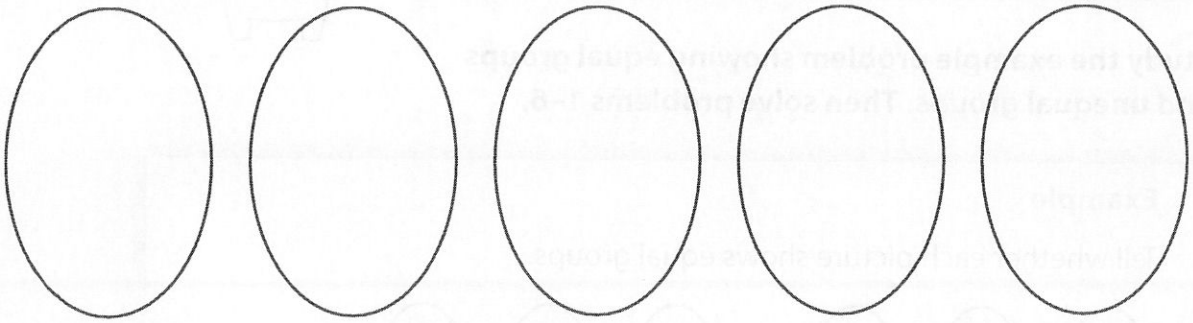
_____

_____

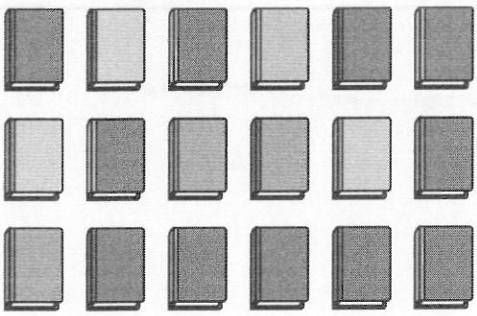
_____

Solve.

4 Becky has 5 groups of apples. Each group has 2 apples. Use the rings below. Draw all the apples to show the equal groups.



5 Mike has 3 shelves in his bookcase. Each shelf has 6 books on it. Mike drew an array to show how many books he has.



How many rows does the array have? _____

How many books are in each row of the array? _____

6 John earned 3 dollars 4 times.

Draw a picture to show this.

Fill in the blanks to complete the addition sentence that describes your picture.

_____ + _____ + _____ + _____ = _____

Vocabulary

array a set of objects arranged in equal rows and equal columns.

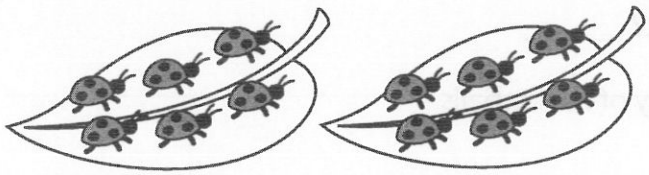
Name: _____

Use Equal Groups to Think About Multiplication

Study the example problem showing a multiplication sentence to represent equal groups. Then solve problems 1–9.

Example

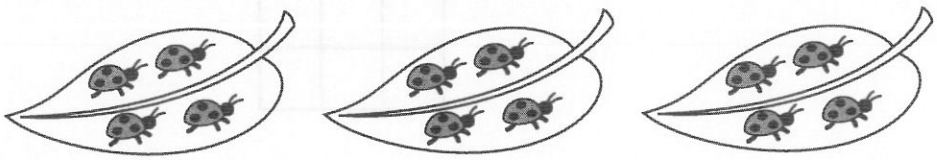
There are 2 leaves. There are 6 ladybugs on each leaf. How many ladybugs are there altogether? Write a multiplication sentence.



There are 2 equal groups of ladybugs. Each group has 6 ladybugs.

Multiplication sentence: $2 \times 6 = 12$

Use the picture below to answer problems 1–4.



1. How many equal groups are there? _____

2. How many ladybugs are in each group? _____

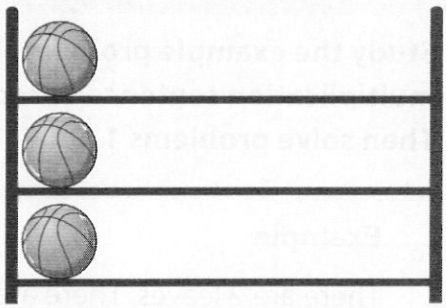
3. How many ladybugs are there altogether? _____

4. Write a multiplication sentence about the number of ladybugs.

_____ × _____ = _____

Solve.

5 The basketball cart has 3 shelves. Each shelf can hold 5 basketballs. There is already 1 basketball on each shelf. Draw the rest of the basketballs to fill the cart.



6 Look at your picture of the basketballs on the cart. Think about the basketballs as an array.

How many rows are in the array? _____

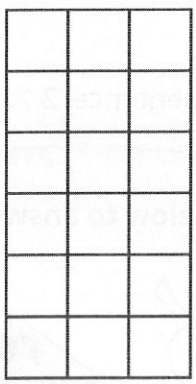
How many basketballs are in each row? _____

How many basketballs are on the cart? _____

7 Fill in the blanks to represent the array of basketballs with a multiplication sentence.

_____ × _____ = _____

8 Write the multiplication sentence to represent the squares in the rectangle.



_____ × _____ = _____

9 Draw an array of square tiles to show $4 \times 6 = 24$.

Name: _____

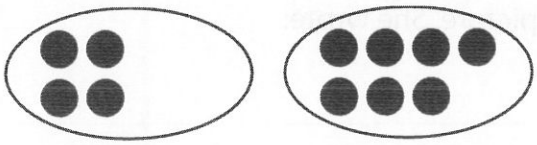
Reason and Write

Study the example. Underline two parts that you think make it a particularly good answer and a helpful example.

Example

Casey drew a picture to show 4×7. He wrote:

My picture shows that $4 \times 7 = 11$.

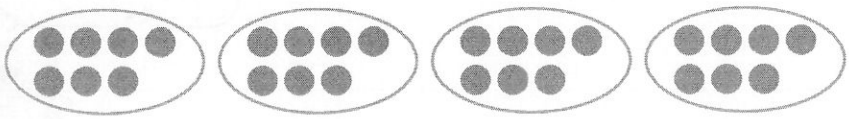


What did Casey do right? What did he do wrong?

Use pictures, words, and numbers to explain.

Casey drew loops to put models into equal groups. He knew that 4 and 7 were important numbers, but he modeled addition instead of multiplication. He drew a model for $4 + 7$ instead of 4×7. He thought of 4 and 7 as addends instead of factors.

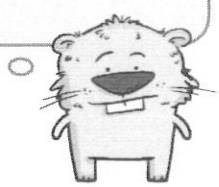
Casey should have shown 4×7 as 4 groups of 7 objects, so he needed to draw 4 loops with 7 objects in each loop. His drawing should look like this.



Then he would see that $4 \times 7 = 28$.

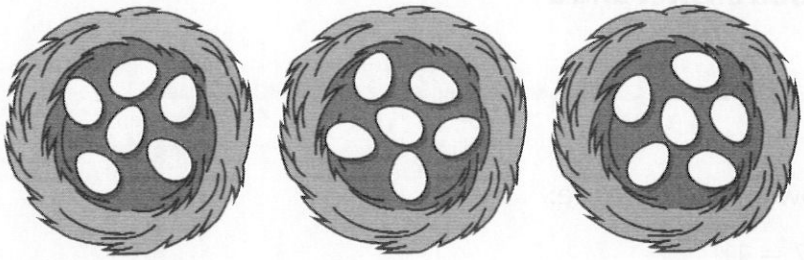
Where does the example . . .

- *use a picture to explain?*
- *use numbers to explain?*
- *use words to explain?*
- *give details?*



Solve the problem. Use what you learned from the example.

Jan found this picture of nests with eggs in them.



She wrote a multiplication sentence about the picture. She wrote:

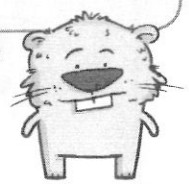
$3 \times 5 = 15$

Explain what Jan did right. What did she do wrong?

Show your work. Use pictures, words, or numbers to explain your answer.

Did you . . .

- use a picture to explain?
- use numbers to explain?
- use words to explain?
- give details?



Lesson 1

Understand the Meaning of Multiplication

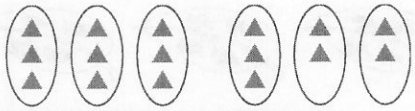
Name: _____

Prerequisite: How do you know if groups are equal?

Study the example problem showing equal groups and unequal groups. Then solve problems 1–6.

Example

Tell whether each picture shows equal groups.



This picture shows equal groups.

This picture shows unequal groups.

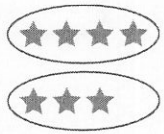
B 1 How many triangles are in each group in the first picture from the Example? 3

How many triangles are in each group in the second picture? 3, 2, 2

M 2 Why does the first picture show equal groups?

Possible answer: Each group in the first picture has the same number of triangles, so the groups are equal.

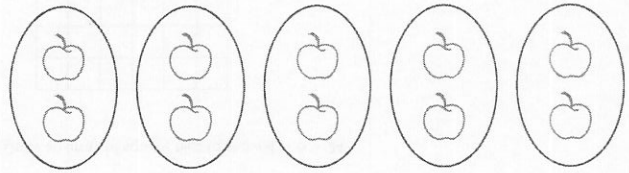
M 3 Look at the picture to the right. Does it show equal groups? How do you know?



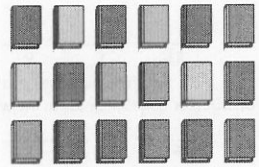
Possible answer: The picture does not show equal groups. One group has 4 stars but the other group has 3 stars.

Solve.

M 4 Becky has 5 groups of apples. Each group has 2 apples. Use the rings below. Draw all the apples to show the equal groups.



M 5 Mike has 3 shelves in his bookcase. Each shelf has 6 books on it. Mike drew an array to show how many books he has.



How many rows does the array have? 3

How many books are in each row of the array? 6

C 6 John earned 3 dollars 4 times.

Draw a picture to show this.

Students should draw 4 groups with $3 in each group.

Fill in the blanks to complete the addition sentence that describes your picture.

3 + 3 + 3 + 3 = 12

Vocabulary

array a set of objects arranged in equal rows and equal columns.

Key

B Basic M Medium C Challenge

Lesson 1

Name: _____

Use Equal Groups to Think About Multiplication

Study the example problem showing a multiplication sentence to represent equal groups. Then solve problems 1–9.

Example

There are 2 leaves. There are 6 ladybugs on each leaf. How many ladybugs are there altogether? Write a multiplication sentence.

There are 2 equal groups of ladybugs. Each group has 6 ladybugs.

Multiplication sentence: $2 \times 6 = 12$

Use the picture below to answer problems 1–4.

B 1 How many equal groups are there? 3

B 2 How many ladybugs are in each group? 4

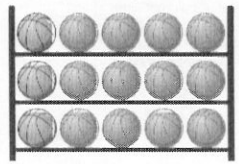
B 3 How many ladybugs are there altogether? 12

C 4 Write a multiplication sentence about the number of ladybugs.

3 × 4 = 12

Solve.

M 5 The basketball cart has 3 shelves. Each shelf can hold 5 basketballs. There is already 1 basketball on each shelf. Draw the rest of the basketballs to fill the cart.



M 6 Look at your picture of the basketballs on the cart. Think about the basketballs as an array.

How many rows are in the array? 3

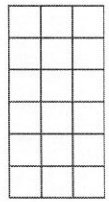
How many basketballs are in each row? 5

How many basketballs are on the cart? 15

M 7 Fill in the blanks to represent the array of basketballs with a multiplication sentence.

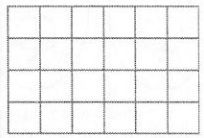
3 × 5 = 15

C 8 Write the multiplication sentence to represent the squares in the rectangle.



6 × 3 = 18

C 9 Draw an array of square tiles to show $4 \times 6 = 24$.



Name: _____

Reason and Write

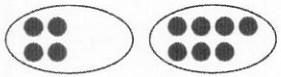
Study the example. Underline two parts that you think make it a particularly good answer and a helpful example.

Answers will vary. Note whether students incorporate the features they chose in their answer on the next page.

Example

Casey drew a picture to show 4×7. He wrote:

My picture shows that $4 \times 7 = 11$.



What did Casey do right? What did he do wrong?

Use pictures, words, and numbers to explain.

Casey drew loops to put models into equal groups. He knew that 4 and 7 were important numbers, but he modeled addition instead of multiplication. He drew a model for $4 + 7$ instead of 4×7. He thought of 4 and 7 as addends instead of factors.

Casey should have shown 4×7 as 4 groups of 7 objects, so he needed to draw 4 loops with 7 objects in each loop. His drawing should look like this.

Then he would see that $4 \times 7 = 28$.

Where does the example . . .
- use a picture to explain?
- use numbers to explain?
- use words to explain?
- give details?

Solve the problem. Use what you learned from the example.

Jan found this picture of nests with eggs in them.

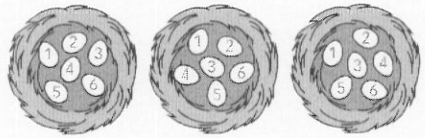
She wrote a multiplication sentence about the picture. She wrote:

$3 \times 5 = 15$

Explain what Jan did right. What did she do wrong?

Show your work. Use pictures, words, or numbers to explain your answer.

Possible answer: Jan's multiplication sentence is a correct sentence, because $3 \times 5 = 15$. It is just not the right multiplication sentence for the picture. There are 3 groups of eggs, so the 3 is correct. There are an equal number of eggs in each nest, so multiplication is correct. But the number 5 doesn't match the number of eggs in each nest in the picture. There are 6 eggs in each nest.



Jan might have counted the number of eggs in each nest wrong. The multiplication sentence should be $3 \times 6 = 18$. This is because 3×6 means 3 groups of 6.

Did you . . .
- use a picture to explain?
- use numbers to explain?
- use words to explain?
- give details?

Teacher Led (teacher/para/ESE)

Multiplication Concepts and Sentences

Objectives Model multiplication using equal groups and repeated addition. Write repeated addition and multiplication number sentences.	**Materials** per group: 30 counters, 5 small cups (optional)

This activity builds on students' understanding of equal groups and fluency with addition, and applies these concepts to the meaning of multiplication. Students learn to form equal groups of objects and find the number of objects in each group, as well as the total number of groups. They use repeated addition to represent and find the total number of objects and then relate this representation to a multiplication sentence $n \times m$ (n groups of m objects). They discover that multiplication is more efficient than repeated addition because it requires fewer calculations ($n \times m$ instead of $m + m + m + \ldots$). Students will build on these skills when they learn to divide by making equal groups and using repeated addition.

Step by Step 20–30 minutes

1 Divide items into equal groups and write number sentences.

- Organize students into small groups. Distribute the counters and cups. If cups are not available, students may make small groups of counters on a flat surface.
- Have students place 4 counters in each of 3 cups. Say: *There are different ways to find the total number of counters, without combining the groups and counting all of them together.*
- Ask: *How many counters are in each cup? What addition sentence shows the total of the equal groups?* Guide students to write: $4 + 4 + 4 = 12$.
- Have students complete the phrase "_____ *groups of* _____" to describe the equal groups. For example, students might say, "Three groups of four."
- Ask: *What multiplication sentence shows the total?* Lead students to write "$3 \times 4 = 12$," emphasizing that the multiplication symbol replaces "groups of."

2 Repeat with different equal groups.

- Repeat with more counters. For example, have students place 5 counters in each of 4 cups.
- Ask: *What addition sentence shows the total of the equal groups?* ($5 + 5 + 5 + 5 = 20$)
- Have students write a multiplication sentence and read it in words. (Students write: $5 \times 4 = 20$ and read, "Four groups of five.")

3 Describe the relationship between repeated addition and multiplication.

- Write each pair of addition and multiplication number sentences on the board, side by side.
- Have students describe how the two sentences are related. Help them to conclude that both show the same quantity of objects in each group, but the addition sentence adds that quantity in each group and the multiplication sentence multiplies the number of groups by that quantity.
- Ask students to write two different number sentences for 7 equal groups of 5 without using counters to model the problem. Guide students to conclude that they could use repeated addition or multiplication to find the total. ($5 + 5 + 5 + 5 + 5 + 5 + 5 = 35$; $7 \times 5 = 35$)

5 Extend the model.

- Discuss why it is more efficient to multiply than to add repeatedly.
- Use an example such as 10×2, for multiplying 10 and 2 versus adding 2 ten times.

Check for Understanding

Present the student with the following problem: Use counters to model 5 equal groups of 6. Write a multiplication sentence and a repeated addition sentence to represent the situation. ($6 + 6 + 6 + 6 + 6 = 30$, $5 \times 6 = 30$)

For the student who struggles, use the chart below to help pinpoint where extra help may be needed.

If you observe...	the student may...	Then try...
the student writes the sentence $5 + 6$ instead of 5×6	not understand the difference between the meaning of addition and multiplication.	having the student use counters to add 5 and 6 and showing that this is a group of 5 and a group of 6, not 5 equal groups of 6.
the student writes the sentence $5 + 6$ instead of $5 + 5 + 5 + 5 + 5 + 5$ or $6 + 6 + 6 + 6 + 6$	be confused about the idea of repeated addition.	giving the student practice with repeated addition by skip-counting by 2s, 3s, and 5s to find a sum. Have the student model skip-counting with groups of counters and repeated addition sentences.

i-Ready Growth Monitoring Checklist for Teachers

Use this checklist to ensure that you are maximizing *i-Ready* to achieve the greatest possible impact for your students. This list includes key steps and tips to keep in mind as you monitor student growth.

After three different months of data from any combination of Diagnostics and Growth Monitoring assessments, *i-Ready* projects a student's trajectory toward end-of-year targets, adjusting to become more precise with each administration. The purpose of Growth Monitoring is to answer the questions "How much growth should my student make?" and "Is my student on track to make that growth?" Growth Monitoring reports do not provide specific instructional recommendations but can alert you when students are not achieving as much growth as expected.

- ☐ Check for completion after each scheduled Growth Monitoring Assessment.
- ☐ After three different months of Diagnostic and Growth Monitoring assessments, access and review the Class Growth Monitoring report to monitor how your students are progressing against growth targets, and whether your students are on track to meet expected growth by the end of the year (EOY).
- ☐ View projected growth details for individual students by clicking on the student name from the Class Growth Monitoring report. Pay special attention to students who are 50–70% likely (yellow diamond) or <50% likely (red X) to meet any targets.
- ☐ Consider instructional adjustments for students as needed.

See the i-Ready Teacher Training Guide for more detailed information and step-by-step guidance.

Login: login.i-ready.com
Resources: i-readycentral.com