



1st Grade

Intervention Lessons

Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects

Readiness for K.NBT.1: Name numbers to 20

Table of Contents

Session 1: Planning Guide p. 4

Session 1: Self-Reflection p. 5

Sessions 2, 3, and 4: Planning Guide p. 6

Sessions 2, 3, and 4: Lesson Resources p. 7-19

Independent Practice Activity: **“Guess How Many”** p. 20-26

Classroom Poster: Questions for Solving Word Problems p. 27

Tier 1 Support Classroom Poster: Steps for Solving Word Problems p. 28

IES Recommendations for Tier 2 and 3 intervention lessons:

2. Instructional materials for students receiving interventions should focus intensely on in-depth treatment of whole numbers in kindergarten through grade 5 and on rational numbers in grades 4 through 8. These materials should be selected by committee.	Low
3. Instruction during the intervention should be explicit and systematic. This includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review.	Strong
4. Interventions should include instruction on solving word problems that is based on common underlying structures.	Strong
5. Intervention materials should include opportunities for students to work with visual representations of mathematical ideas and interventionists should be proficient in the use of visual representations of mathematical ideas.	Moderate
6. Interventions at all grade levels should devote about 10 minutes in each session to building fluent retrieval of basic arithmetic facts.	Moderate
7. Monitor the progress of students receiving supplemental instruction and other students who are at risk.	Low
8. Include motivational strategies in tier 2 and tier 3 interventions.	Low

(Institute of Educational Sciences, Assisting Students Struggling with Mathematics: Response to Intervention (RtI) for Elementary and Middle Schools, 2009, p. 6)

Gradual release of responsibility model

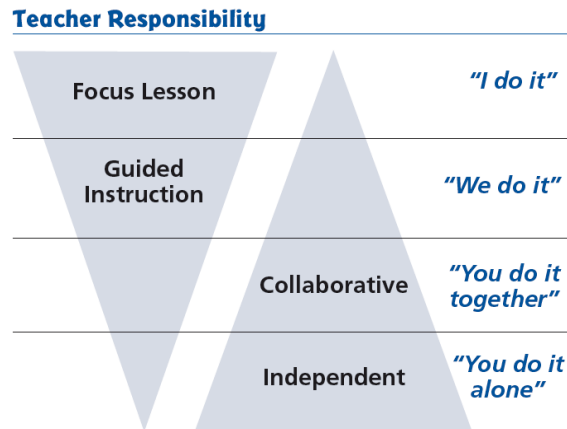


Figure 1

[\(Dr. Douglas Fisher, Effective Use of the Gradual Release of Responsibility Model\)](#)

Preparation:

Session 1:

- Teacher Copies: Self-Reflection Questions (p. 5)
- Student Copies: Guided Review*, Quick Check – Form A*, Growth Chart*

Session 2:

- Teacher Copies: Modeling (p. 7 and 8), Guided Practice (p. 9), Self-Reflection (p. 11)
- Teacher Materials: 1 sandwich bag labeled "Bobby's Bugs filled with 7 counting beans.
- Student Copies: Counting Mat (p. 10), Quick Check – Form B*, Growth Chart*
- Student Materials: 4 sandwich bags labeled A through D filled with the following number of counting beans. (A = 8, B = 6, C = 10, D = 9)

Session 3:

- Teacher Copies: Modeling (p. 12 and 13), Guided Practice (p. 14), Self-Reflection (p. 15)
- Student copies: Guided Practice (p. 14), Quick Check – Form C*, Growth Chart*

Session 4:

- Teacher Copies: Modeling (p. 16 and 17), Guided Practice (p. 18), Self-Reflection (p. 19)
- Student copies: Guided Practice (p. 18), Quick Check – Form D*, Growth Chart*

* Resources located in the 1st Grade Intervention Cycle Masters at www.deltamath.org.

Planning Guide: Session 1

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

Recommended Actions	
Beginning (15 min.)	<ul style="list-style-type: none">➤ <u>Review</u> the readiness standard with the intervention group using the Guided Review<ul style="list-style-type: none">➤ Introduce the learning target and why it is important for future learning➤ Use a think-aloud strategy to solve each question
Middle (5 min.)	<ul style="list-style-type: none">➤ Ask students to <u>reflect</u> on their progress towards the learning target<ul style="list-style-type: none">➤ What did I remember about the learning target?➤ What did I learn today about the learning target?➤ How confident do I feel about doing the learning target on my own?
End (10 min.)	<ul style="list-style-type: none">➤ <u>Assess</u> each student's progress using Quick Check – Form A➤ Guide students to self-correct their Quick Check – Form A➤ Guide students to <u>chart their progress</u> by recording the date and Quick Check score in their Growth Chart➤ Collect each student's Quick Check and Growth Chart
After	<ul style="list-style-type: none">➤ Create sub-groups to differentiate the middle of sessions 2 through 8<ul style="list-style-type: none">○ Group 1 – Include students who <u>did not</u> meet the learning goal○ Group 2 – Include students who met or exceeded the learning goal



Session 1: Self-Reflection

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Briefly discuss student responses:

- What did I remember today about counting?

- What did I learn today about counting?

- How confident do I feel about counting on my own?
(Thumbs up, down, or sideways)

Planning Guide: Sessions 2, 3, and 4

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

Recommended Actions			
Beginning (5 min.)	<ul style="list-style-type: none"> ➤ Review the learning target with the whole group and ask each student to set a goal for today's learning 		
Middle (15 min.)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>Group 1: <i>(Students who <u>did not</u> meet the learning goal on the previous Quick Check)</i></p> <ul style="list-style-type: none"> ➤ Model solving a word problem – “I do” ➤ Guided Practice – “We do together/ You do together” <p>Session 2: Count up to 10 beans in a random order on a counting mat</p> <p>Session 3: Count up to 10 objects in a picture in random order</p> <p>Session 4: Count up to 20 objects in an array</p> </td> <td style="width: 50%; vertical-align: top;"> <p>Group 2: <i>(Students who met the learning goal)</i></p> <ul style="list-style-type: none"> ➤ Independent practice – “You do alone” <p>Activity 1: <i>“Guess How Many?”</i></p> <p><i>(Additional activities may be located in current kindergarten classrooms)</i></p> </td> </tr> </table>	<p>Group 1: <i>(Students who <u>did not</u> meet the learning goal on the previous Quick Check)</i></p> <ul style="list-style-type: none"> ➤ Model solving a word problem – “I do” ➤ Guided Practice – “We do together/ You do together” <p>Session 2: Count up to 10 beans in a random order on a counting mat</p> <p>Session 3: Count up to 10 objects in a picture in random order</p> <p>Session 4: Count up to 20 objects in an array</p>	<p>Group 2: <i>(Students who met the learning goal)</i></p> <ul style="list-style-type: none"> ➤ Independent practice – “You do alone” <p>Activity 1: <i>“Guess How Many?”</i></p> <p><i>(Additional activities may be located in current kindergarten classrooms)</i></p>
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End (10 min.)	<ul style="list-style-type: none"> ➤ Bring the students back together. ➤ Ask students to reflect on their progress towards the learning target <ul style="list-style-type: none"> ○ What did I learn today about counting? ○ How confident do you feel about counting on my own? (Thumbs up, down, or sideways) ➤ Assess each student's progress using the next Quick Check form ➤ Guide students to self-correct their Quick Check ➤ Guide students to chart their progress in their Growth Chart <ul style="list-style-type: none"> ○ Record the type of intervention they received, date and Quick Check score in the table and graph ➤ Collect each student's Quick Check and Growth Chart 		
After	<ul style="list-style-type: none"> ➤ Regroup students to differentiate the middle of sessions 3 through 8 <ul style="list-style-type: none"> ○ Promote students who met the learning goal to group 2 ○ Exit students who met the learning goal for a third time ➤ Problem solve with a team to plan additional support for students who did not exit 		



Session 2: Modeling (I Do)

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

Bobby collected insects for a science activity. Pretend that each bean in this bag is an insect. How many insects did Bobby collect?

Counting Mat

Session 2: Modeling (I Do - Teacher Notes)

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

Bobby collected insects for a science activity.

(Hold up the sandwich bag labelled, "Billy's Bugs".)

Pretend that each bean in this bag is an insect. How many insects did Bobby collect?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about Bobby collecting insects for a science activity.

Second, I need to determine what I need to find.

I need to find the total number of insects that Bobby collected.

Third, I need to determine what I know.

I know that each bean represents an insect.

Fourth, I need to figure out what I can try.

I am going to try counting each bean on a counting mat.

(Place the bag of beans on the counting mat.)

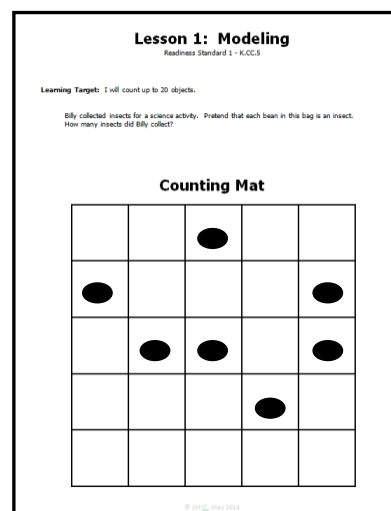
I will arrange the beans so that no square has more than one bean on it.

(Arrange the beans similar to the sample pattern.)

Then, so I don't count any bean twice, I will begin on the left and point to each bean as I say the counting number.

(Point at each bean as you count, "One, two, three, four, five, six, seven")

Bobby collected 7 insects.



(Sample Pattern)

Last, I need to make sure that my answer makes sense.

I found that Bobby collected 7 insects. It makes sense because I knew that the beans were like the bugs he collected and I needed to find the total number, so I counted each of them exactly once to find the total.



Session 2: Guided Practice (We Do)

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Materials:

- 4 sandwich bags labeled A through D filled with the following number of counting beans.
 - (A = 8, B = 6, C = 10, D = 9)

We Do Together: (Teacher Actions)

- Place bag A on the counting mat, organize the beans into separate squares and invite the students to do the same.
- Point to each bean from left to right and say each counting number.
- Repeat the pointing and counting out loud for a second time. Invite the students to point to the each bean on their mat and say each counting number in unison.
- Clear the counting mat and repeat to find the total number of beans in bag B.

You Do Together: (As a class, or in small groups)

- Students take turns leading to find the total number of beans in bags C and D.



Session 2: Counting Mat

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.



Session 2: Self-Reflection

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Briefly discuss student responses:

- What did I learn today about counting?

- How confident do I feel about counting on my own?
(Thumbs up, down, or sideways)

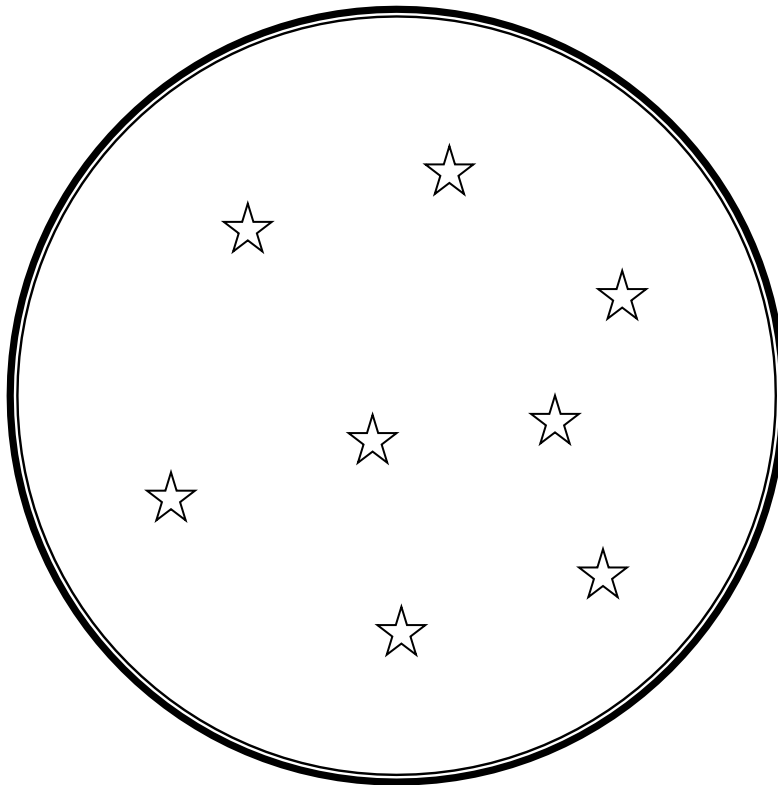
Session 3: Modeling (I do)

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

Joe looked at the nighttime sky through a telescope. How many stars did he see?



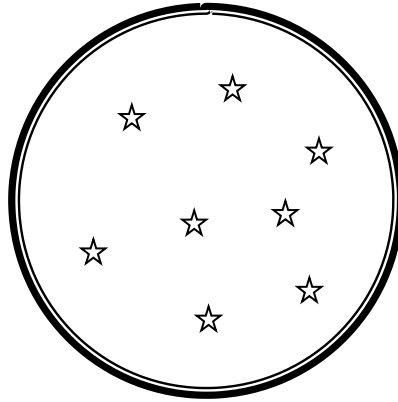
Session 3: Modeling (I do - Teacher Notes)

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

Joe looked at the nighttime sky through a telescope. How many stars did he see?



I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about Joe looking at stars through a telescope.

Second, I need to determine what I need to find.

I need to find the total number of stars that Joe saw.

Third, I need to determine what I know.

I know that Joe saw the number of stars shown in the picture.

Fourth, I need to figure out what I can try.

So I don't count any star twice, I will begin on the left and point to each star as I say the counting number.
(Point at each star as you count, "One, two, three, four, five, six, seven, eight")

Joe saw 8 stars through the telescope.

Last, I need to make sure that my answer makes sense.

I found that Joe saw 8 stars. It makes sense because I could see all of the stars and counted each star exactly once to find the total.

Learning Target: I will count up to 20 objects.

1st Grade - Readiness Standard 1 - K.CC.5

Session 3: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Point to each dot from left to right while saying each counting number.
- Repeat the problem for a second time and invite the students to participate by pointing to the dots on their paper and saying each counting number in unison.

<p>1.</p>	<p>2.</p>
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You Do Together: (As a class, or in small groups)

- Students take turns leading to count the total number of dots.

<p>3.</p>	<p>4.</p>
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Session 3: Self-Reflection

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Briefly discuss student responses:

- What did I learn today about counting?

- How confident do I feel about counting on my own?
(Thumbs up, down, or sideways)

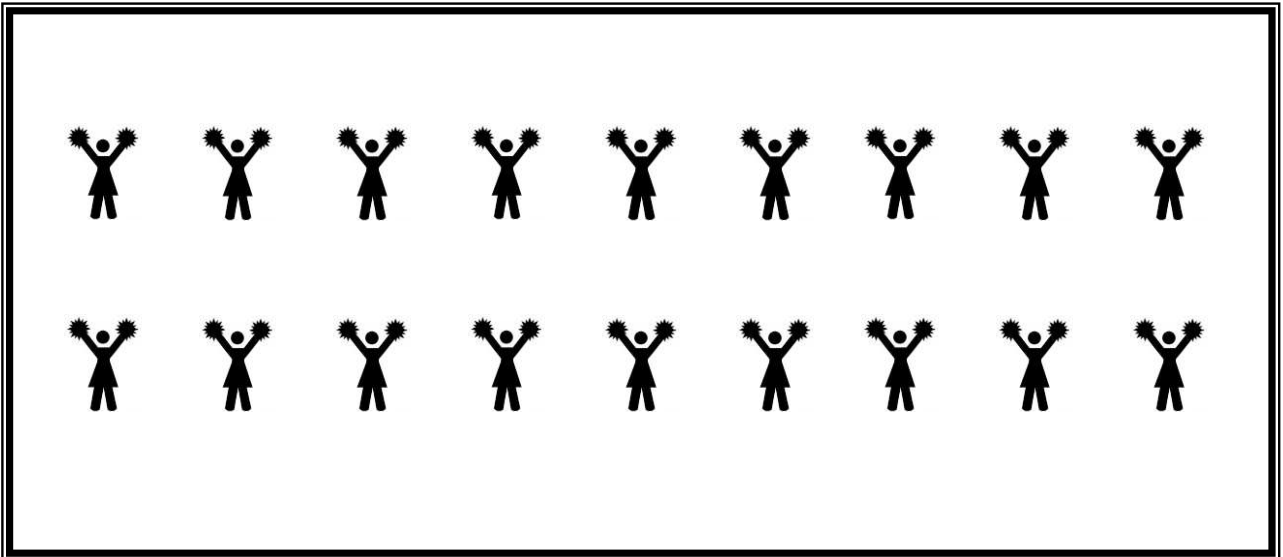
Session 4: Modeling (I Do)

Grade 1 - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

A cheerleading team was performing a cheer. How many cheerleaders are performing on the team?



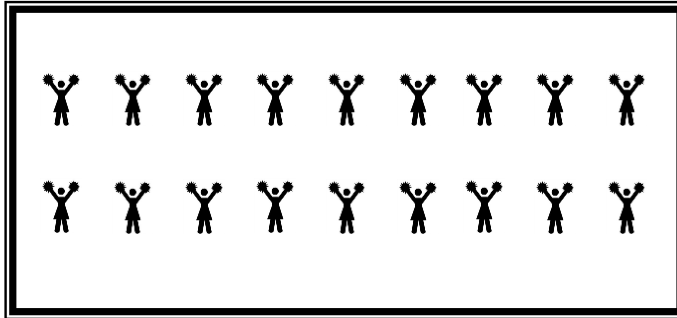
Session 4: Modeling (I do - Teacher Notes)

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

A cheerleading team was performing a cheer. How many cheerleaders are performing on the team?



I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about cheerleaders that are cheering.

Second, I need to determine what I need to find.

I need to find the total number of cheerleaders performing on the team.

Third, I need to determine what I know.

I know there are two rows of cheerleaders.

Fourth, I need to figure out what I can try.

So I don't count any cheerleader twice, I am going to try counting each cheerleader from left to right on the bottom row.

I will say the last number in the bottom row a little louder to help me remember where I left off.

Then, I will continue counting left to right on the top row.

(Point at each cheerleader as you count, "One, two, three, four, five, six, seven, eight, NINE...ten, eleven..."

There are 18 cheerleaders cheering.

Last, I need to make sure that my answer makes sense.

I found there were 18 cheerleaders on the team. It makes sense because I could see the total number of cheerleaders and I counted each cheerleader exactly once to find the total.

Learning Target: I will count up to 20 objects.

1st Grade - Readiness Standard 1 - K.CC.5

Session 4: Guided Practice (We do)

We Do Together: (Teacher Actions)

- Point to each dot from left to right while saying each counting number. (Note: Say the last counting number in each row a little louder.)
- Repeat the step above for a second time and invite the students to participate by pointing to the dots on their paper and saying each counting number in unison.

<p>1.</p> <div style="text-align: center;"> </div> <p style="text-align: center;">_____</p>	<p>2.</p> <div style="text-align: center;"> </div> <p style="text-align: center;">_____</p>
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You Do Together: (As a class, or in small groups)

- Students take turns leading to count the total number of dots.

<p>3.</p> <div style="text-align: center;"> </div> <p style="text-align: center;">_____</p>	<p>4.</p> <div style="text-align: center;"> </div> <p style="text-align: center;">_____</p>
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Session 4: Self-Reflection

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Briefly discuss student responses:

- What did I learn today about counting?

- How confident do I feel about counting on my own?
(Thumbs up, down, or sideways)



Independent Practice Activity

1st Grade - Readiness Standard 1 - K.CC.5

Learning Target: I will count up to 20 objects.

Readiness for naming numbers to 120.

Title of Game: "Guess How Many"

Number of Players: 3 or more (For each turn, one person plays the role of the leader.)

Objective: To be the player with the closest guess.

Materials:

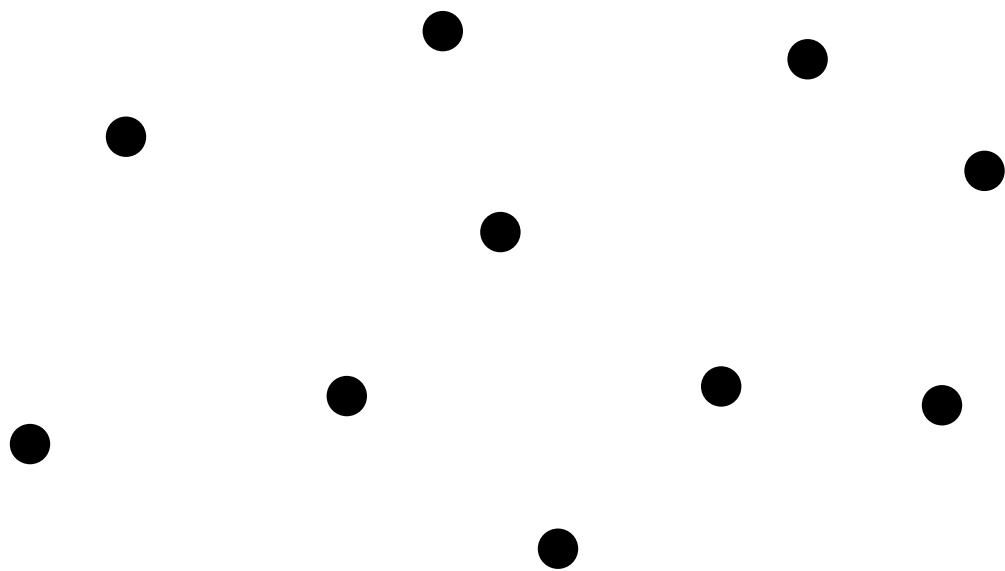
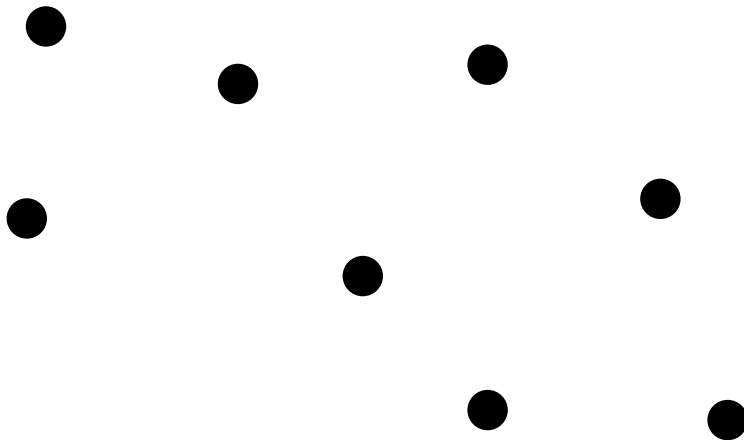
- 1 set of Dot-Cards per small group
- 1 half-sheet of blank paper for students to record their guesses.

Directions:

- Place the stack of Dot-Cards face down in a pile.
- The leader flips over the top card, counts to 5 in their head and then flips the card back to being face-down.
- While the dot card is face-up, each player looks at the dot card to guess the total number of dots.
- After 5 seconds, each player writes down their guess of the number of dots they think they saw.
- The leader flips the card back over and points to each dot while the group counts out loud to find the actual number of dots.
- The player who wrote the number closest to the actual answer keeps the card.
- Repeat with a new leader until all cards have been played.

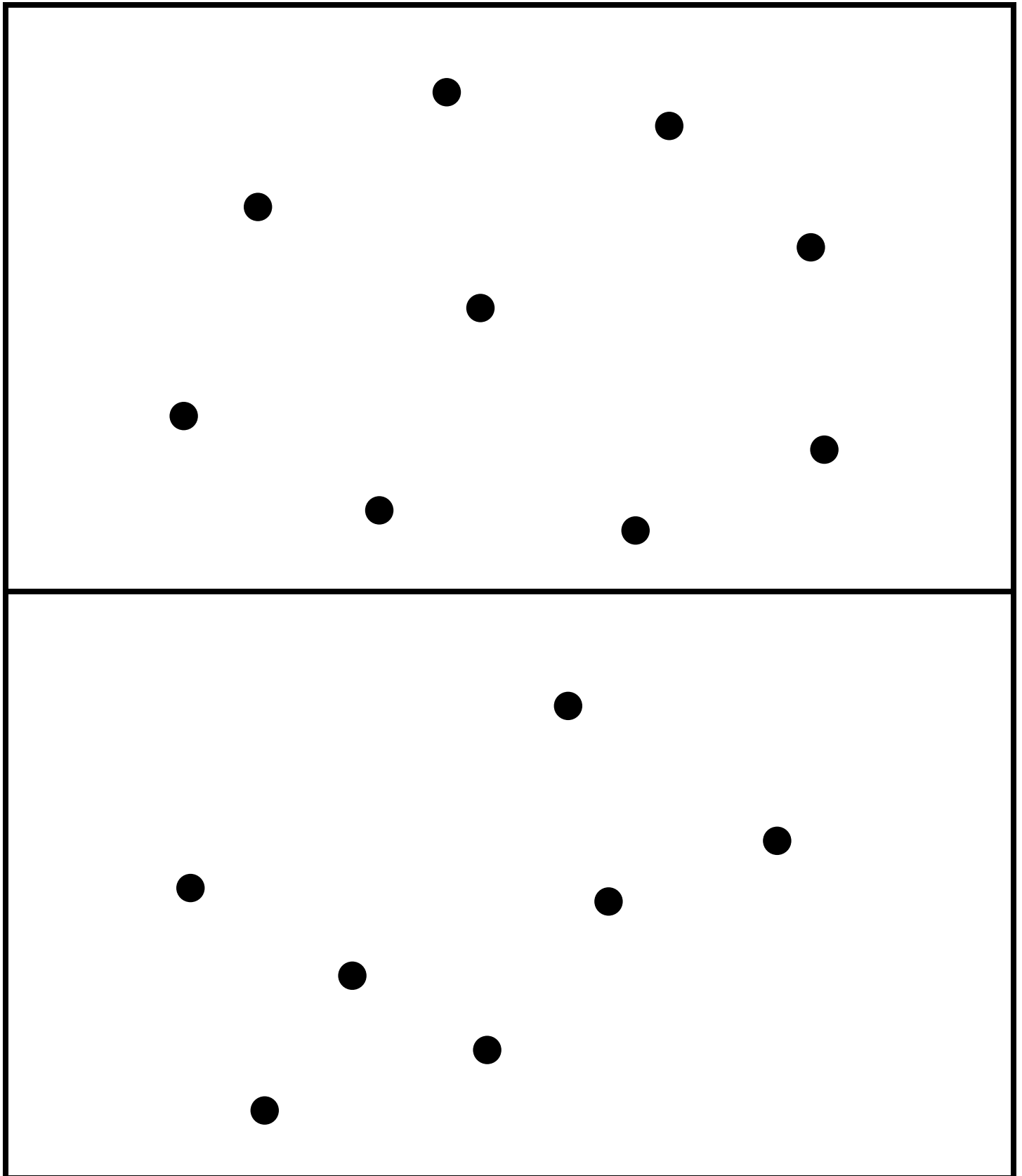
Guess How Many: Dot Cards

1st Grade - Readiness Standard 1 - K.CC.5



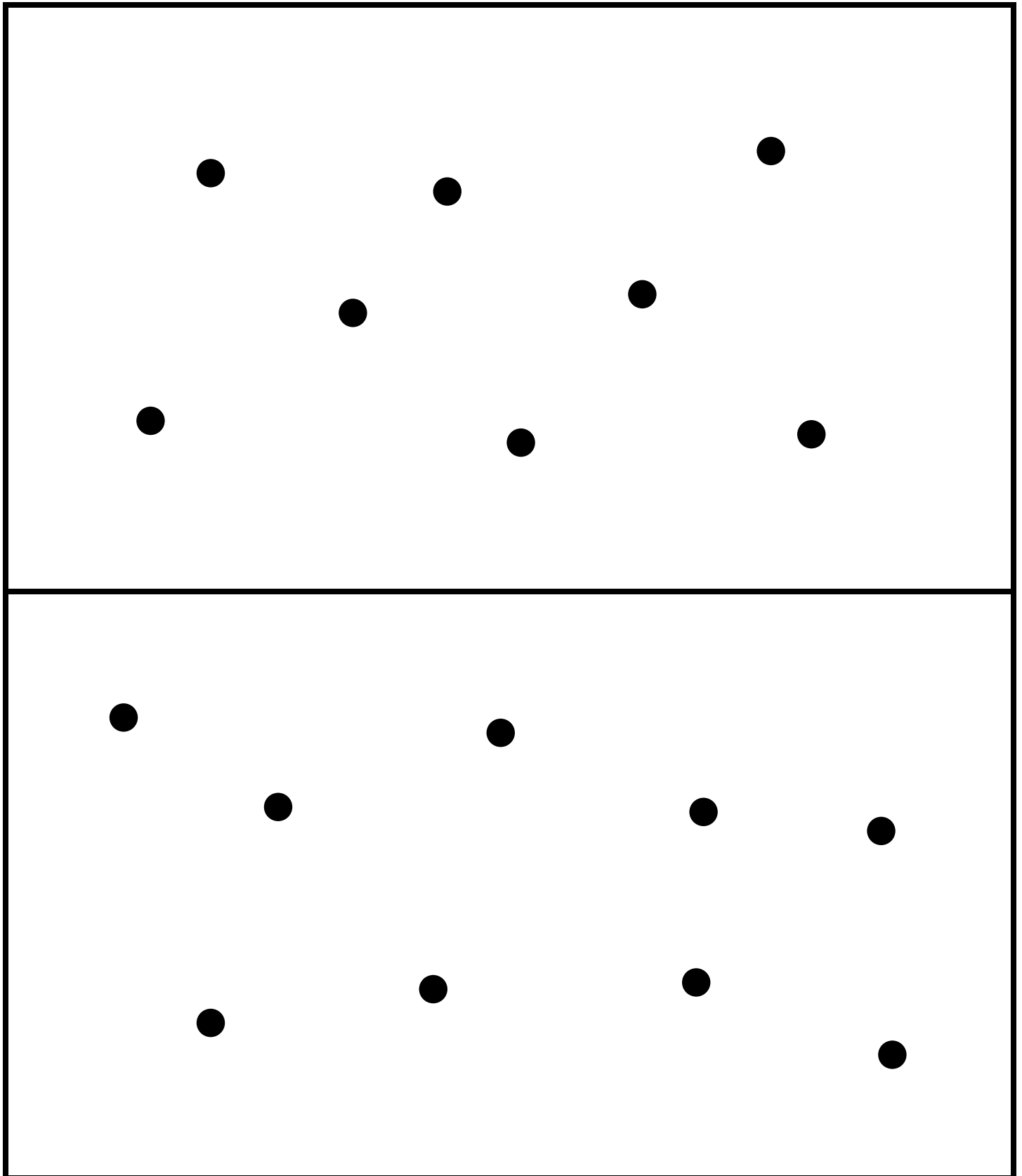
Guess How Many: Dot Cards

1st Grade - Readiness Standard 1 - K.CC.5



Guess How Many: Dot Cards

1st Grade - Readiness Standard 1 - K.CC.5

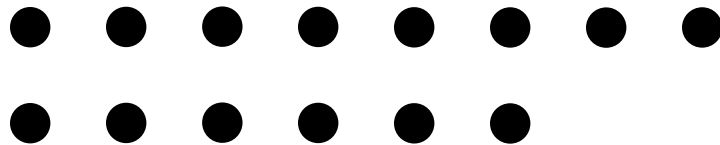
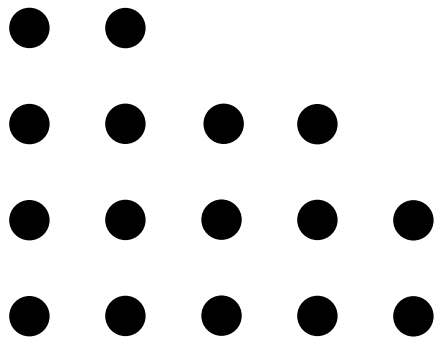


The image contains two dot cards, each enclosed in a black rectangular border. The top card features 8 black dots scattered across its surface. The bottom card features 9 black dots scattered across its surface.



Guess How Many: Dot Cards

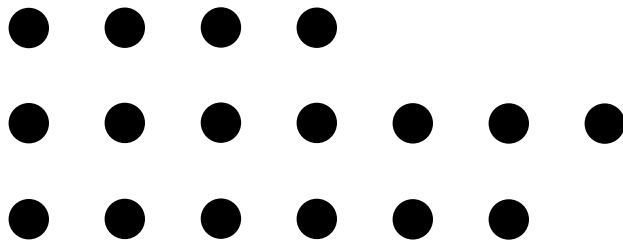
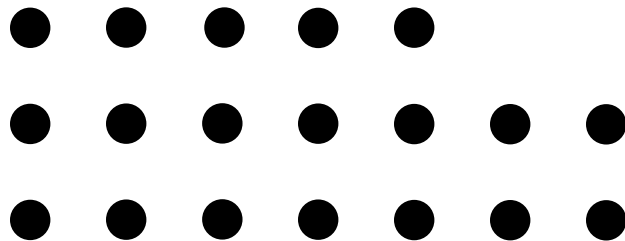
1st Grade - Readiness Standard 1 - K.CC.5





Guess How Many: Dot Cards

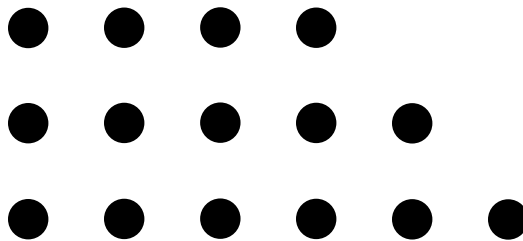
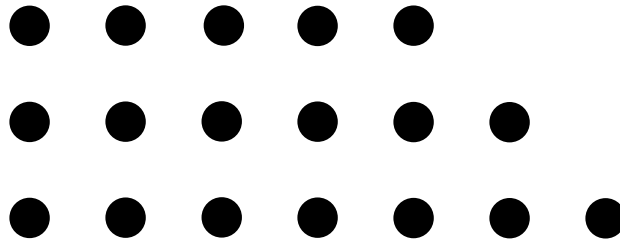
1st Grade - Readiness Standard 1 - K.CC.5





Guess How Many: Dot Cards

1st Grade - Readiness Standard 1 - K.CC.5





Questions for Solving Word Problems

Q_1

What is the problem about?

Q_2

What do I need to find?

Q_3

What do I know?

Q_4

What can I try?

Q_5

Does my answer make sense?



Steps for Solving Word Problems

Q₁. *What is the problem about?*

Q₂. *What do I need to find?*

Q₃. *What do I know?*

Q₄. *What can I try?*

Q₅. *Does my answer make sense?*