

## $1^{\text {st }}$ Grade

# Tier 2 Intervention Lessons 

Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Readiness for 1.OA.6a: Add numbers to 20
Session 1: Planning Guide ..... p. 4
Session 1: Re-engagement Lesson Resources ..... p. 5-10
Sessions 2 through 8: Planning Guide ..... p. 11
Sessions 2 through 8: Lesson Resources ..... p. 12-40
Independent Practice: "10 Partner Match-ups" ..... p. 41-44
Classroom Poster: Questions for Solving Word Problems ..... p. 45
Tier 1 Support Classroom Poster: Steps for Solving Word Problems ..... p. 46

## IES Recommendations for Tier $\mathbf{2}$ and $\mathbf{3}$ intervention lessons:

| 2. Instructional materials for students receiving interventions should <br> focus intensely on in-depth treatment of whole numbers in kindergar- <br> ten through grade 5 and on rational numbers in grades 4 through 8. <br> These materials should be selected by committee. | Low |
| :--- | :--- |
| 3. Instruction during the intervention should be explicit and systematic. <br> This includes providing models of proficient problem solving, verbal- <br> ization of thought processes, guided practice, corrective feedback, and <br> frequent cumulative review. | Strong |
| 4. Interventions should include instruction on solving word problems <br> that is based on common underlying structures. | Strong |
| 5. Intervention materials should include opportunities for students to <br> work with visual representations of mathematical ideas and interven- <br> tionists should be proficient in the use of visual representations of <br> mathematical ideas. | Moderate |
| 6. Interventions at all grade levels should devote about lo minutes in each <br> 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

Teacher Responsibility


Figure 1
(Dr. Douglas Fisher, Effective Use of the Gradual Release of Responsibility Model)

| Recommended Actions |  |
| :---: | :---: |
| Beginning (15 min.) | Review the readiness standard with the intervention group using the Guided Review <br> > Introduce the learning target and why it is important for future learning <br> > Read each question on the Guided Review and ask students to share what they remember from the previous school year. |
| Middle <br> (5 min.) | Ask students to reflect on their progress towards the learning target <br> $>$ What did I remember about the learning target? <br> What did I learn today about the learning target? <br> -How confident do I feel about doing the learning target on my own? |
| $\begin{aligned} & \text { End } \\ & \text { (10 min.) } \end{aligned}$ | Assess each student's progress using Quick Check - Form A <br> Guide students to self-correct their Quick Check - Form A <br> Guide students to chart their progress by recording the date and Quick Check score in their Growth Chart <br> Collect each student's Quick Check and Growth Chart |
| After | Create sub-groups to differentiate the middle of sessions 2 through 8 <br> - Group 1 - Include students who did not meet the learning goal <br> - Group 2 - Include students who met or exceeded the learning goal |

## $1^{\text {st }}$ Grade Fall Guided Review

Readiness Standard 4 - K.OA. 4
$\qquad$

Learning Target: I will find numbers that add to make 10.

| 1. |  |  |  |
| :---: | :---: | :---: | :---: |
|  | $4+$ | $=10$ |  |
| 04 | - 5 | -6 | $\bigcirc 7$ |
| 2. |  |  |  |
|  | $3+$ | $=10$ |  |
| - 5 | -6 | $\bigcirc 7$ | $\bigcirc 8$ |
| 3. |  |  |  |
|  | $8+$ | $=$ |  |
| $\bigcirc 1$ | $\bigcirc 2$ | $\bigcirc 3$ | $\bigcirc 4$ |

$1^{\text {st }}$ Grade Winter Guided Review
Readiness Standard 4 - K.OA. 4

## Name

$\qquad$ Date $\qquad$

Learning Target: I will find numbers that add to make 10.
1.
$6+\ldots=10$

04
$\circ 5$

- 6
$\circ 7$

2. 

$$
\begin{array}{rlll} 
& 7+\ldots & =10 \\
05 & 04 & 03 & 02
\end{array}
$$

3. 

$$
2+\ldots=10
$$- 8

$\bigcirc 7$

- 9
$\qquad$

Learning Target: I will find numbers that add to make 10.

$$
\begin{aligned}
& 8+\ldots=10 \\
& \qquad \begin{array}{lll}
8+2 & 02
\end{array}
\end{aligned}
$$

2. 

$$
\begin{array}{ccc} 
& 4+=10 \\
04 & 06 & 05
\end{array}
$$

$\circ 7$
3.

$$
7+\ldots=10
$$



- 2

- 3

Learning Target: I will find numbers that add to make 10

Briefly discuss student responses:

What did I remember today about finding numbers that add to make 10?
$>$ What did I learn today about finding numbers that add to make 10 ?
> How confident do I feel about finding numbers that add to make 10 on my own? (Thumbs up, down, or sideways)

M $\triangle$ TH
$\qquad$

Learning Target: I will find numbers that add to make 10.
Directions: Fill in the blank. (Work time: 3 minutes)


## Growth Chart

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Name $\qquad$ Date $\qquad$

Learning Target: I will find numbers that add to make 10.
Goal: 5 out of 6 correct


| Intervention | Date | Score |
| :--- | :--- | :--- |
| Session 1: |  |  |
| Session 2: |  |  |
| Session 3: |  |  |
| Session 4: |  |  |
| Session 5: |  |  |
| Session 6: |  |  |
| Session 7: |  |  |
| Session 8: |  |  |

## Planning Guide: Sessions 2 Through 8

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10
Readiness for adding numbers to 20

| Recommended Actions |  |
| :---: | :---: |
| Beginning (5 min.) | Review the learning target with the whole group and ask each student to set a goal for today's learning |
| Middle <br> (15 min.) | Group 1: (Students who did not meet the learning goal on the previous Quick Check) <br> Model solving a word problem - "I do" <br> Guided Practice - "We do together/ You do together" <br> Session 2: Find 10-partners with counters on a ten-frame mat. <br> Session 3: Find 10-partners with drawings. <br> Session 4: Find 10-partners by counting-on or counting back. <br> Group 2: (Students who met the learning goal) <br> Independent practice - "You do alone" <br> Activity 1: "10-Partner Match-ups" <br> (Additional activities may be located in current kindergarten classrooms) |
| $\begin{gathered} \text { End } \\ (10 \mathrm{~min} .) \end{gathered}$ | Bring the students back together. <br> Ask students to reflect on their progress towards the learning target <br> - What did I learn today about counting? <br> - How confident do you feel about counting on my own? <br> (Thumbs up, down, or sideways) <br> Assess each student's progress using the next Quick Check form <br> Guide students to self-correct their Quick Check <br> Guide students to chart their progress in their Growth Chart <br> - If not using Delta Math lessons, record the activity in the table <br> Collect each student's Quick Check and Growth Chart |
| After | Regroup students to differentiate the middle of sessions 3 through 8 <br> - Promote students who met the learning goal to group 2 <br> - Exit students who met the learning goal for a third time <br> Problem solve with a team to plan additional support for students who did not exit |

## Session 2: Modeling (I Do)

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10
Readiness for adding numbers to 20

Bob had a full bag of fruit snacks that held 10 snacks. After he ate some, there were 6 snacks left in the box. How many fruit snacks did Bob eat?

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10
Readiness for adding numbers to 20

Bob had a full bag of fruit snacks that held 10 snacks. After he ate some, there were 6 snacks left in the box. How many fruit snacks did Bob eat?

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 Bob eating fruit snacks.

Second, I need to determine what I need to find.
I need to find the number of fruit snacks that Bob ate.

Third, I need to determine what I know.
I know that the bag held a total of 10 fruit snacks and 6 were left after he ate some.

Fourth, I need to figure out what I can try.
I am going to try to model the actions using counters.
The bag held 10 fruit snacks, so I will place 10 counters on the frame.
(Place the original 10 counters on the ten-frame counting mat)
I will move counters one-at-a-time off the ten-frame until there are 6 remaining on the ten-frame.
(Point to the 6 in the ten-frame)
These are the 6 fruit snacks that were left in the bag after he ate some.
(Point to the 4 counters outside of the ten-frame.)
Bob ate 4 fruit snacks.


Find the ten-partner card and place it under the ten-frame to represent the situation.

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

I found that Bob ate 4 fruit snacks. It makes sense because I knew the total number of fruit snacks was ten and the part left in the box was 6, so I modeled the problem with counters to find the 10-partner of 6.

Ten-Frame Counting Mat
$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4


Combinations of 10 Cards
$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

| $10=9+1$ | $10=8+2$ |
| :---: | :---: |
| $10=7+3$ | $10=6+4$ |
| $10=5+5$ | $10=4+6$ |
| $10=3+7$ | $10=2+8$ |
| $10=1+9$ |  |

Name $\qquad$
$\qquad$

## Session 2: Guided Practice (We Do)

We Do Together: (Teacher Actions)
$>$ Say the ten equation and write the answer if you know it.
> Use counters on a 10 -frame mat and Ten-Equation cards to find or check your answer.

- "10 is equal to 3 plus 7 "

| 1. | $10=8+\ldots$ |  |
| :--- | :--- | :--- |
|  |  |  |
| 3. | $10=6+\ldots$ |  |
|  |  | 4. |

You Do Together: (As a class, or in small groups)
$>$ Students take turns leading to find numbers that add to make 10.

| 5. | $10=3+\ldots$ |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| 7. | $10=7+\ldots+\ldots$ |  |  |
|  |  | 8. | $10=2+\ldots$ |

## Session 2: Self-Reflection

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Briefly discuss student responses:

What did I learn today about finding numbers that add to make 10 ?
$>$ How confident do I feel about finding numbers that add to make 10 on my own? (Thumbs up, down, or sideways)

Directions: Fill in the blank. (Work time: 3 minutes)


## Session 3: Modeling (I Do)

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Dominik shared a pack of erasers with Jarod. The pack originally held 10 erasers.
If Dominik now has 7 erasers, how many were shared with Jarod?

## Session 3: Modeling (I Do - Teacher Notes)

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10
Readiness for adding numbers to 20

Dominik shared a pack of erasers with Jarod. The pack originally held 10 erasers.
If Dominik now has 7 erasers, how many were shared with Jarod?

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 Dominik sharing a pack of erasers.

Second, I need to determine what I need to find.
I need to find the number of erasers shared with Jarod.

Third, I need to determine what I know.
I know that the pack held a total of 10 erasers and Dominik now has 7.

Fourth, I need to figure out what I can try.
This time, I am going to try to model the actions with a drawing.
First, I will draw 10 circles to represent the erasers originally held in Dominik's pack
Dominik's and write a ten-equation that include the $\mathbf{7}$ erasers that Dominik has now.
(Write the ten-equation "10=7+ $\qquad$ " under the drawing.)
Next, I will draw a loop around the 7 erasers that Domink has now.
The erasers not inside the loop represent the erasers given to Jarod. Therefore, Dominik gave Jarod 3 erasers.
(Complete the ten-equation under the drawing.)


$$
10=7+3
$$

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

I found that Dominik gave Jarod 3 erasers. It makes sense because I knew the total number of erasers Dominik had was 10 and the part he kept was 7 , so I modeled the problem with a math drawing to find the 10-partner of 7.
$\qquad$
$\qquad$

## Session 3: Guided Practice (We Do)

We Do Together: (Teacher Actions)
> Say the ten equation and write the answer if you know it.
> Use a math drawing to find or check your answer.

| 1. | 2. |
| :--- | :--- | :--- |
|  | $10=4+\ldots$ |

You Do Together: (As a class, or in small groups)
$>$ Students take turns leading to find numbers that add to make 10.

| 3. | $10=7+\ldots$ | $10=1+\ldots$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| 5. | $10=6+\ldots$ | 6. | $10=3+\ldots$ |
|  |  |  |  |

## Session 3: Self-Reflection

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Briefly discuss student responses:

What did I learn today about finding numbers that add to make 10 ?
$>$ How confident do I feel about finding numbers that add to make 10 on my own? (Thumbs up, down, or sideways)

Directions: Fill in the blank. (Work time: 3 minutes)


Mrs. K. was playing math games with her students and asked them a number riddle. She said, "I'm thinking of the number that can be added to 2 to make 10." What number is Mrs. K thinking of?

# 品留TH Session 4: Modeling (I Do - Teacher Notes) 

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10
Readiness for adding numbers to 20

Mrs. K. was playing math games with her students and asked them a number riddle. She said, "I'm thinking of the number that can be added to 2 to make 10." What number is Mrs. K thinking of?

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 Mrs. K. asking her students a number riddle.

Second, I need to determine what I need to find.
I need to find the answer to the number riddle... 2 plus what number makes 10 ?

Third, I need to determine what I know.
I know that the number the teacher is thinking of the 10-partner with 2.

Fourth, I need to figure out what I can try.
To solve this problem, I can try making a ten equation to model the problem.
I will begin by writing the ten-equation 2 plus what number equals 10 . (Write " $2+\ldots=10$ ")
Next, I will use my fingers and count up to ten...3, 4, 5, 6, 7, 8, 9, 10.
(Hold up one finger per counting number until you have 8 fingers up and you reach 10.)
2 plus 8 equals 10. (Complete the ten-equation " $2+{ }_{2} \underline{8}_{-}=10$ ")
When the part of the number that you know is small, you begin with 10 and count back...10...9, 8.
(Hold up one finger per counting number until you have 2 fingers up and you reach 8.)

Let's prove our answer is correct with a picture.
If I have $\mathbf{1 0}$ circles (Draw 10 circles) and one part is $\mathbf{2}$ (loop 2 circles),
then the other part is $\mathbf{8}$ (point to the 6 circles not inside the loop).

Last, I need to make sure that my answer makes sense.
I found the answer Mrs. K was thinking of is 8 . It makes sense because I knew the answer to Mrs. K's question was the 10-partner of $\mathbf{2}$, so I modeled the problem with an equation to find the missing part.

Name $\qquad$
$\qquad$

## Session 4: Guided Practice (We Do)

We Do Together: (Teacher Actions)
> Say the ten equation and write the answer if you know it.
> Count-on from the known part or count-back from 10 to find or check your answer.

| 1. $\quad 8+\ldots=10$ | $3+\ldots=10$ |
| :--- | :--- |

You Do Together: (As a class, or in small groups)
> Students take turns leading to find the numbers that add to make 10.


## Session 4: Self-Reflection

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Briefly discuss student responses:

What did I learn today about finding numbers that add to make 10?
$>$ How confident do I feel about finding numbers that add to make 10 on my own? (Thumbs up, down, or sideways)

Directions: Fill in the blank. (Work time: 3 minutes)


M $\triangle$ TH $\qquad$
$\qquad$

## Session 5: Guided Practice (We Do)

We Do Together: (Teacher Actions)
> Say the ten equation and write the answer if you know it.
> Use a math drawing to find or check your answer.

| 1. | 2. |
| :--- | :--- |
|  | $10=7+\ldots+$ |

You Do Together: (As a class, or in small groups)
$>$ Students take turns leading to find numbers that add to make 10.

| 3. | $10=6+\ldots$ | $10=3+\ldots$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| 5. | $10=1+\ldots$ |  | $10=4+\square$ |
|  |  |  |  |

## Session 5: Self-Reflection

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Briefly discuss student responses:

What did I learn today about finding numbers that add to make 10 ?
$>$ How confident do I feel about finding numbers that add to make 10 on my own? (Thumbs up, down, or sideways)

Directions: Fill in the blank. (Work time: 3 minutes)


M $\triangle$ TH $\qquad$
$\qquad$

## Session 6: Guided Practice (We Do)

We Do Together: (Teacher Actions)
> Say the ten equation and write the answer if you know it.
> Use a math drawing to find or check your answer.

| 1. | 2. |
| :--- | :--- | :--- |
|  | $10=4+\ldots$ |

You Do Together: (As a class, or in small groups)
$>$ Students take turns leading to find numbers that add to make 10.

| 3. | $10=7+\ldots$ | $10=1+\ldots$ |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| 5. | $10=6+\ldots$ |  | $10=3+\ldots$ |
|  |  |  |  |

## Session 6: Self-Reflection

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Briefly discuss student responses:

What did I learn today about finding numbers that add to make 10?
$>$ How confident do I feel about finding numbers that add to make 10 on my own? (Thumbs up, down, or sideways)
$\qquad$

Learning Target: I will find numbers that add to make 10.
Directions: Fill in the blank. (Work time: 3 minutes)


Name $\qquad$
$\qquad$

## Session 7: Guided Practice (We Do)

We Do Together: (Teacher Actions)
> Say the ten equation and write the answer if you know it.
> Count-on from the known part or count-back from 10 to find or check your answer.

| 1. $\quad 7+\ldots=10$ | 2. |
| :--- | :--- |

You Do Together: (As a class, or in small groups)
> Students take turns leading to find the numbers that add to make 10.


## Session 7: Self-Reflection

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Briefly discuss student responses:

What did I learn today about finding numbers that add to make 10 ?
$>$ How confident do I feel about finding numbers that add to make 10 on my own? (Thumbs up, down, or sideways)

M $\triangle$ TH
$\qquad$

Learning Target: I will find numbers that add to make 10.
Directions: Fill in the blank. (Work time: 3 minutes)


Name $\qquad$
$\qquad$

## Session 8: Guided Practice (We Do)

We Do Together: (Teacher Actions)
$>$ Say the ten equation and write the answer if you know it.
> Count-on from the known part or count-back from 10 to find or check your answer.

| 1. | $8+\ldots=10$ | 2. |
| :--- | :--- | :--- |
|  | $3+\ldots=10$ |  |

You Do Together: (As a class, or in small groups)
> Students take turns leading to find the numbers that add to make 10.


## Session 8: Self-Reflection

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10

Briefly discuss student responses:

What did I learn today about finding numbers that add to make 10 ?
$>$ How confident do I feel about finding numbers that add to make 10 on my own? (Thumbs up, down, or sideways)
$\qquad$

Learning Target: I will find numbers that add to make 10.
Directions: Fill in the blank. (Work time: 3 minutes)


## Independent Practice (You Do) <br> $1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4

Learning Target: I will find numbers that add to make 10.

Title of Game: "10-Partner Match-ups"

Number of Players: 2

Objective: To be the player with the most cards at the end of the game.

## Materials:

$>$ 10-Frame Cards (Numbers 1-9...do not use the number 10.)
$>$ Number Cards (Numbers 1-9...do not use the number 10.)
> 10-Partner Match-ups: Recording sheet (1 per student - Optional)

## Directions:

$>$ Place one set of 10-frame cards face down in a row
$>$ Deal the Number cards below, 4 for each player. (The left-over card will not be used.)
> Player 1 turns over a 10-frame card to see if it makes 10 with one of their Number cards.

- If there is a 10-partner match, say the 10-partner equation, pick up the card and place it below the matched card.
- If there is not a match, say "No Matches" and turn the card back over.
> Player 2 turns over a 10-frame card and checks if it makes 10 with one of their Number cards.
- If there is a 10-partner match, say the 10-partner equation, pick up the card and place it below the matched card.
- If there is not a match, say "No 10-partner match" and turn the card back over.
$>$ Repeat
$>$ The winner is the first player to match all 4 cards.

Math Talk:
"I have a match ... 4 plus 6 equals 10"

## 10-Frame Cards

$1^{\text {st }}$ Grade - Readiness Standard 4 - K.OA. 4


Number Cards (2 Sets)
$1^{\text {st }}$ Grade - Readiness Standard 2 - K.CC. 7

Set 1
Set 2


M $\triangle$ TH $\qquad$
$\qquad$

## 10-Partner Match-up Recording Sheet (Optional)

## Directions:

$>$ Draw the number and dots for each set of Digit/10-frame cards below.
> After each match is found, write the $\mathbf{1 0}$-partner equation below its match.
> The winner is the first to find Number card matches for all 4 cards.

Math Talk: "I have a match ... 4 and 6 makes 10 ... 10 equals 4 plus 6"

Player 1 Cards

$\qquad$ $+$ $\qquad$ $=10$ $\qquad$ $+$ $\qquad$ $=10$

$\qquad$ $+$ $\qquad$ $=10$ $\qquad$ $+$ $\qquad$ $=10$

## Player 2 Cards


$\qquad$ $+\ldots=10$ $\qquad$ $+$ $\qquad$ = 10 $\qquad$ $+$ $\qquad$
$\qquad$ $+$ $\qquad$ $=10$


| $Q_{1}$ | What is the problem about? |
| :--- | :---: |
| $Q_{2}$ |  |
| $Q_{3}$ | What do I need to find? |
| What can I try? |  |
| $Q_{5}$ |  |

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?
$Q_{5 .}$ Does my answer make sense?

