

Oregon Teacher Toolbox

Resource Sampler



Grade

1

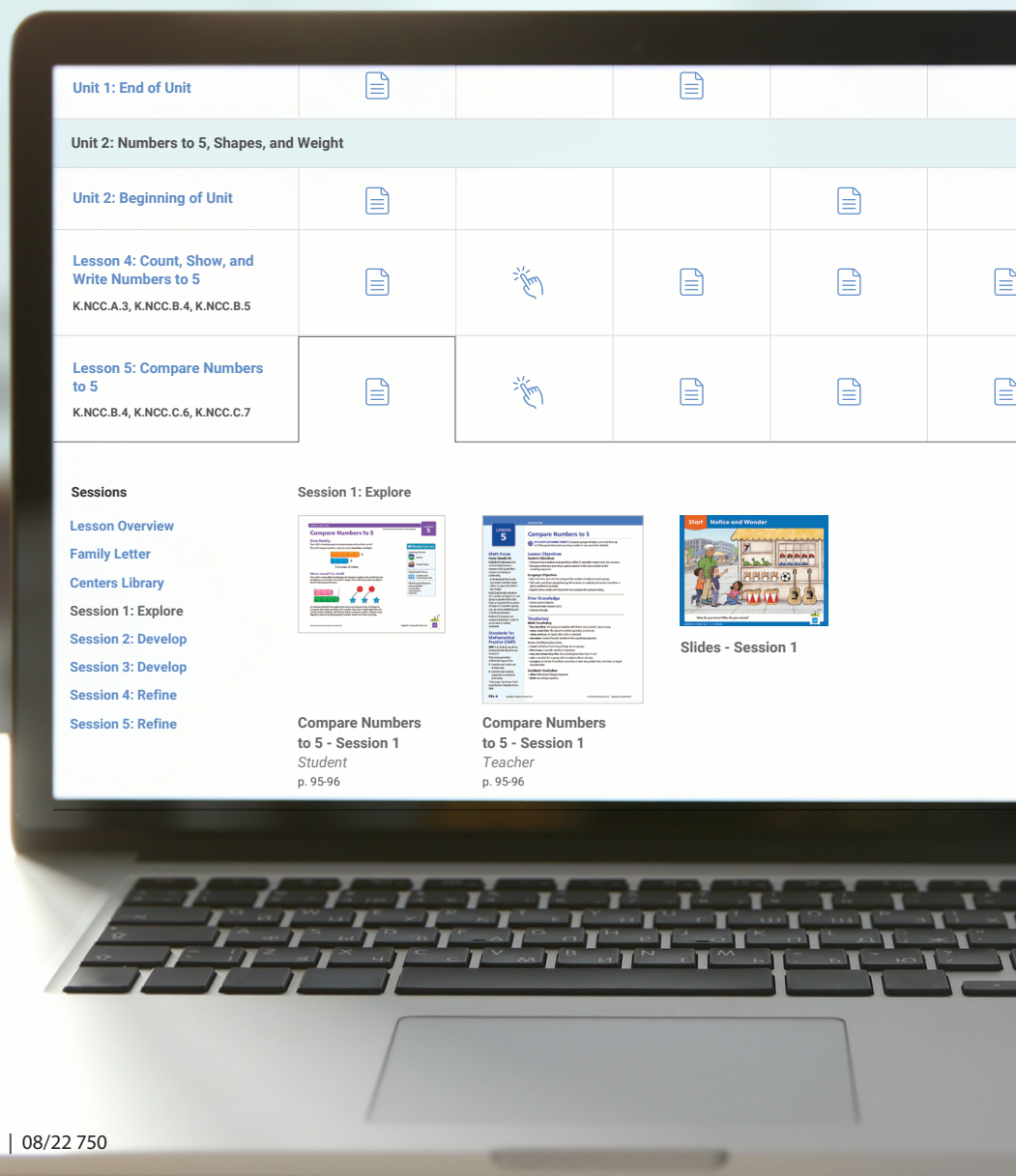
Engaging Resources to Drive

i-Ready Classroom Mathematics, Oregon Edition includes a wealth of resources to meet the needs of all learners. The Oregon Teacher Toolbox resources are accessible through the Teacher Digital Experience via i-ReadyConnect.com.

Easily Access All Grades K–8 Resources on the Oregon Teacher Toolbox:

- Oregon Enhancement Activities ^{E/S}
- Activity Sheets ^{E/S}
- Assessments (*Lesson Quizzes, Practice Tests, and Unit Assessments—Forms A and B*) ^{E/S}
- Cumulative Practice ^{E/S}
- Develop Session Videos
- Digital Math Tools
- Discourse Cards ^{E/S}
- Graphic Organizers ^{E/S}
- Games (*Unit Level K–8 and Grade Level K–2*) ^{E/S}
- Enrichment Activities ^{E/S}
- Family Letters ^{E/S}
- Fluency and Skills Practice ^{E/S}
- Implementation Support

^{E/S} = Available in English and Spanish
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Student Growth

- Interactive Tutorials ^{E/S}
- Literacy Connection Activities ^{E/S}
- Math Center Activities *(On Level, Below Level, and Above Level)* ^{E/S}
- Student Worktext PDFs ^{E/S}
- PowerPoint® Slides *(Editable)* ^{E/S}
- Prerequisite Lessons ^{E/S}
- Professional Learning Videos
- Teacher's Guide PDFs
- Tools for Instruction ^{E/S}
- Unit Flow & Progression Videos *(Closed Captioned in English and Spanish)*

Table of Contents

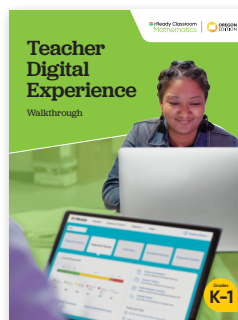
This sampler includes some of the lesson- and unit-level resources available on Oregon Teacher Toolbox for **Unit 2: Addition and Subtraction within 20, Lesson 8: Make Ten to Add.**

Enhancement
Activities
Page 4

Lesson-Level
Resources
Page 21

Unit-Level
Resources
Page 36

Note: Grade K
Oregon Teacher
Toolbox image
shown



Check out the Teacher Digital Experience Walkthrough to see more digital resources!

Explore all Grades K–8 resources in your demo account. Review the Teacher Digital Experience Walkthrough to see how.

Oregon Enhancement Activities

Oregon Enhancement Activities provide additional notes and activities to ensure all the Oregon Mathematics Standards are addressed. **Following are the two types of Enhancement Activities.**

**EDUCATOR NOTE**

Asking Questions and Displaying Data

Dear Educator,

In this lesson children will sort objects into categories, represent data in tally charts and picture graphs, and ask and answer questions about the data.

According to OR 1.DRA.1, children should also gain experience investigating situations within the classroom by generating questions, collecting data, and showing a visual representation of the data.

One way to fully meet this standard is to have all children complete the Challenge Activity in the Teacher Guide for Lesson 18 (page 422) to gain experience generating questions, surveying the class, and displaying the data. Be sure to give children other opportunities throughout the year to generate questions, collect data, and display the data set with a visual representation, as appropriate.

Oregon Mathematics Standard

1.DR.A.1 Generate questions to investigate situations within the classroom. Collect or consider data that can naturally answer questions by representing data visually.

**EDUCATOR NOTE**

Counting Backward within 120

Dear Educator,

Earlier in Grade 1 children learned to count by tens within 120. In this lesson children learn to count up by ones from any given number within 120.

According to OR 1.NBT.A.1, children should also show understanding of counting backward by ones and tens within 120.

One way to fully meet this standard is to provide additional problems where children can practice counting backward by ones and tens within 120.

Oregon Mathematics Standard

1.NBT.A.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

PROVIDED EXAMPLE

Lesson 20, page 457, problem 3

Count by ones:
104, _____, 107, _____

ADDITIONAL PROBLEMS

Count backward by ones:
112 _____, 109, _____

Count backward by tens:
110 _____, 80, _____

GRADE 1 • Asking Questions and Displaying Data

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GRADE 1 • Counting Backward within 120

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Educator Notes

- Describe how the content in the *i-Ready Classroom Mathematics, Oregon Edition* instructional program varies from the expectations of the Oregon Mathematics Standards.
- Also include an example of how the content might be modified in order to better address the Oregon Mathematics Standards.

Educator Notes are provided when:

- Oregon Mathematics Standards require different content limits or vocabulary terms OR
- A clear modification can tailor the *i-Ready Classroom Mathematics, Oregon Edition* instructional program to address Oregon expectations

One-Day Activities

- Step-by-step, teacher-led activities with a focus on hands-on tasks for students
- Activity sheets provided within the activity as needed to support student work

One-Day Activities are provided when:

- There is a less comprehensive Oregon Mathematics Standard that is not addressed by the *i-Ready Classroom Mathematics, Oregon Edition* instructional program OR
- The scope of a Oregon Mathematics Standard goes beyond the instruction provided



ONE-DAY ACTIVITY

Solve Elapsed Time Problems

In Lesson 23, children learned to tell and write time in hours and half-hours using analog and digital clocks. In this activity, children will solve elapsed time problems on a number line, make the connection between the number line and a traditional clock by bending the number line into a circle, and then solve elapsed time problems using a clock.

Materials

- copies of **Recording Sheet**, 1 per pair (pages 7–8)
- copy of **Clock Number Line** (pages 9–11)
- copies of **Clock Cards**, 1 per pair (page 12)
- copies of **Check for Understanding** (page 13)
- demonstration clock
- 12 brass fasteners
- 2 crayons (each a different color)
- 1 pencil
- glue

1 Show elapsed time on a number line.

- Cut out the pieces of the **Clock Number Line** and connect them together with brass fasteners. Make sure the pieces are in numerical order.
- Place the number line on the floor. Have children sit around the number line. Ask: *How many numbers does the number line show? (12) What is something else in the real world that shows 12 numbers? (a clock)*
- Say: *The number line shows the numbers on a clock. Point to each number on the number line as you count aloud with children joining in. Say: 1 o'clock, 2 o'clock, 3 o'clock, 4 o'clock, 5 o'clock, 6 o'clock, 7 o'clock, 8 o'clock, 9 o'clock, 10 o'clock, 11 o'clock, 12 o'clock.*
- Say: *Times in the morning, from midnight until before noon, are called **AM**. Times in the afternoon, evening, and night, from noon until before midnight, are called **PM**. Point to each number on the number line as you count aloud with children joining in. Say: 1 AM, 2 AM, 3 AM, 4 AM, 5 AM, 6 AM, 7 AM, 8 AM, 9 AM, 10 AM, 11 AM. Point to 12 on the number line. Ask: Is 12 noon called 12 AM or 12 PM? (12 PM) How do you know? (Times in the afternoon are called PM. Afternoon means after 12 noon.) Point to each number on the number line again as you count aloud with children joining in. Say: 1 PM, 2 PM, 3 PM, 4 PM, 5 PM, 6 PM, 7 PM, 8 PM, 9 PM, 10 PM, 11 PM. Point to 12 on the number line. Ask: Is 12 midnight called 12 AM or 12 PM? (12 AM) How do you know? (12 noon is 12 PM so 12 midnight must be 12 AM.)*

Oregon Mathematics Standard

1.GM.C.6 Tell and write time in hours and half-hours using analog and digital clocks.



ONE-DAY ACTIVITY

4 Check for understanding.

Provide children with a copy of **Check for Understanding**. Have children draw hands on the clock to show the start time of the situation. (*Minute hand pointing to 6 and hour hand pointing between 12 and 1.*) Then have children circle a clock to show the end time of the situation. (*4:00*)

Observe and monitor children's reasoning and guide or redirect them as necessary. Use the table below to pinpoint where extra support may be needed.

If you observe...	the child may...	Then try...
the child draws the hour hand pointing to 12,	not understand that the hour hand moves from one number to the next on the clock as the minute hand moves around the clock.	having the child use a demonstration clock to show 12:30 and compare it to the clock drawing.
the child circles the first clock to show the end time,	have counted the minutes first and then started counting from 12 to count the hours.	having the child use a demonstration clock to count on 3 hours and 30 minutes from 12:30 and compare it to the circled clock.
the child circles the second clock to show the end time,	have not included the minutes in the elapsed time given in the problem.	first having the child count on 3 minutes from 12:30 to get 3:30 and then have the child count on 30 minutes from 3:30.

GRADE 1 • Solve Elapsed Time Problems

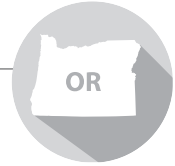
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Teacher pages and student recording sheet shown here. The full activity and additional **Enhancement Activities** can be accessed through the Oregon Teacher Toolbox.

	Classroom Resources				
	Plan & Teach	Assess	Re-teach	Reinforce	Extend
	Instruction, Practice & Centers	Interactive Tutorials	Lesson Quizzes & Unit Assessments	Tools for Instruction	Learning Activities
Unit 4: Using Tens and Ones to Organize and Count					
Unit 4: Beginning of Unit					
Lesson 15: Tens and Ones 1.NBT.B.2					
Educator Note: Counting Backward within 120 1.NBT.A.1					
Lesson 16: Count to 120 1.NBT.A.1, 1.NBT.C.5					
One-Day Activity: Count by Twos and Fives 1.NBT.A.1					
Lesson 17: Compare Numbers 1.NBT.B.3					
Unit 4: End of Unit					



EDUCATOR NOTE



Counting Backward within 120

Dear Educator,

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According to OR 1.NBT.A.1, children should also show understanding of counting backward by ones and tens within 120.

One way to fully meet this standard is to provide additional problems where children can practice counting backward by ones and tens within 120.

Oregon Mathematics Standard

1.NBT.A.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

PROVIDED EXAMPLE

Lesson 20, page 457, problem 3

Count by ones:

104,,, 107,

ADDITIONAL PROBLEMS

Count backward by ones:

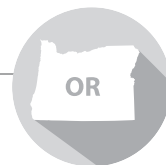
112,,, 109,

Count backward by tens:

110,,, 80,



ONE-DAY ACTIVITY



Solve Elapsed Time Problems

In Lesson 23, children learned to tell and write time in hours and half-hours using analog and digital clocks. In this activity, children will solve elapsed time problems on a number line, make the connection between the number line and a traditional clock by bending the number line into a circle, and then solve elapsed time problems using a clock.

Oregon Mathematics Standard

1.GM.C.6 Tell and write time in hours and half-hours using analog and digital clocks.

Materials

- copies of **Recording Sheet**, 1 per pair (pages 7–8)
- copy of **Clock Number Line** (pages 9–11)
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- copies of **Check for Understanding** (page 13)
- demonstration clock
- 12 brass fasteners
- 2 crayons (each a different color)
- 1 pencil
- glue

1 Show elapsed time on a number line.

- Cut out the pieces of the **Clock Number Line** and connect them together with brass fasteners. Make sure the pieces are in numerical order.
- Place the number line on the floor. Have children sit around the number line.
Ask: How many numbers does the number line show? (12) What is something else in the real world that shows 12 numbers? (a clock)
- Say: *The number line shows the numbers on a clock.* Point to each number on the number line as you count aloud with children joining in. Say: 1 o'clock, 2 o'clock, 3 o'clock, 4 o'clock, 5 o'clock, 6 o'clock, 7 o'clock, 8 o'clock, 9 o'clock, 10 o'clock, 11 o'clock, 12 o'clock.
- Say: *Times in the morning, from midnight until before noon, are called **AM**. Times in the afternoon, evening, and night, from noon until before midnight, are called **PM**.* Point to each number on the number line as you count aloud with children joining in. Say: 1 AM, 2 AM, 3 AM, 4 AM, 5 AM, 6 AM, 7 AM, 8 AM, 9 AM, 10 AM, 11 AM. Point to 12 on the number line. Ask: *Is 12 noon called 12 AM or 12 PM? (12 PM) How do you know? (Times in the afternoon are called PM. Afternoon means after 12 noon.)* Point to each number on the number line again as you count aloud with children joining in. Say: 1 PM, 2 PM, 3 PM, 4 PM, 5 PM, 6 PM, 7 PM, 8 PM, 9 PM, 10 PM, 11 PM. Point to 12 on the number line. Ask: *Is 12 midnight called 12 AM or 12 PM? (12 AM) How do you know? (12 noon is 12 PM so 12 midnight must be 12 AM.)*



ONE-DAY ACTIVITY

- e. Tell children that they will be using the number line to help solve problems involving time. Say: *Ann goes to the zoo at 2 o'clock. She is at the zoo for 3 hours.* Ask: *What time does Ann leave the zoo?*
- f. Ask: *How can the number line help solve this problem?* **(Mark the time Ann goes to the zoo and count on 3 to find the time she left the zoo.)** Invite a volunteer to show the start time on the number line by pointing to it with a crayon. Guide the volunteer to show the correct start time by asking questions such as:
- *What time does Ann go to the zoo?* **(2 o'clock)**
 - *Where is 2 o'clock shown on the number line?* **(2)**
 - *Do you think Ann went to the zoo at 2 o'clock in the morning or 2 o'clock in the afternoon? Explain.* **(2 o'clock in the afternoon; the zoo is not open at 2 o'clock in the morning.)**
- g. Invite another volunteer to show 3 hours after 2 o'clock on the number line by pointing to it with the second crayon. Guide the volunteer to show the correct end time by asking questions such as:
- *How many hours does Ann stay at the zoo?* **(3)**
 - *How can you show 3 hours after 2 o'clock on the number line?* **(Start at 2 and count on 3.)**
- h. Ask: *What time did Ann leave the zoo?* **(5 o'clock)** *How does the number line show the answer to the problem?* **(After counting on 3 from 2 o'clock, you land on 5 o'clock.)**
- i. Tell children that they are going to solve another problem involving time. Say: *Ty goes to the beach at 9 o'clock. He leaves the beach at 11 o'clock.* Ask: *How long was Ty at the beach?*
- j. Ask: *How can the number line help solve this problem?* **(Mark the time Ty got to the beach and the time Ty left the beach on the number line. Then count on to find how long he was at the beach.)** Invite a volunteer to show the start time on the number line by pointing to it with a crayon. Guide the volunteer to show the correct start time by asking questions such as:
- *What time does Ty go to the beach?* **(9 o'clock)**
 - *Where is 9 o'clock shown on the number line?* **(9)**
 - *Do you think Ty went to the beach at 9 AM or 9 PM? Explain.* **(9 AM; most people go to the beach during the day.)**
- k. Invite another volunteer to show 11 o'clock on the number line by pointing to it with the second crayon. Guide the volunteer to show the correct end time by asking questions such as:
- *At what time does Ty leave the beach?* **(11 o'clock)**
 - *Where is 11 o'clock shown on the number line?* **(11)**



ONE-DAY ACTIVITY

- l. Ask: *How long was Ty at the beach? (2 hours)* How does the number line show the answer to the problem? **(I can count on from 9 to 11 to find the number of hours Ty was at the beach.)**
- m. Repeat e–l with new problems as needed until all children understand how to use the number line to solve elapsed time problems to the nearest hour.

2 Show elapsed time on clocks.

- a. Direct children's attention to the Clock Number Line. Say: *The number line can be bent into a circle to model a clock.* Bend the number line into a circle to form a clock face. Have children sit in a circle around the clock. Guide children to recognize the connection between the number line and the clock by asking questions such as:
- *What is the first number on the number line? Where is that number on the clock?* **(1; The 1 is between 12 and 2 on the clock.)**
 - *What is the last number on the number line? Where is that number on the clock?* **(12; The 12 is between 11 and 1 on the clock.)**
 - *How is the clock the same as the number line?* **(They both show the numbers 1 to 12.)**
 - *How is the clock different from the number line?* **(The number line ends at 12, but the clock circles back to 1 after it reaches 12.)**
- b. Tell children that they will be using the clock to help solve problems involving time. Say: *Liam starts building a cage for his rabbit at 7 o'clock. He finishes 4 hours later.* Ask: *What time does Liam finish building the rabbit cage?*
- c. Ask: *How can the clock help solve this problem?* **(Mark the time Liam started to build the cage and count on 4 using the clock.)**
- d. Invite a volunteer to show the start time on the clock using a crayon to represent the clock's hour hand. Guide the volunteer to show the correct start time by asking questions such as:
- *What time does Liam start building the rabbit cage?* **(7 o'clock)**
 - *Where is the hour hand on the clock when it is 7 o'clock?* **(Pointing to 7.)**
 - *Do you think Liam started to build the cage at 7 o'clock in the morning or 7 o'clock in the evening? Explain.* **(7 o'clock in the morning; 7 o'clock in the evening is too close to bedtime to start a project.)**
- e. Invite another volunteer to show 4 hours after 7 o'clock by rotating the crayon that is representing the hour hand. Guide the volunteer to show the correct end time by asking questions such as:
- *How many hours does it take Liam to build the rabbit cage?* **(4)**
 - *How can you show 4 hours after 7 o'clock on the clock?* **(I can start at 7 and count on 4.)**



ONE-DAY ACTIVITY

- f. Guide children to understand how the clock relates to the problem by asking questions such as:
- *How does the clock show the answer to the problem?* (After counting on 4 from 7 o'clock, you land on 11 o'clock.)
 - *What time did Liam finish building the rabbit cage?* (11 o'clock)
- g. Tell children that they are going to solve another problem involving time. Say: *Nia goes to a friend's house at 2 o'clock. She leaves her friend's house at 7 o'clock. Ask: How long was Nia at her friend's house?*
- h. Ask: *How can the clock help solve this problem?* (Show the time Nia got to her friend's house and the time Nia left her friend's house on the clock. Then count on to find how long she was at her friend's house.)
- i. Invite a volunteer to show the start time on the clock using a crayon. Guide the volunteer to show the correct start time by asking questions such as:
- *What time does Nia go to her friend's house?* (2 o'clock)
 - *Where is the hour hand on the clock when it is 2 o'clock?* (Pointing to 2.)
 - *Do you think Nia went to her friend's house at 2 AM or 2 PM? Explain.* (2 PM; Most people are asleep at 2 AM.)
- j. Invite another volunteer to show 7 o'clock on the clock with the second crayon. Guide the volunteer to show the correct end time by asking questions such as:
- *At what time does Nia leave her friend's house?* (7 o'clock)
 - *Where is the hour hand on the clock when it is 7 o'clock?* (Pointing to 7.)
- k. Ask: *How long was Nia at her friend's house?* (5 hours) *How does the clock show the answer to the problem?* (I can count on from 2 to 7 to find the number of hours Nia was at her friend's house.)
- l. Tell children that they are going to solve another problem involving time. Say: *Ben starts watching a movie at 6:30. The movie is 2 hours and 30 minutes long. Ask: What time does Ben finish the movie?*
- m. Ask: *How is this problem different from the other problems you have seen today?* (I will need the minute hand to show the start time for this problem.)
- n. Ask: *How can the clock help solve this problem?* (I can show the time Ben started the movie and count on 2 hours and 30 minutes on the clock.)



ONE-DAY ACTIVITY

- o. Invite a volunteer to show the start time on the clock. Use a crayon for the hour hand and use a pencil for the minute hand. Guide the volunteer to show the correct start time by asking questions such as:
- *What time does Ben start the movie?* (6:30)
 - *Where is the hour hand on the clock when it is 6:30?* (Between 6 and 7.)
 - *Where is the minute hand on the clock when it is 6:30?* (Pointing to 6.)
 - *Do you think Ben started watching the movie at 6:30 AM or 6:30 PM? Explain.* (6:30 PM; I like watching movies at night.)
- p. Invite two volunteers to work together to show the end time on the clock by rotating the hour hand (crayon) and minute hand (pencil) of the clock. Have children count the hours as the hands rotate around the clock. Guide the volunteer to show the correct end time by asking questions such as:
- *What is 2 hours after 6:30?* (8:30)
 - *What is 30 minutes after 8:30?* (9 o'clock)
 - *Where is the hour hand on the clock when it is 9 o'clock?* (Pointing to 9.)
 - *Where is the minute hand on the clock when it is 9 o'clock?* (Pointing to 12.)
- q. Ask: *What time does Ben finish watching the movie?* (9 o'clock) *How does the clock show the answer to the problem?* (I can start at 6:30 and count on 2 hours and then count on 30 minutes to find that the movie ends at 9 o'clock.)
- r. Repeat l–q with the following problem: *Lily starts doing her homework at 5:00. She finishes at 6:30. How long does it take Lily to finish her homework?*

3 Solve elapsed time problems.

- a. Provide pairs of children with **Recording Sheet 3**, a set of **Clock Cards**, and glue. Have a demonstration clock and the Clock Number Line available for children to use as needed.
- b. Instruct children to read the problems on the Recording Sheet and glue a Clock Card to the sheet to show the end time of the situation. For problems 3 and 4, children will also write the amount of time that has elapsed. Guide children to solve the problems by asking questions such as:
- *What is known about this problem?*
 - *What are you asked to find?*
 - *How can you find the answer to the problem using a number line? A clock?*
- c. Have children compare and discuss their results with another pair. (7:30; 9:00; 0 hours 30 minutes; 1 hour 30 minutes)



ONE-DAY ACTIVITY

4 Check for understanding.

Provide children with a copy of **Check for Understanding**. Have children draw hands on the clock to show the start time of the situation. (**Minute hand pointing to 6 and hour hand pointing between 12 and 1.**) Then have children circle a clock to show the end time of the situation. (**4:00**)

Observe and monitor children's reasoning and guide or redirect them as necessary. Use the table below to pinpoint where extra support may be needed.

If you observe...	the child may...	Then try...
the child draws the hour hand pointing to 12,	not understand that the hour hand moves from one number to the next on the clock as the minute hand moves around the clock.	having the child use a demonstration clock to show 12:30 and compare it to the clock drawing.
the child circles the first clock to show the end time,	have counted the minutes first and then started counting from 12 to count the hours.	having the child use a demonstration clock to count on 3 hours and 30 minutes from 12:30 and compare it to the circled clock.
the child circles the second clock to show the end time,	have not included the minutes in the elapsed time given in the problem.	first having the child count on 3 hours from 12:30 to get 3:30 and then have the child count on 30 minutes from 3:30.

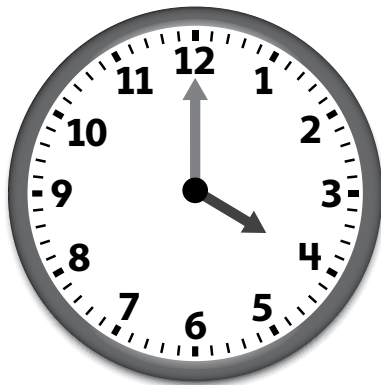


ONE-DAY ACTIVITY

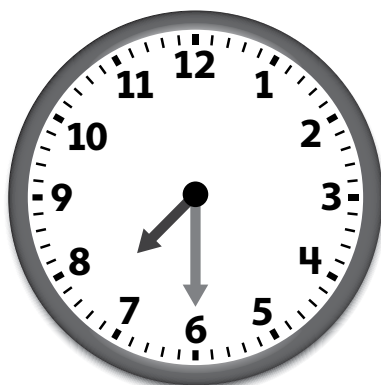
Name: _____

Recording Sheet 3

1. Yuki starts sewing at 4:00.
She finishes 3 hours and 30 minutes later.
What time does Yuki finish sewing?

Start Time**End Time**

2. Barry goes to a dance at 7:30.
He leaves the dance 1 hour and 30 minutes later.
What time does Barry leave the dance?

Start Time**End Time**

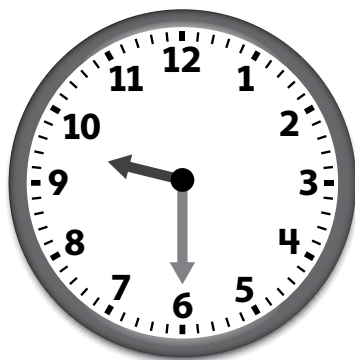
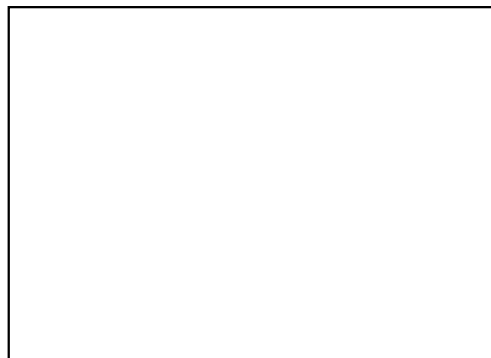


ONE-DAY ACTIVITY

Name: _____

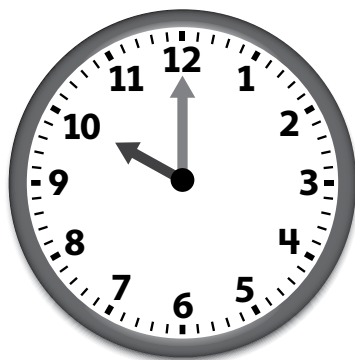
Recording Sheet 3 *continued*

3. Tim goes to the store at 9:30.
He leaves the store at 10:00.
How long was Tim at the store?

Start Time**End Time**

How much time has passed? _____ hours _____ minutes

4. Sandra goes to a friend's house at 10:00.
She leaves her friend's house at 11:30.
How long was Sandra at her friend's house?

Start Time**End Time**

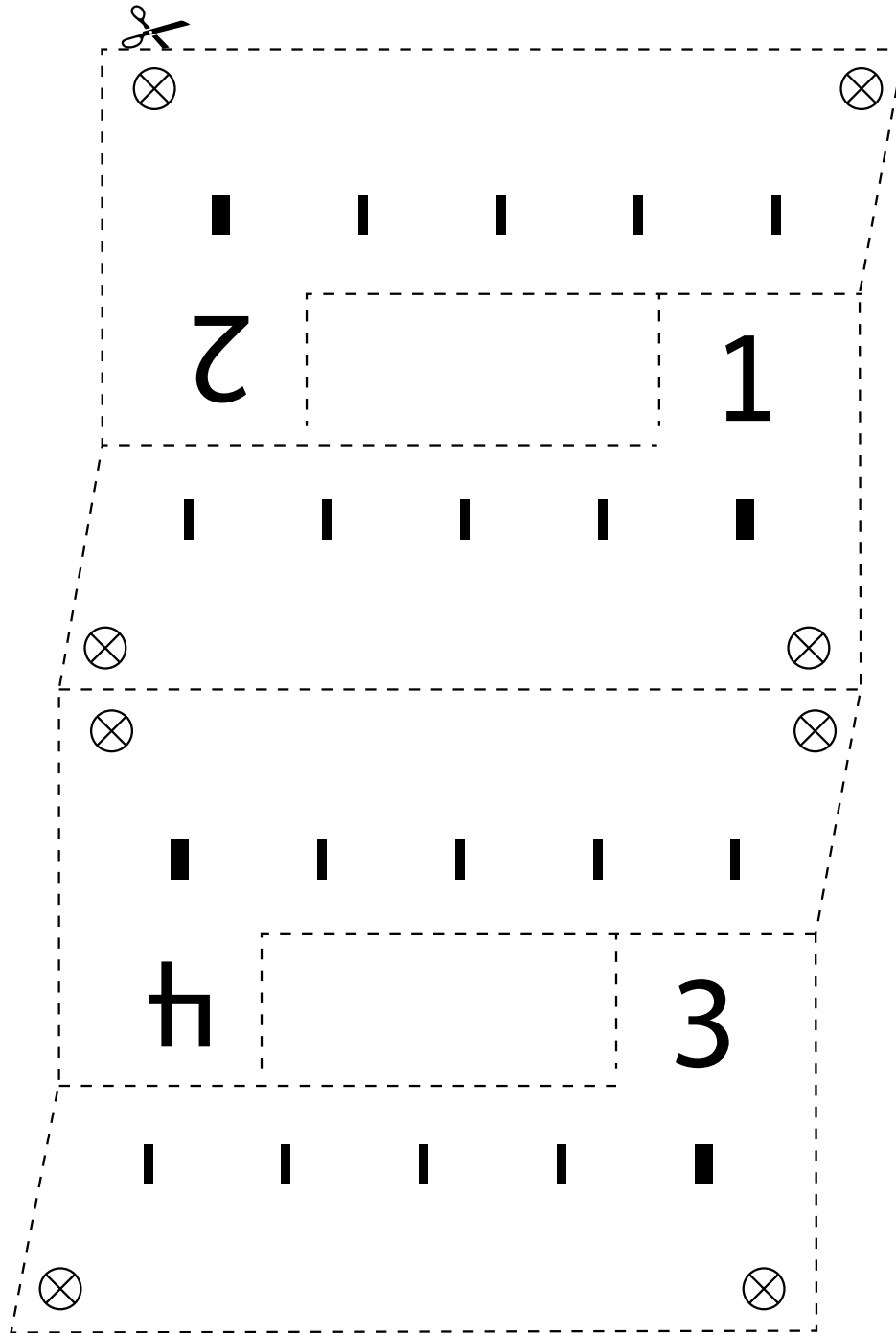
How much time has passed? _____ hours _____ minutes



ONE-DAY ACTIVITY

Name: _____

Clock Number Line



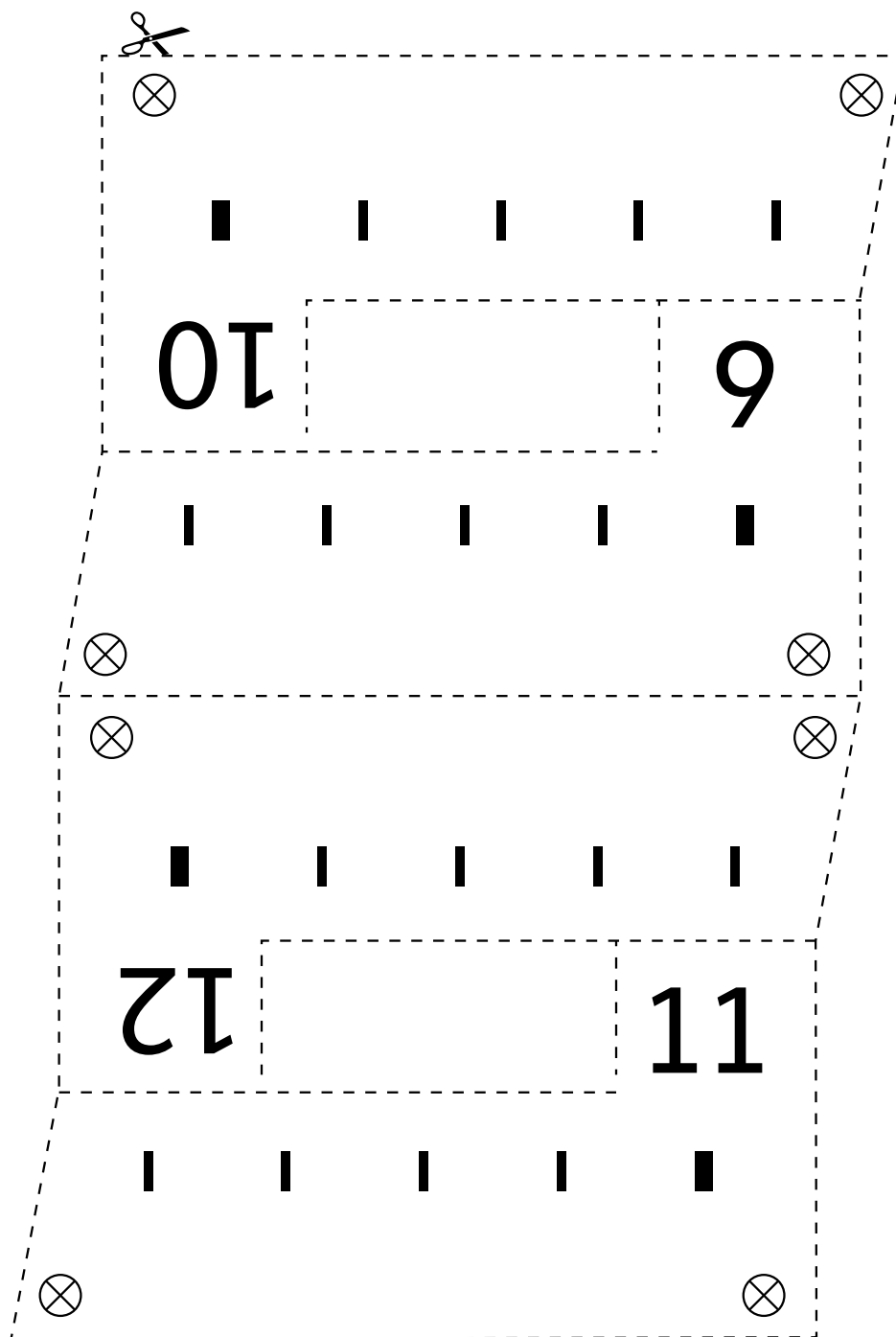


Name:



ONE-DAY ACTIVITY

Name: _____

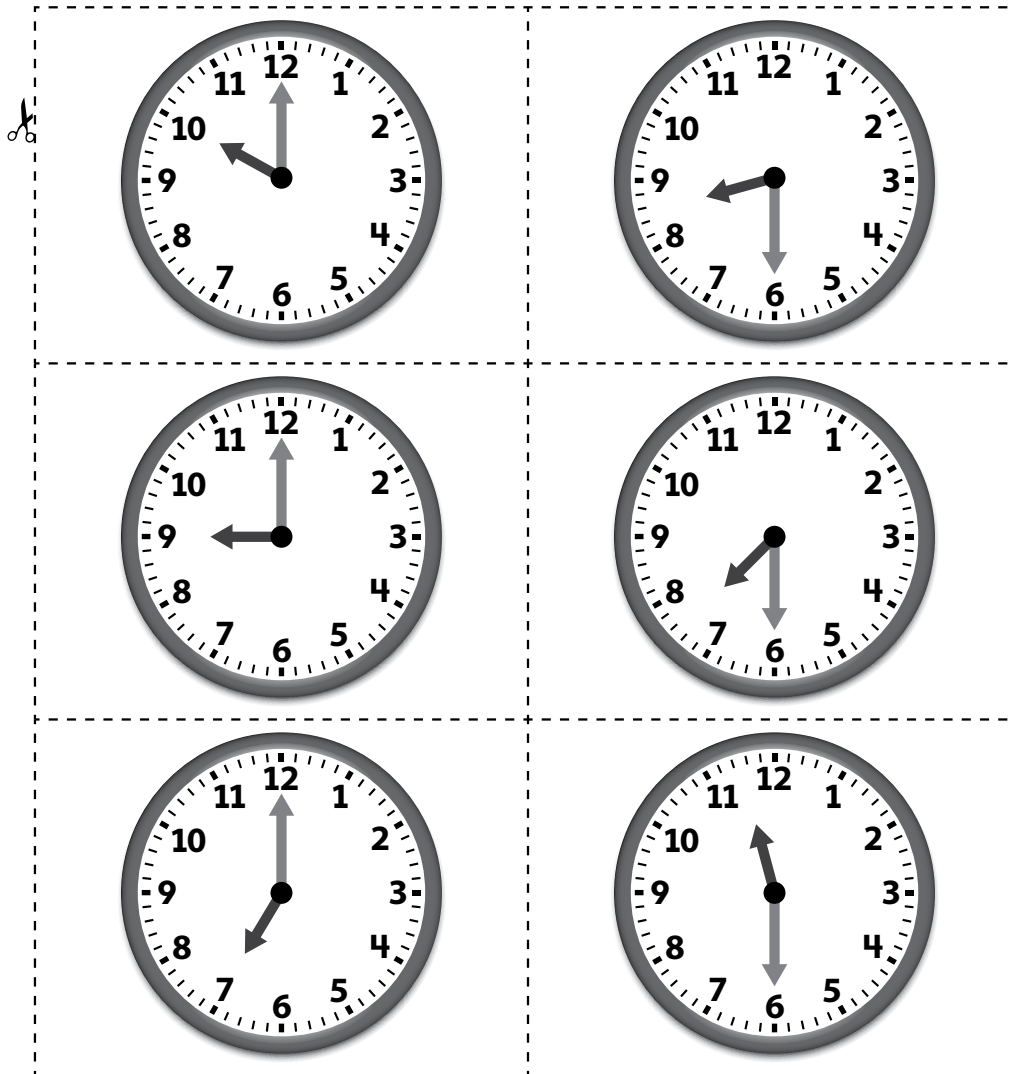
Clock Number Line *continued*



ONE-DAY ACTIVITY

Name: _____

Clock Cards





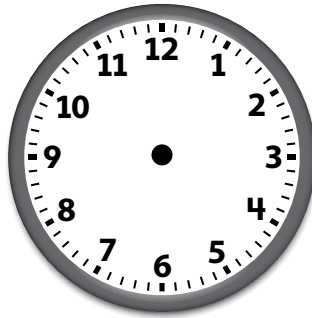
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Name: _____

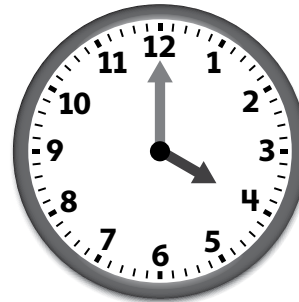
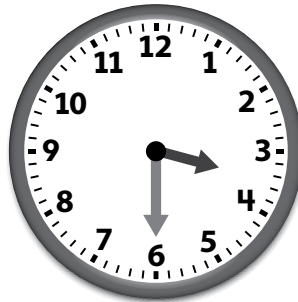
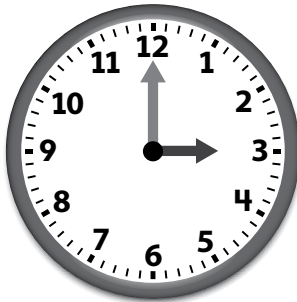
Check for Understanding

Sofía goes shopping at 12:30.
She shops for 3 hours and 30 minutes.

Draw hands on the clock to show the time Sofía goes shopping.



Circle the clock that shows when Sofía goes home.





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“I love the rigor of the program,
and I love having access to all
grade levels of the [Teacher]
Toolbox. It allows me to
differentiate the instruction
within each of my math groups.”

—Mathematics Educator

.....

Lesson-Level Resources

Lesson 8: Make Ten to Add

Additional Practice

Centers Library [22](#)

Fluency and Skills Practice [24](#)

Differentiation

Reteach: Tools for Instruction [26](#)

Reinforce: Differentiated Learning Activity [29](#)

Extend: Enrichment Activity [32](#)

Assessment

Lesson Quiz [34](#)

Build to Compare

Grade K Centers Library Card is shown. Centers Library Cards are also available for Grade 1.



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19

Compare Within 10
BUILD TO COMPARE

OPTIONS

- A. Cube Number Path Workmat
- B. More, Less, Equal Workmat
- C. Greater, Less, Equal Workmat

MATERIALS (per pair)

- Connecting cubes
- Cups
- Workmat

PREPARATION

1. Select a range of numbers for children to work with at the center.
2. Place a selected number of connecting cubes in each cup.
3. Select a workmat from the available options.

DIRECTIONS

1. Place a cup in front of each partner.
2. Taking turns, each partner takes the cubes out of their cup and builds a tower with that many cubes.
3. Partners compare the number of cubes in each tower and describe the comparison.
4. Partners record the number and comparison on a workmat.
5. Repeat with each partner selecting a different cup and building a new tower.
6. Play continues until time is called.

Teacher Tip: Children could select a number card or roll a number cube to determine the number of cubes used to build each tower.

QUICK CHECK

Ask: How did you know which tower had more or less cubes?

Listen For: I knew my tower had ____ cubes because ____.

19A | CUBE NUMBER PATH
Build to Compare

NAME: _____

10	10
9	9
8	8
7	7
6	6
5	5
4	4
3	3
2	2
1	1

A. Cube Number Path Workmat

19B | MORE, LESS, EQUAL
Build to Compare

NAME: _____

	more than	
	less than	
	equal to	
	_____	_____

B. More, Less, Equal Workmat

19C | GREATER, LESS, EQUAL
Build to Compare

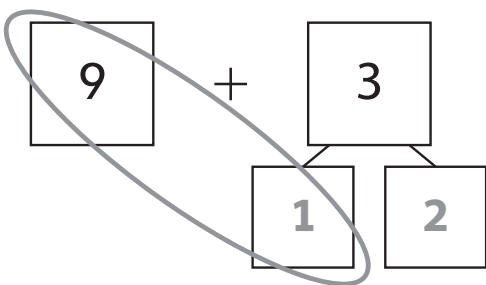
NAME: _____

1	Greater Than	Less Than	Equal to	2
_____				_____
_____				_____
_____				_____
_____				_____
_____				_____

C. Greater, Less, Equal Workmat

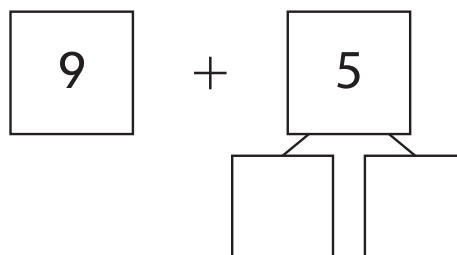
Making a Ten to Add

Name _____

Fill in the number bonds to make a ten.**1** Find $9 + 3$.

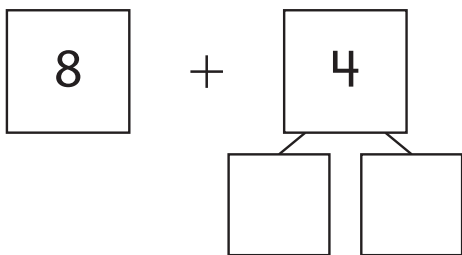
$10 + 2 = \underline{\quad}$

$9 + 3 = \underline{\quad}$

2 Find $9 + 5$.

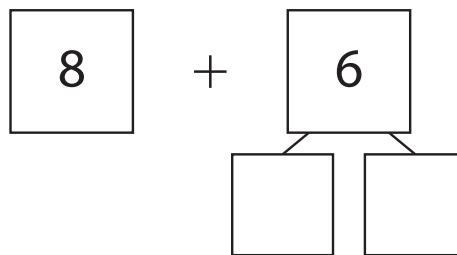
$10 + 4 = \underline{\quad}$

$9 + 5 = \underline{\quad}$

3 Find $8 + 4$.

$10 + 2 = \underline{\quad}$

$8 + 4 = \underline{\quad}$

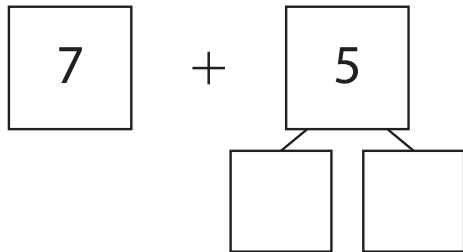
4 Find $8 + 6$.

$10 + 4 = \underline{\quad}$

$8 + 6 = \underline{\quad}$

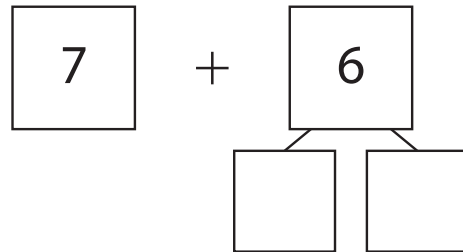
Making a Ten to Add *continued*

Name _____

5 Find $7 + 5$.

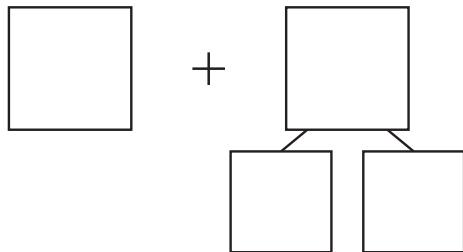
$$10 + 2 = \underline{\quad}$$

$$7 + 5 = \underline{\quad}$$

6 Find $7 + 6$.

$$10 + 3 = \underline{\quad}$$

$$7 + 6 = \underline{\quad}$$

7 Find $7 + 4$.

$$10 + 1 = \underline{\quad}$$

$$7 + 4 = \underline{\quad}$$

Discuss It

How does making a ten help you add two numbers?

Tools for Instruction

Make a Ten to Add Within 20

Objective Use a ten frame to solve addition facts for 7, 8, and 9.

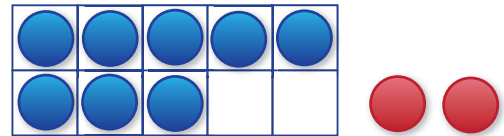
Materials Two-color counters, **Ten Frames** (page 3)

Recognizing and understanding ten allows students to make sense of the numeration system and to use pattern and structure as they calculate. Knowing different ways to make a ten, such as $1 + 9$, $2 + 8$, and $3 + 7$, can help students add and subtract quickly and reliably. In this activity, students make a ten to help them understand and solve basic addition facts. For example, when adding $9 + 6$, they will add $9 + 1$ to make a 10, and then add 5 more. Later, students will use this understanding to make tens while adding three numbers and while computing mentally. The idea of making a ten can also provide a basis for the subtraction strategy of breaking apart numbers to make tens in subtraction.

Step by Step 20–30 minutes

1 Make a ten.

- Give the student a blank **Ten Frame** (page 3).
- Have the student put 8 counters in the ten frame, as shown.
- Ask: *How do you show $8 + 2$ on the ten frame?* Guide the student to add two counters to fill in the two open spots.
- Explain that filling all of the ten spaces on the ten frame is “making a ten.”



Support English Learners Since the word *make* has multiple meanings, the phrase *make a ten* may be confusing. Remind the student that *making* something can mean putting parts together, like puzzle pieces or recipe ingredients. To *make a ten*, you look for two numbers that add to ten.

2 Model $8 + 3$.

- Ask: *What would happen if you tried to show $8 + 3$ on the ten frame?* Use counters to show that the ten frame would be filled, with one left over.
- Help the student verbalize that she “made a ten” and had one counter left over. Ask: *How do you write the number for 1 ten and 1 leftover one?* (11)
- Write the number sentence shown. Use counters to illustrate that when you add $8 + 3$, you can break the 3 into $2 + 1$, giving you $8 + 2 + 1$. Point out that you can add the 8 and 2 first to “make a ten,” and then add the 1 to find the answer.

$$\begin{array}{rcl}
 8 + 3 = & 8 + 2 + 1 & \\
 & \swarrow \quad \searrow & \\
 & 10 + 1 & \\
 & \swarrow \quad \searrow & \\
 8 + 3 = & 11 &
 \end{array}$$

3 Use the make-a-ten strategy to add other facts.

- Use this approach to teach other facts with 7, 8, and 9.
- Have the student use ten frames and counters. Record the corresponding number sentences, emphasizing to the student how to “make a ten” in each problem.
- As the student seems to be ready, challenge her to do more of the work, including describing how to make a ten. If possible, encourage the student to strive for doing the activity mentally without using the ten frame.

Tools for Instruction

Check for Understanding

Provide a ten frame and ask the student to place counters in 8 spots. Then ask the student to use 7 counters with the frame and to describe how to make a ten to add $8 + 7$. ($8 + 7 = 8 + 2 + 5 = 10 + 5 = 15$)

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

If you observe...	the student may...	Then try...
the student has difficulty representing what is displayed in the ten frame as a number sentence,	benefit from a modeling situation.	having the student describe the process she used with the counters and ten frame to make a ten as you record the corresponding numbers and symbols, correcting any errors she makes.
the student does not recognize that 10 and 5 is 15,	not be sufficiently familiar with the teen numbers.	helping the student connect the number names with the numerals, focusing on the words for 11, 12, 13 and 15, where the number names are less obvious.

Tools for Instruction

Name _____

Ten Frames

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Center Activity 1.08 ★★

Make Ten to Add



Check Understanding

Make 10 to find
 $8 + 5$.

On Level is shown here.
Below and Above Level
are also available.

What You Need

- 9 connecting cubes of one color
- 9 connecting cubes of another color
- Recording Sheet
- Addition Cards

What You Do

1. Take turns. Pick a card.
2. Make a cube train for each number. Use one color for the first number. Use another color for the second number.
3. Move some cubes from one train to the other train to make 10.
4. Complete the addition equations on the **Recording Sheet**. Circle the number added to 10. If your circled number is greater than your partner's, you win the turn.

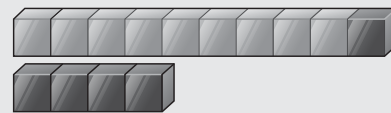
Example

Pick $9 + 5$.

Make two cube trains.



Make 10.



$$9 + 5 = 14$$

$$10 + \textcircled{4} = 14$$

Go Further!

Add 8 and 4. Do not use cubes. Tell how to make 10 to find the total. Then find 9 and 4.

Operations and Algebraic Thinking



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Center Activity 1.08 ★★ Recording Sheet

Player A _____

Player B _____

Make Ten to Add

Player A	Player B
_____ + _____ = _____	_____ + _____ = _____
10 + _____ = _____	10 + _____ = _____
_____ + _____ = _____	_____ + _____ = _____
10 + _____ = _____	10 + _____ = _____
_____ + _____ = _____	_____ + _____ = _____
10 + _____ = _____	10 + _____ = _____



I can add cubes to the greater number to make 10.



Center Activity 1.08 ★★ Addition Cards

$6 + 8$	$9 + 6$
$7 + 6$	$5 + 7$
$8 + 7$	$9 + 4$

Operations and Algebraic Thinking

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Enrichment Activity

Name _____

Can You Prove It?

Your Challenge

Soo uses the make a ten strategy to make the total of 14.

How many ways can you make 14 using numbers that make ten?

Use your **Recording Sheet** to show the different ways and then answer the questions.

Example

$$\begin{array}{c} 10 + 4 = 14 \\ \swarrow \quad \searrow \\ 7 + 3 + 4 = 14 \end{array}$$



Enrichment Activity Recording Sheet

Name _____

Can You Prove It?

How many ways can you make 14 using numbers that make ten? Show all the ways.

Does the strategy you used to make 14 work for all teen numbers? Why?

Show why this works using drawings or pictures.



LESSON QUIZ

NAME: _____

LESSON

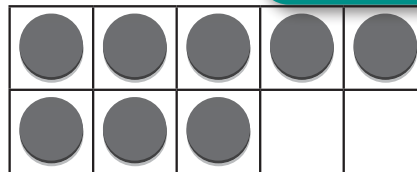
8

Digital Comprehension
Checks are also available**Solve.**

1 $8 + 7 = ?$

$8 + 7 = 10 + \underline{\quad}$

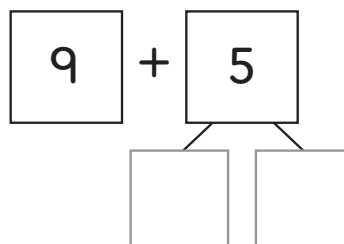
$8 + 7 = \underline{\quad}$



2 $9 + 5 = ?$

$9 + 5 = 10 + \underline{\quad}$

$9 + 5 = \underline{\quad}$



3 $8 + 8 = ?$

Show your work.

$8 + 8 = \underline{\quad}$

LESSON QUIZ

NAME: _____

LESSON
8**Solve.**

4 $7 + 6 = ?$

Circle. 

11

12

13

-
- 5** Amy has 7 red cups and 4 blue cups.
How many cups in all? Show your work.

$7 + 4 = \underline{\quad}$

 $\underline{\quad}$ cups

Unit-Level Resources

Unit 2: Addition and Subtraction within 20

Unit Game	37
Grade Level Game	45
Literacy Connection	47
Unit Assessment (Form A)	50

Unit 2 Game

Name _____

Teen Number Totals

What You Need

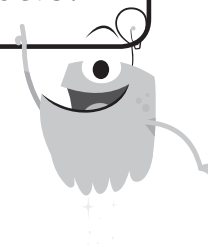
For each pair:

- 3 sets of Number Cards 1–10
- *Teen Number Totals* Game Board
- 9 two-color counters

For each child:

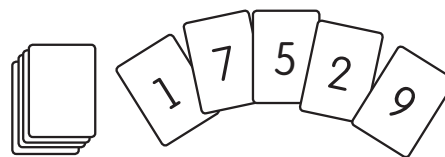
- *Teen Number Totals* Recording Sheet

What are the
different partners
for teen numbers?

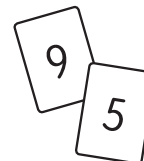


How to Play

- Mix and place the cards in a stack facedown. Take turns.
- Take 5 cards from the stack. Choose 2 or 3 of the numbers to add. Add to make a teen number.
- Put a counter on that number. If you cannot make a number that is open on the Game Board, skip your turn. Put your cards on the bottom of the stack.
- Write an addition equation on the Recording Sheet. Show what you added.
- Play until all numbers on the Game Board are covered. The player with the most counters on the Game Board wins.



11	12	13
14	15	16
17	18	19



$$\boxed{9} + \boxed{5} = \boxed{14}$$



Name _____

Teen Number Totals Recording Sheet

	+		+		=	
	+		+		=	
	+		+		=	
	+		+		=	
	+		+		=	
	+		+		=	



Name _____

Teen Number Totals Game Board

11	12	13
14	15	16
17	18	19

Grade 1 Unit 2 Game Teen Number Totals

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Name _____

Number Cards 1–10

1	2	3	4
5	6	7	8
9	10		



Name _____

Number Cards 1–10

1	2	3	4
5	6	7	8
9	10		



Name _____

Number Cards 1–10

1	2	3	4
5	6	7	8
9	10		



Name _____

Equation Recording Sheet

			=	
			=	
			=	
			=	
			=	
			=	



Name _____

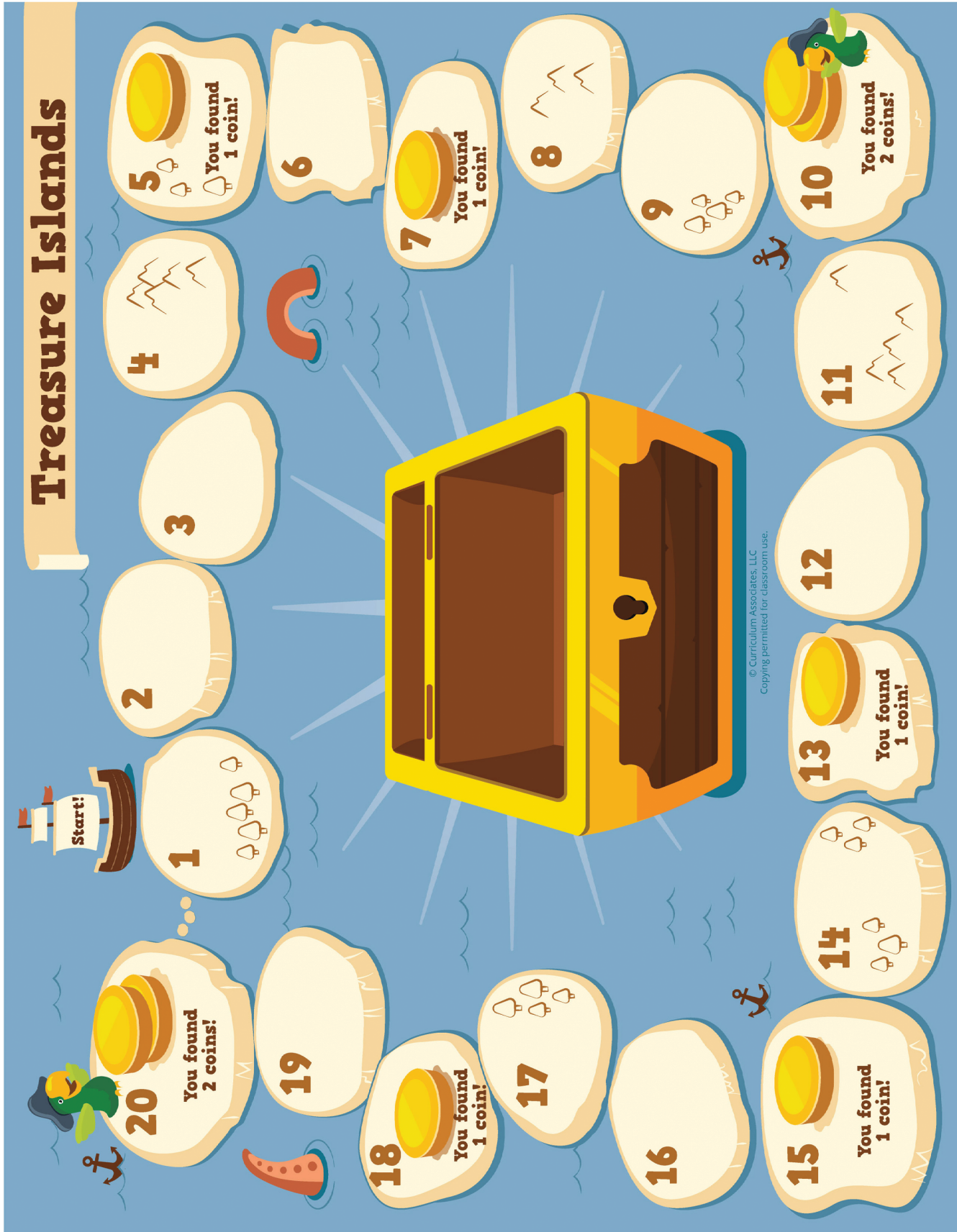
Teen Number Subtraction Game Board

1	2	3
4	5	6
7	8	9

Grade 1 Unit 2 Game Teen Number Totals



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Treasure Islands

Instructions Page (2–3 players)

Materials and setup



2 special number cubes
 Cube 1: (10, 10, 10, 10, 9, 8)
 Cube 2: (6, 5, 4, 3, 2, 1)



10–15 coins



2–3 game pieces
 1 per player



Game board

- Put 10–15 coins in the treasure chest (beginners should start with 10 coins).
- Put all game pieces on Start!
- Decide who goes first—rock-paper-scissors could work!

Goal



Collect as many coins as you can before they're all gone.
 The player with the most coins wins!

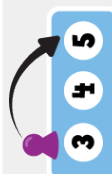
On your turn



Roll both number cubes.
 For example, you roll 8 and 6.

$$8 - 6 = 2$$

Find the difference of the numbers you rolled. Use the thinking sheet if you want. Say the difference out loud.
 "8 minus 6 equals 2"



Move your game piece forward by the difference.
 You're on 3 and roll 8-6. You move forward 2 spaces, ending your turn at 5.



As you pass 20, continue to 1 and **keep counting**.

Scoring

- Collect coin(s) each time you land on a space with a coin on it.
- The game ends when all the coins are gone from the treasure chest.

Additional games are available.

TURN On the TAP

BY MARISA WOLLCOT

1 Turn on the tap, and out pours fresh, clean water. But where does it come from? In many places, water is pumped from lakes and rivers or from under the ground to wells or to treatment plants. There, it is cleaned to make it safe to drink. Then pipes carry clean water into our homes.

2 Water is important to people—we need it to live! To stay healthy, we drink it every day. We also use it to get clean and to wash away germs. We think there will always be plenty of water when we need it, but that may not be true.



3 In the past, people wasted water. Water was polluted with harmful things, such as garbage and oil.

4 We must protect our water. To make sure we have fresh water in the future, everyone must help today. So be sure to use water wisely!

Name _____

Literacy Connection: Science**“Turn on the Tap”: Add Three Numbers****Solve the problems.**

- 1** Ava drinks 6 cups of water. Sophia drinks 4 cups of water. Olivia drinks 8 cups of water. How many cups of water do Ava, Sophia, and Olivia drink altogether?

Draw counters.

Complete the equation.

$$6 + 4 + 8 = \underline{\quad}$$

Ava, Sophia, and Olivia drink _____ cups of water.

Name _____

Literacy Connection: Science continued

- 2** Logan drinks 4 cups of water. Noah drinks 8 cups of water. Mason drinks 5 cups of water. How many cups of water do Logan, Noah, and Mason drink in all?

Draw counters.

Write an equation.

$$\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$$

Logan, Noah, and Mason drink _____ cups of water.

UNIT ASSESSMENT

NAME: _____

UNIT
2

Form A

Solve the problems.

Form A is shown here. Digital Comprehension Checks and Form B are also available.

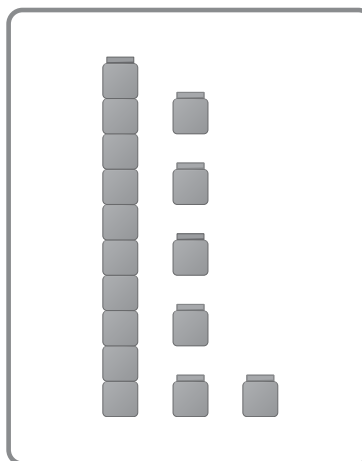
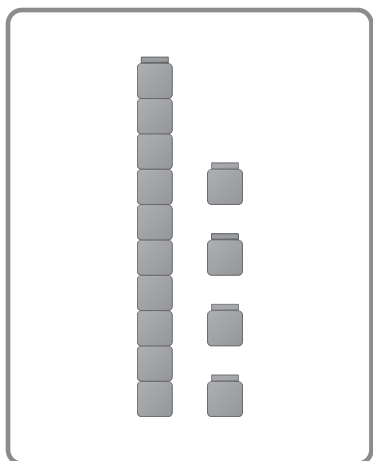
- 1 Tina has 7 stickers.
She buys 8 more.
How many stickers does Tina have now?

$$7 + 8 = 7 + 7 + \underline{\quad}$$

$$7 + 8 = \underline{\quad}$$

 $\underline{\quad}$ stickers

- 2 Draw lines to match the cubes with the equation.



$$14 = 10 + 4$$

$$15 = 10 + 5$$

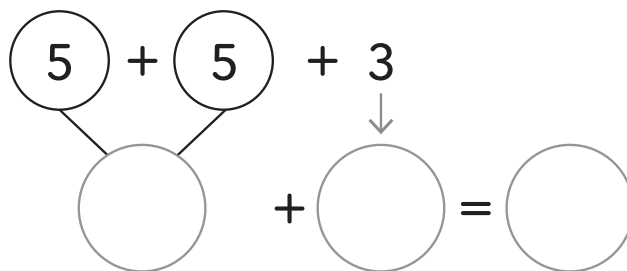
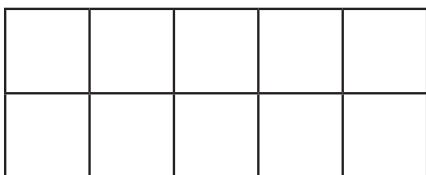
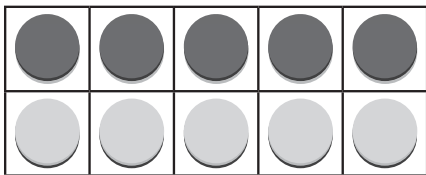
$$16 = 10 + 6$$

UNIT ASSESSMENT

NAME: _____

UNIT
2**Form A**

- 3 Jena has 5 toy cars. She has 5 toy trucks.
She has 3 toy boats.
How many toys does she have in all?



_____ toys

- 4 $8 + 6 = ?$

Circle.

$10 + 6$

$10 + 4$

UNIT ASSESSMENT

NAME: _____

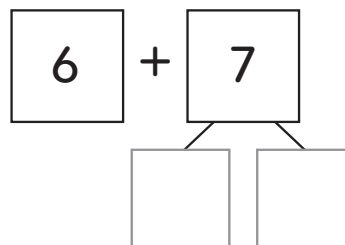
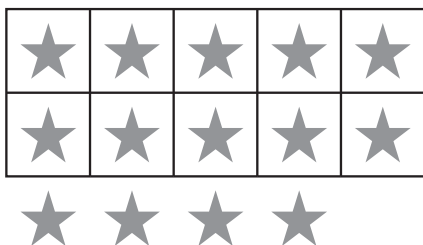
UNIT
2

Form A

5 $6 + 7 = ?$

$6 + 7 = 10 + \underline{\quad}$

$6 + 7 = \underline{\quad}$

**6** How many stars? $\underline{\quad}$ ten and $\underline{\quad}$ ones is $\underline{\quad}$.

7 $7 + 4 = ?$

Circle.

10

11

12

UNIT ASSESSMENT

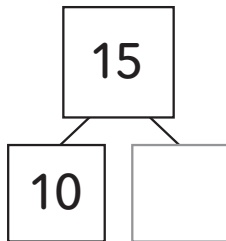
NAME: _____

UNIT
2**Form A**

- 8 $14 - 8 = ?$
Show your work.

$$14 - 8 = \underline{\quad}$$

- 9 Complete the number bond.
Then write the tens and ones.



15 is the same as _____ ten and _____ ones.

UNIT ASSESSMENT

NAME: _____

UNIT
2**Form A**

- 10** Find $4 + 7 + 6$. Show your work.

- 11** There are 8 large fish.
There are 9 small fish.
How many fish in all?

$$8 + 9 = 8 + 8 + \underline{\quad}$$

$$8 + 9 = \underline{\quad}$$

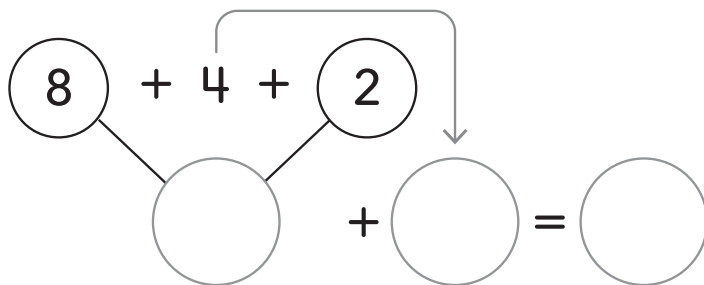
 $\underline{\quad}$ fish

UNIT ASSESSMENT

NAME: _____

UNIT
2**Form A**

- 12** Dave has 8 red hats. He has 4 blue hats. He has 2 green hats. How many hats does he have in all?



_____ + _____ + _____ = _____

_____ hats

- 13** José paints 15 pictures. He gives away 8 pictures. How many pictures does he have left? Show your work.

$$15 - 8 = \underline{\quad}$$

José has _____ pictures left.

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