



MISSISSIPPI

# EXEMPLAR

Units & Lessons

MATHEMATICS

Grade 1

Grant funded by:



## Lesson 3: The Treasure Chest

**Focus Standard(s):** 1.OA.1

**Standards for Mathematical Practice:** SMP.3, SMP.4, SMP.5, SMP.7


**Estimated Time:** 70 minutes

**Resources and Materials:**

- Counters
- Crayons
- Math Journals
- Rekenreks or bead strings
- Ten Frames
- Handout 3.1: Hide Zero Cards
- Handout 3.2: Number Bonds Template
- Handout 3.3: Ten Frames Template
- Handout 3.4: Addition Equation Template
- Handout 3.5: Addition to 20 Practice
- Handout 3.6: Addition to 20 Homework
- Handout 3.7: Word Wall Games
- Boy Demonstrating how to use Hide Zero Cards: <https://www.youtube.com/watch?v=LhGEIKGf0Ok>
- Ten Frame Flash Cards: <https://www.youtube.com/watch?v=wRR9LK3zfh0>
- What are Hide Zero Cards: <https://vimeo.com/93275204>

**Lesson Target(s):**

- Students will add to 10 to make sums within 20 using tools and manipulatives.

<b>Guiding Question(s):</b>	
<ul style="list-style-type: none"> <li>• What models show your equation is equal?</li> <li>• What is the value of the digit 1 in the number 15?</li> </ul>	
<b>Vocabulary</b>	
<b>Academic Vocabulary:</b>	<b>Instructional Strategies for Academic Vocabulary:</b>
<ul style="list-style-type: none"> <li>• Addition</li> <li>• Compare</li> <li>• Difference</li> <li>• Minus</li> <li>• Reasonable</li> <li>• Subtraction</li> <li>• Sum</li> <li>• Total</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Introduce words with student-friendly definitions and pictures</li> <li><input type="checkbox"/> Model how to use the words in discussion</li> <li><input type="checkbox"/> Discuss the meaning of word in a mathematical context</li> <li><input type="checkbox"/> Create pictures/symbols to represent words</li> <li><input type="checkbox"/> Write/discuss using the words</li> <li><input type="checkbox"/> Act out the words or attach movements to the words</li> </ul>
<b>Symbol</b>	<b>Type of Text and Interpretation of Symbol</b>
	Instructional support and/or extension suggestions for students who are EL, have disabilities, or perform well below the grade level and/or for students who perform well above grade level
✓	Assessment (Pre-assessment, Formative, Self, or Summative)
<b>Instructional Plan</b>	
<b>Understanding Lesson Purpose and Student Outcomes:</b>	
Students will identify numbers on ten frames with a flash card video. Students will learn to model addition within 20 using number bonds, Rekenrek, Hide Zero Cards, ten frames, and equations.	

### **Anticipatory Set/Introduction to the Lesson: What Am I?**

Play [Ten Frames video](#). When a ten frame is shown, students call out the corresponding number. Do this as whole class or taking turns.

### **Activity 1: Vocabulary**

Choose a game from **Handout 3.7: Word Wall Games** to review vocabulary.

**Note:** Take the class' readiness into consideration when choosing the word wall game to play.

#### **For students who are EL, have disabilities, or perform well below grade level:**

- Students will work with a partner for peer coaching or with the teachers in a small group, depending on the activity chosen.

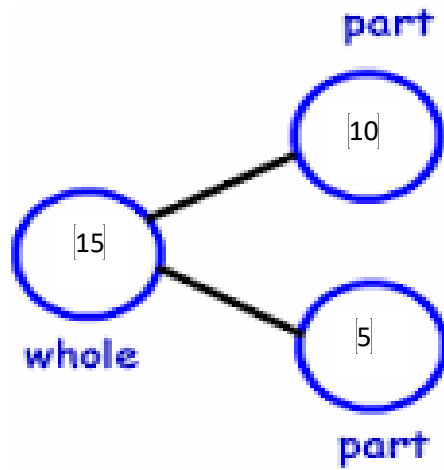
### **Activity 2: Pair Problem Solving**

Gather students on the floor. Display the following problem on the board or chart paper and use a close reading strategy to read the problem: "Peg Leg Sam has five more jewels than Captain Hook. Captain Hook has 10 jewels. How many jewels does Peg Leg Sam have?" Have students get into partner groups to support each other as they discuss the problem.

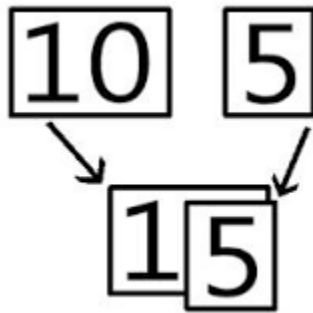
Use **Handout 3.1: Hide Zero Cards** to demonstrate how to use Hide Zero cards to see that  $10 + 5 = 15$ . Show the video [Hide zero](#) to see a boy using Hide the Zero cards to make 15 (SMP.4).

Model showing addition to 15 with a number bond, Hide Zero cards, a Rekenrek, ten frames with counters, and an equation while students model with their own manipulatives and tools (SMP.5).

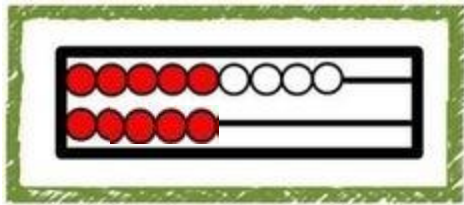
Number Bond:



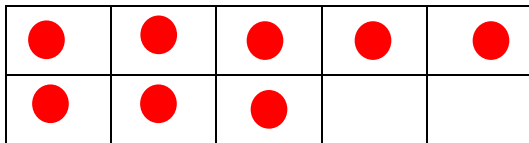
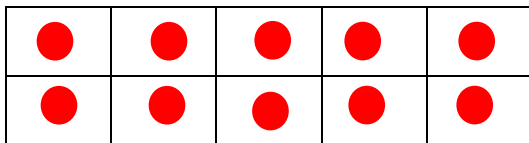
Hide Zero Card:



Rekenrek:



Ten Frames:



Equation:

$$10 + 5 = 15$$

Have students return to their work area to work with a partner. Display the following expressions:  $10 + 4 = \underline{\quad}$ ,  $12 + 6 = \underline{\quad}$ ,  $9 + 4 = \underline{\quad}$ , and  $11 + 9 = \underline{\quad}$ .

Distribute to each pair a set of Hide Zero cards. Instruct students to model addition expressions using the Hide Zero cards (SMP.7).

Distribute a Rekenrek to each pair and model the same addition expressions using the Rekenrek (SMP.5).

Distribute **Handout 3.2: Number Bond Template** to each pair and model the same addition expressions using the number bond template (SMP.5).

Distribute **Handout 3.3: Ten Frames** and counters to each pair and model the same addition expressions using the ten frames (SMP.5).

Distribute **Handout 3.4: Addition Equation Template** to each pair and tell them to write an equation for each of the addition expressions they practiced (SMP.7).

**Note:** If you do not have Rekenreks, you can create them by using strips of leather or string with 5 red beads and 5 white beads on each one. Each student will need 2 bead strings for each student or pair.

**Note:** Prior to the lesson, print Handouts 3.1, 3.2, and 3.3 and cut out and laminate if possible.

### **Activity 3: Sums to 20**

Model  $8 + 6$  using a Rekenrek and Ten Frames and making a number bond and equation. Tell students to model other numbers whose sum is equal to 14 on their Rekenrek. (not  $8 + 6$ ) Have students demonstrate all the different ways they can model 14:  $10 + 4$ ,  $9 + 5$ ,  $8 + 6$ ,  $7 + 7$ ,  $6 + 8$ ,  $5 + 9$ , and  $4 + 10$ . Point out to students that  $10 + 4 = 4 + 10$  (Commutative Property). Have students practice for the numbers 12, 13, 16, 17, 18, 19, and 20 using a Rekenrek and ten frames and making number bonds and writing equations. Tell students to record their work in their math journals.

**Activity 4: Independent Practice**

Distribute **Handout 3.5: Addition to 20 Practice** and tell students to work independently to complete the worksheet for adding within 20. Tell Students, “Find all the sums for the addition equations. When you get the sum, follow the directions to color the parts of the pirate that match that sum. For example, what is the sum of  $6 + 5$ ? (11) So everywhere there is an 11 on the pirate, you will color it what color? (red).”

**For students who are EL, have disabilities, or perform well below grade level:**

- Students can choose to use any of the manipulative used in the lesson.

**Extensions for students with high interest or working above grade level:**

- Have students write equations with a missing addend and model on Rekenreks and number bonds.

**Reflection and Closing:**

- Display the following problem on the board and tell students to find the sum in this equation:

$$6 + 7 = \underline{\quad} (13)$$

**Homework**

Distribute **Handout 3.6: Homework** and tell students to complete the worksheet.



**Handout 3.1: Hide Zero Cards**

**0**

**1**

**2**

**3**

**4**

**5**

**6**

**7**

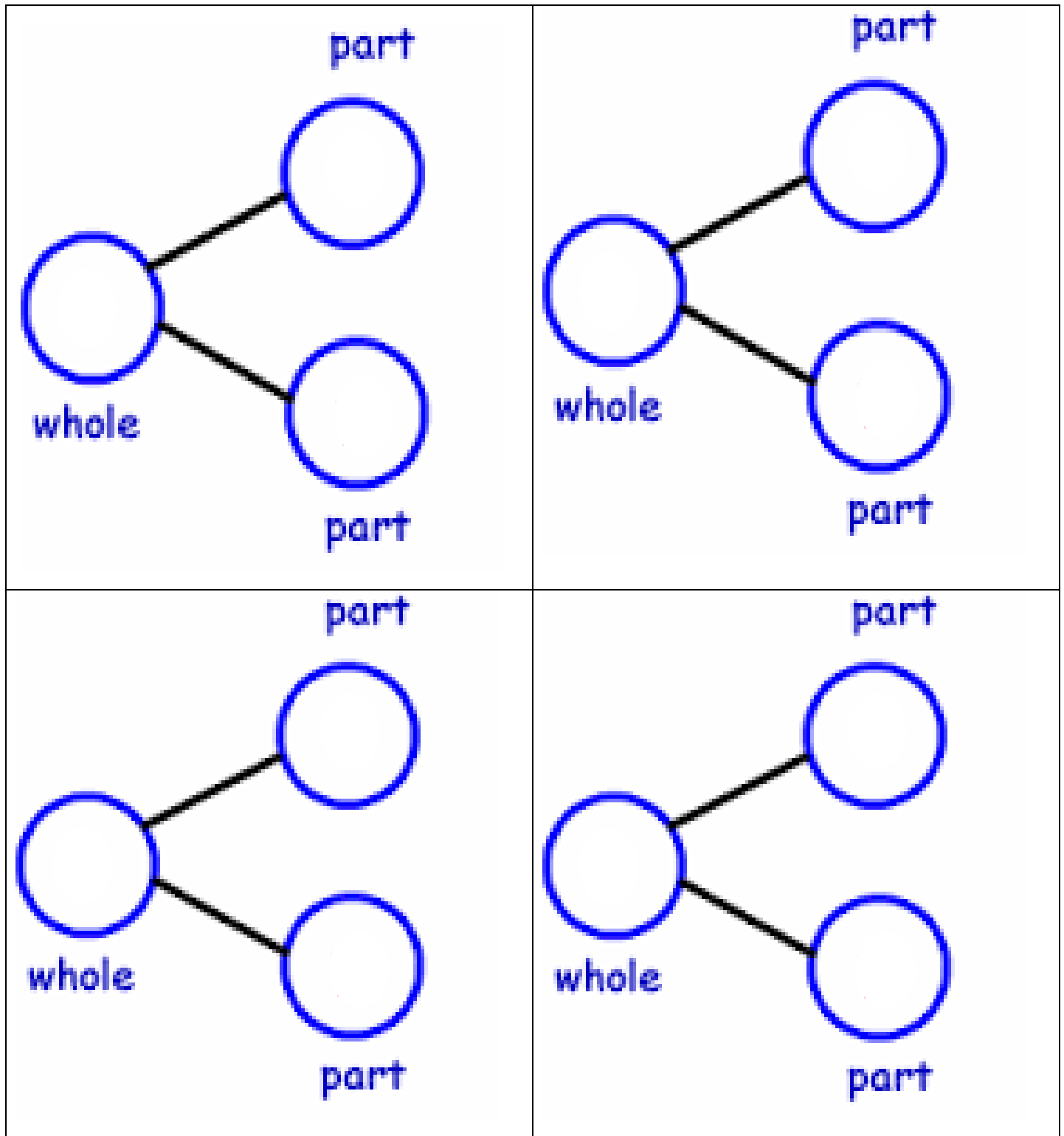
8

9

1

0

Handout 3.2: Number Bond Template



**Handout 3.3: Ten Frames**



### Handout 3.4: Addition Equation Template

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Handout 3.5: Addition to 20 Practice

- $6 + 5 = \underline{\quad}$  red  
 $9 + 4 = \underline{\quad}$  pink  
 $7 + 7 = \underline{\quad}$  orange  
 $10 + 6 = \underline{\quad}$  black  
 $9 + 9 = \underline{\quad}$  brown  
 $10 + 10 = \underline{\quad}$  yellow



### Handout 3:6: Addition to 20 Homework

Name \_\_\_\_\_

Date \_\_\_\_\_

Direction: Find sum.

1.  $8 + 7 =$  \_\_\_\_\_

2.  $6 + 9 =$  \_\_\_\_\_

3.  $7 + 5 =$  \_\_\_\_\_

4.  $5 + 6 =$  \_\_\_\_\_

5.  $9 + 2 =$  \_\_\_\_\_



6.  $3 + 10 =$  \_\_\_\_\_

7.  $10 + 8 =$  \_\_\_\_\_

8.  $9 + 8 =$  \_\_\_\_\_



### Handout 3.7: Word Wall Games

Place vocabulary alphabetically on word walls-play interactive games during the unit



#### **Guess Who Game**

Each day before your students enter the classroom, choose a few words on the wall and flip the card over so the definition is showing. At the beginning of class, ask the students to identify which words are flipped over by using the definition. You could also substitute a synonym or antonym for the definition in this game.

#### **Alphabetizing**

Before the students enter the classroom, mix up some of the words on the word wall and ask the students to put them in the correct order again.

#### **Picture This**

Create a picture that relates to some of the words on the Word Wall. Show your students the picture, and ask them to identify words that can be used to describe the picture or relate to the picture.

#### **Compare and Contrast**

Choose two words from the Word Wall and have your students compare and contrast the words.

#### **Point, Clap, Chant, Read**

The teacher states the word, one student points to the word on the word wall and then all students chant the letters of the word and clap for each letter, or syllable then read the word.

### **Rhymes**

The teacher states that the word begins with a letter and rhymes with a word on the word wall. The student will write the word on their word wall sheet. The teacher will repeat it 5 times with 5 different words.

### **Kid Friendly Definitions**

Students create definitions in their own words for better understanding/ownership.

### **Guess My Word**

The teacher will choose one word from the word wall. The teacher will give one clue each time to see how long it will take the students to guess the word.

### **Word Sort Activities**

Sort words that match the current phonics skill or pattern (e.g., short vowel sounds, long vowel sounds, magic e, r-controlled vowels, etc.)

Sort words that are similar or opposite in meaning.

Sort nouns, verbs, adjectives, adverbs.

Open sort – give a group of words and let the students decide how they should be sorted.

### **Find and Erase**

Write 5 to 10-word wall words on a lap-size dry erase board with dry erase markers. Say a word's definition at random and have the students find the word in their list and then erase it. Continue until all words are gone.

### **Tall Tower**

When you make the word wall words, write a number 1, 2, or 3 on the back of the cards in a corner. (For this activity, you will need blocks, snap cubes, Legos or any type of manipulative that students can build a tower with.) Collect between 6-12-word wall word cards. Shuffle the cards and place face down. Have the students to pull a card from the stack reading the word on the face of the card. If they are successful with the knowing the definition, they turn the card over and find the number on the back. They then take that number of blocks and begin building a tower. They continue by adding blocks with every successful definition. Students will take turns and continue until all words are gone. (This can be done as an intervention activity.)

### **Word Wall, Beach Ball**

Stand or sit in a circle. Teacher holds beach ball (or a ball or bean bag). The teacher tosses the ball to a child and asks the child to define the word \_\_\_\_\_. (name a word off the word wall at random) The student must find the word on the word wall and define it. Then that child throws the ball to another child and asks the child who caught the ball to define another word on the word wall. Repeat as desired.

### **Word Wall Hot Potato**

Play hot potato with a bean bag or small ball. Play music and when the music stops, ask the child who is holding the ball or bag, to tell you the definition of a word from the word wall. Repeat.

### **Word Wall Bingo**

Give each student a filled in or blank bingo card. If it is blank, have students to randomly select words from the word wall cards and write them in the blanks on their card. Collect cards and shuffle. Randomly, select word card and call out a definition. If the child has that word on his/her card, then they must cover it with the marker. Continue until someone bingos or has a complete line across, diagonally, or up and down.

### **Word Wall Tic-Tac-Toe**

Make a laminate blank tic-tac-toe grids large enough for students to write word wall words in the spaces. At the beginning of the game have them write word wall words of their choice in each space. When they are done have them gather those words from the word wall. Shuffle the cards. As you give a definition of a word tell them if it is an **O** or **X**. If they have the word, the put an **O** or **X** over the word. The first person to get a tic-tac-toe wins. Return word wall words to wall.

### **Word wall Fill in the Blanks**

Have the students choose 1-3 words from the word wall to form a guessing pool. Bring the words to the teacher at the teacher table. The teacher makes up a sentence with one of the words from the guessing pool and says it out loud omitting the targeted word. The students must figure out the missing word. Return word wall words to word wall.

For training or questions regarding this unit,  
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