



MISSISSIPPI

# EXEMPLAR

Units & Lessons

MATHEMATICS

**Grade 1**

Grant funded by:



## Lesson 7: What Number is the Pirate Missing?

**Focus Standard(s):** 1.OA.2, 1.OA.8

**Additional Standard(s):** 1.OA.4

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

**Estimated Time:** 70 minutes

**Resources and Materials:**

- Counters
- Handout 7.1: Part-Part-Whole Map
- Handout 7.2: Number Lines
- Handout 7.3: Individual Practice Page
- Handout 7.4: Missing Addend Homework
- Barnacle Subtraction Song: <https://www.youtube.com/watch?v=yXIOvH-HHk>
- Missing Addends: [https://www.youtube.com/watch?v=Mvm0y1Qr\\_JQ](https://www.youtube.com/watch?v=Mvm0y1Qr_JQ)

**Lesson Target(s):**

- Students will use mental strategies to add and subtract numbers within 20 with ease.
- Students will use the equal sign appropriately.

**Guiding Question(s):**

- What do we know about the relationship between addition and subtraction fact families?
- How does that relationship help us know more facts?

## Vocabulary

**Academic Vocabulary:** Refer to the word wall frequently.

- Addition
- Compare
- Difference
- Minus
- Reasonable
- Subtraction
- Sum
- Total

**Instructional Strategies for Academic Vocabulary:**

- Introduce words with student-friendly definitions and pictures
- Model how to use the words in discussion
- Discuss the meaning of word in a mathematical context
- Create pictures/symbols to represent words
- Write/discuss using the words
- Act out the words or attach movements to the words

### Symbol

### Type of Text and Interpretation of Symbol



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)

## Instructional Plan

**Understanding Lesson Purpose and Student Outcomes:**

Students will watch a video using a Part-Part-Whole map to subtract to find missing addends and practice using counters and the part-part-whole map.

### **Anticipatory Set/Introduction to the Lesson/Activity #1: Barnacle Subtraction Song**

Play Sesame Street: Elmo the Musical [“Barnacle Subtraction Song”](#) and have 3 students act out each of the subtraction equations and have the rest of the students do it with their fingers.

### **Activity 2: Problem Solving Pirates**

Show the video, [Missing Addends](#). Distribute **Handout 7.1: Part-Part-Whole Map**. Have students use counters with a part-part-whole map to find missing addends (SMP.4, SMP.5). Stop the video to allow time for students to practice the skill. Distribute **Handout 7.2: Number Lines** and demonstrate how to find missing addends on the number line. Display  $8 - \underline{\quad} = 3$ . Practice using fingers, Part-Part-Whole map, and a number line. Repeat using other equations with missing addends. Display  $14 - \underline{\quad} = 9$ . Tell students to find the missing addend using only their fingers.

Help students to see that they cannot use fingers for numbers greater than 10 because they only have 10 fingers.

Prompting questions:

- Why can't you use your fingers to find the missing addend? (The whole is greater than 10 and we only have 10 fingers.)
- Do you have enough fingers to do an addition with 9 and some more to make 14?
- What is the greatest number we can make with our fingers?
- Is there a better way to find the missing addend? (Part-Part-Whole map or Number Line)

Have one half of the class use a Part-Part-Whole map to solve and the other half use a number line to solve. Have each group choose one member to demonstrate for the class how they did their work. After presenting, the other team can critique the work (SMP3).

### **Activity 3: Vocabulary**

Review vocabulary terms with math doodles. Call out a math word and have the students sketch or doodle a picture of the word for 15-20 seconds, until the next word is called. Students connect each of their doodles with a line, making a simple link. After you've called out 5-7 words, have students label their doodles without looking at the math word wall. Next, ask students to call out the words in their chain before checking the spelling of their words against the math word wall to make sure they are accurate.

### **Activity 4: Partner Work**

- Distribute **Handout 7.3: Individual Practice Page** and tell students to work individually how to find the missing addend using the 3 different methods.

**Reflection and Closing:**

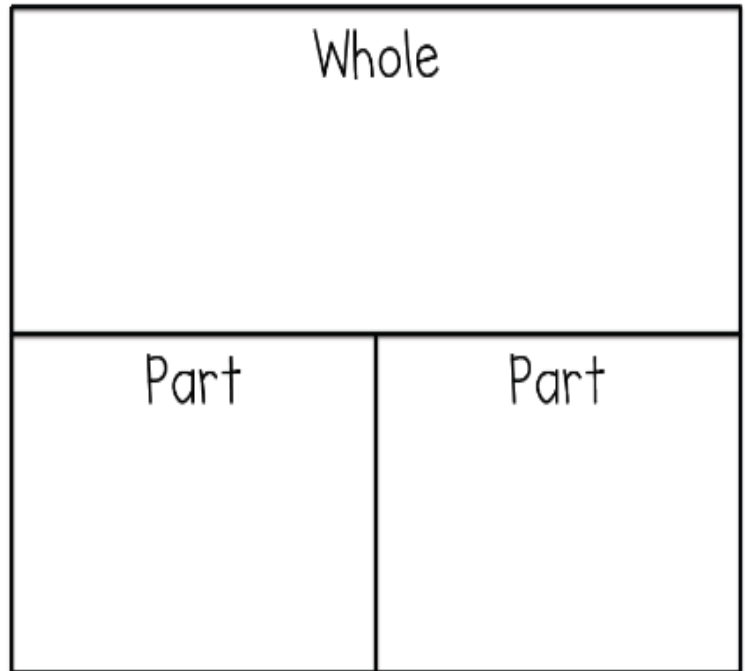
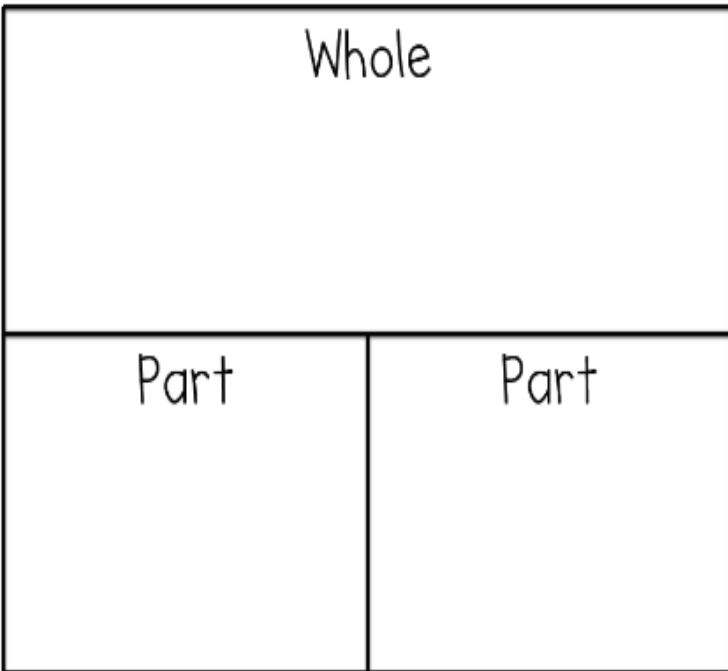
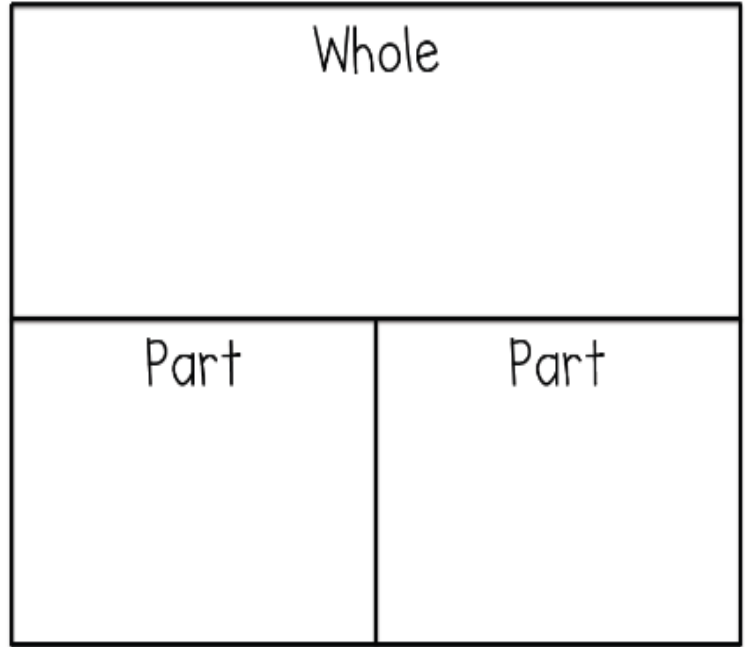
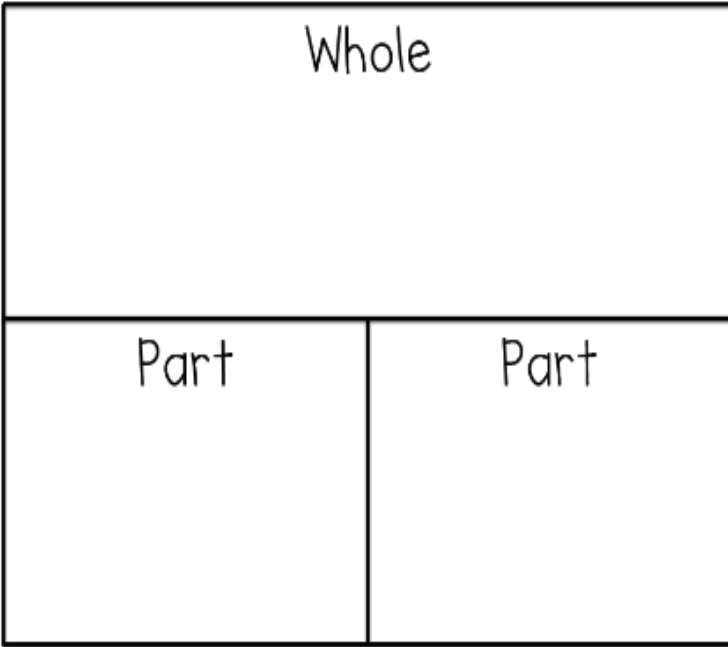
- Exit Ticket: Students will find the missing addend in the following story and show how they found their answer.

Brandon the pirate has 12 hats. Some of the hats are orange and 4 of them are yellow. How many of the hats are orange?

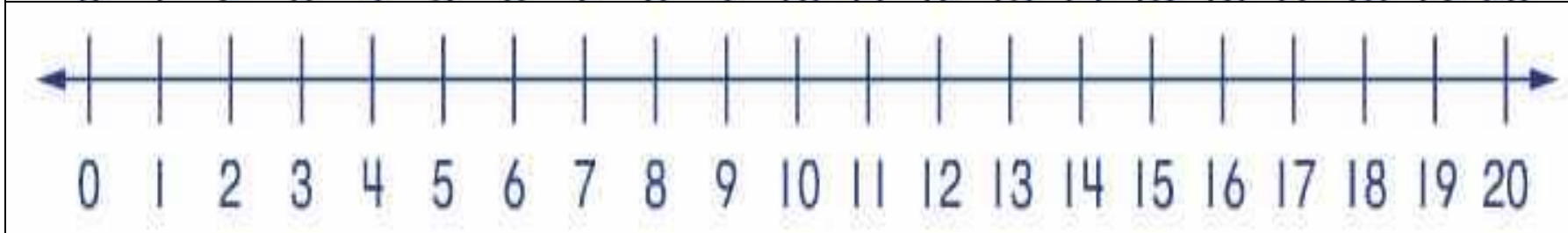
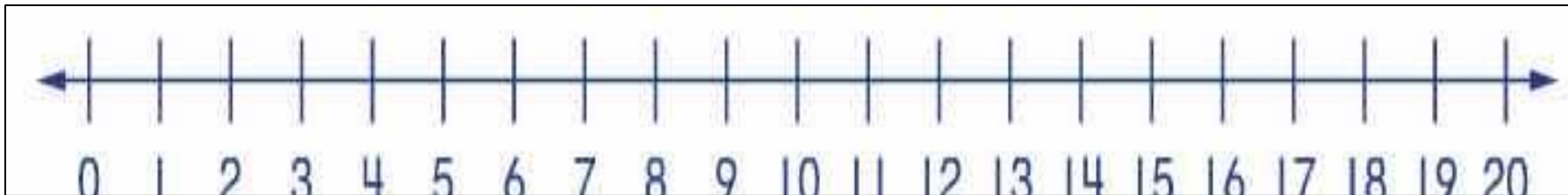
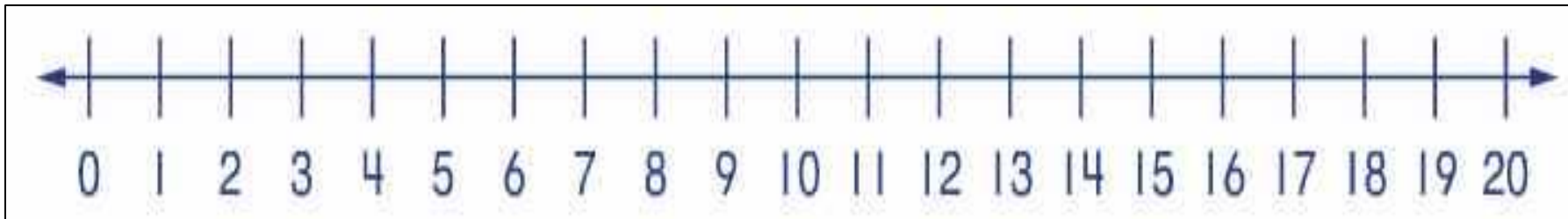
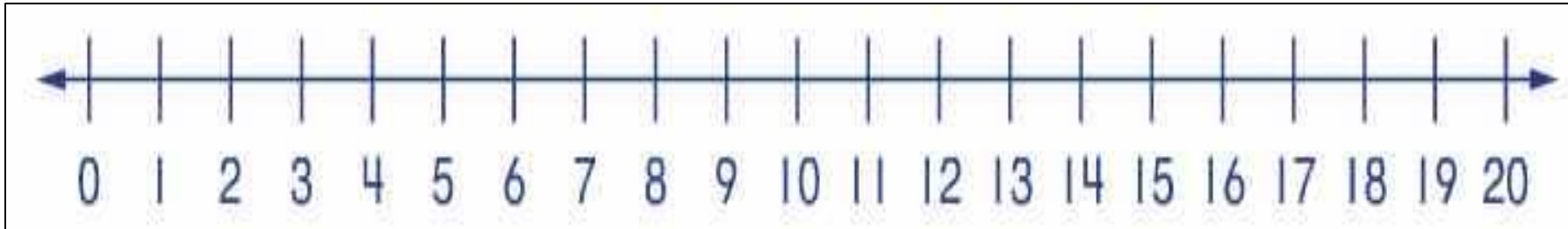
## Homework

**Distribute Handout 7.4: Missing Addend Homework** and tell students to complete the Part-Part-Whole maps to find the missing addends.

Handout 7.1: Part-Part-Whole Maps



Handout 7.2: Number Lines



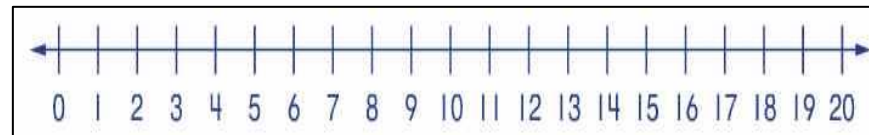
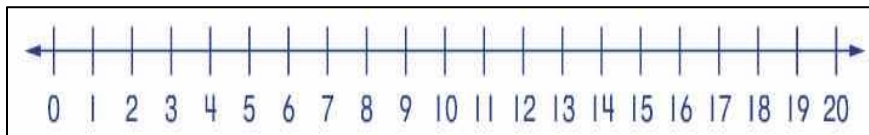
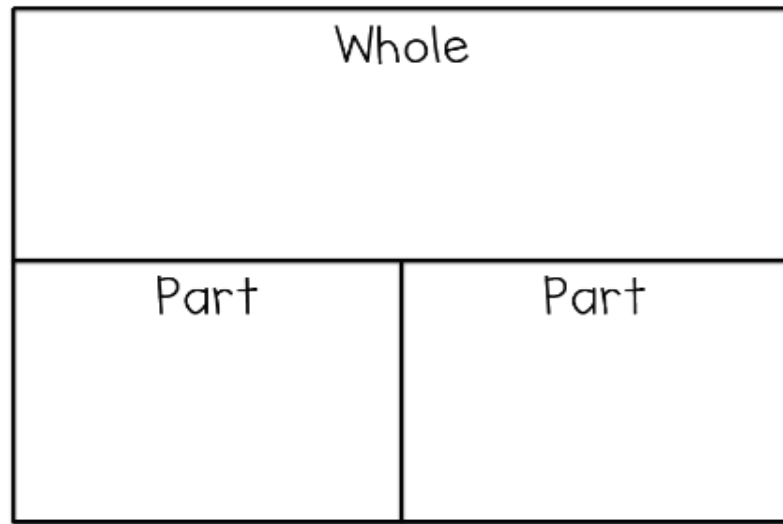
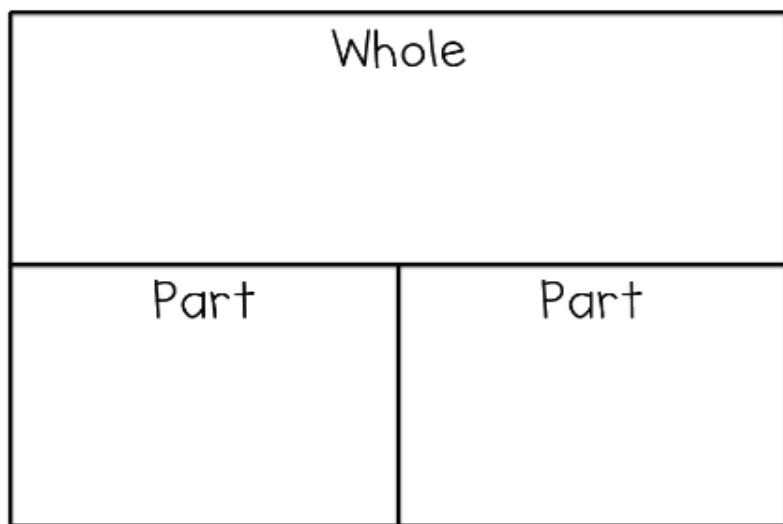
**Handout 7.3: Individual Practice Page (pg. 1)**

Name \_\_\_\_\_ Date \_\_\_\_\_

Find the missing addend for each of these number sentences. Label a part-part-whole map for each sentence to show your work. Draw the counters in the map. Show your work on a number line.

$$1 + \underline{\quad} = 7$$

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

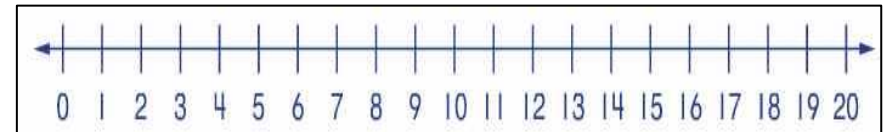
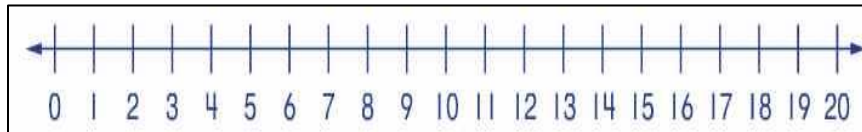
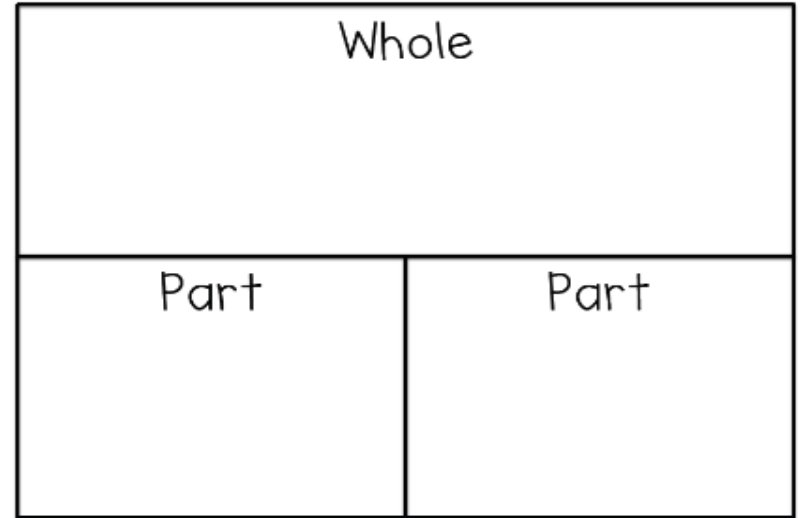
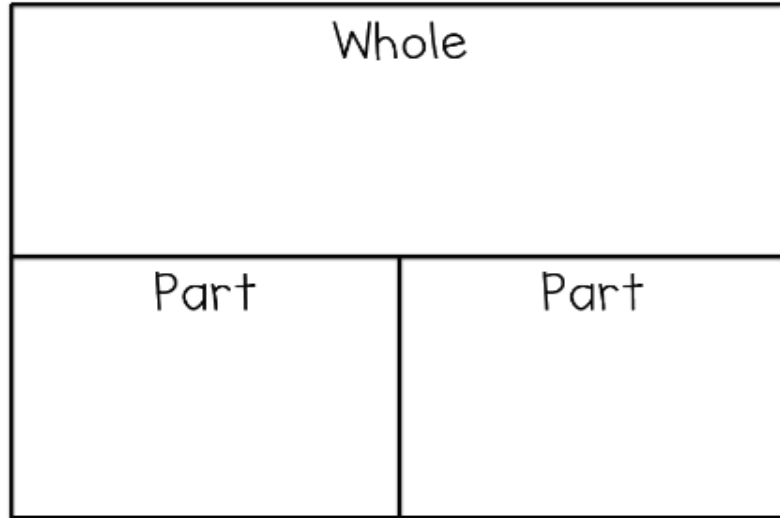




Handout 7.3: Individual Practice Page (pg. 2)

$9 + \underline{\quad} = 14$

$\underline{\quad} + 7 = 11$

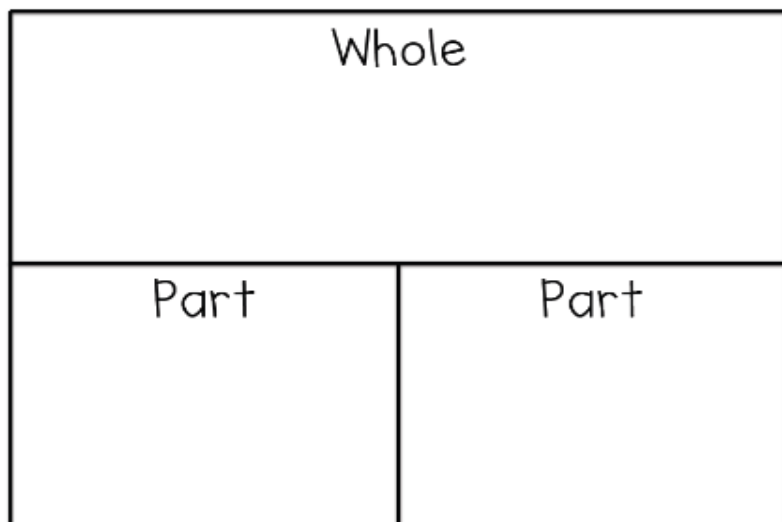


**Handout 7.4: Missing Addend Homework (pg. 1)**

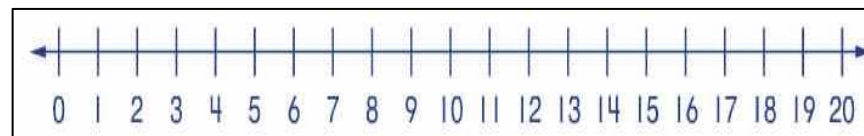
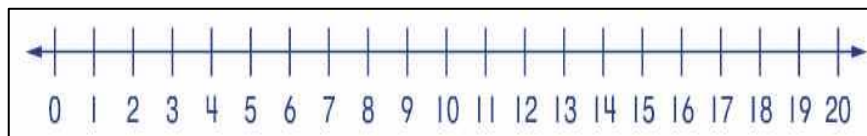
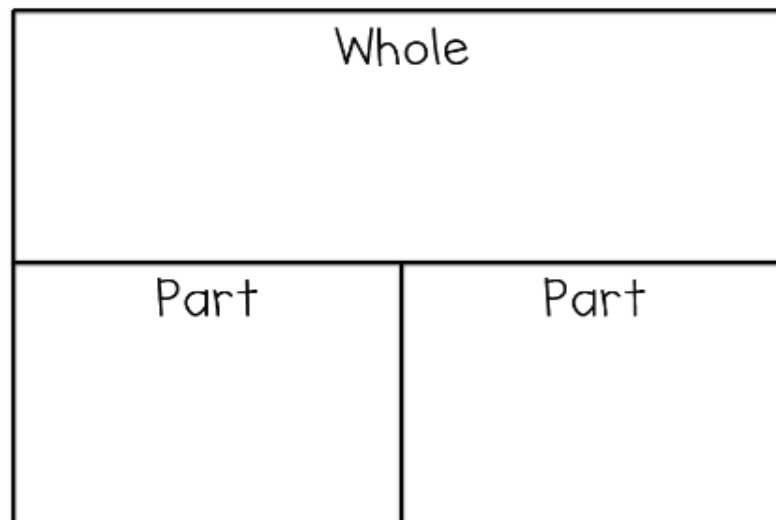
Name \_\_\_\_\_ Date \_\_\_\_\_

Find the missing addend for each of these number sentences. Label a part, part, whole map for each sentence to show your work. Draw the counters in the map. Show your work on a number line.

$$8 + \underline{\quad} = 16$$

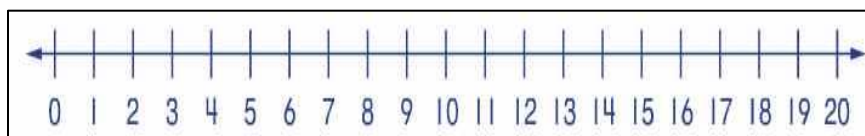
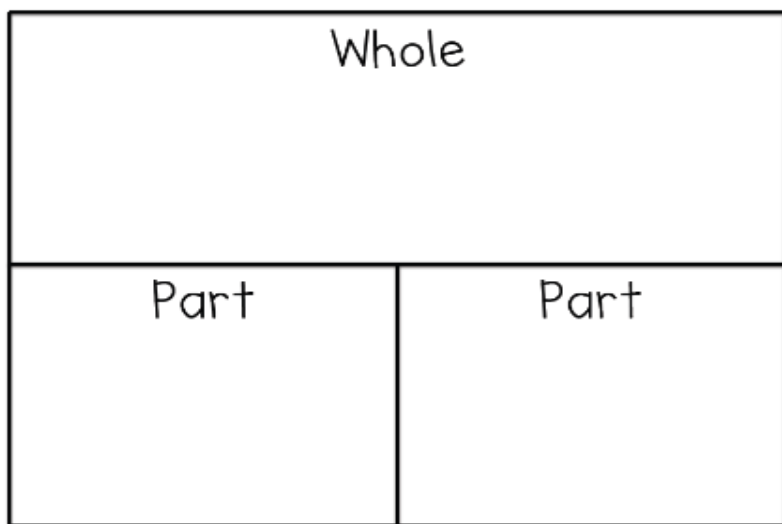


$$\underline{\quad} + 5 = 14$$

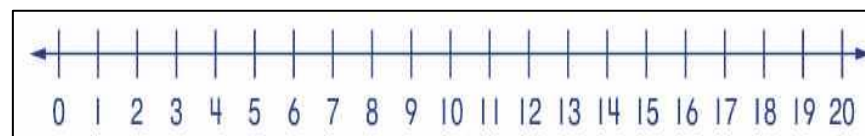
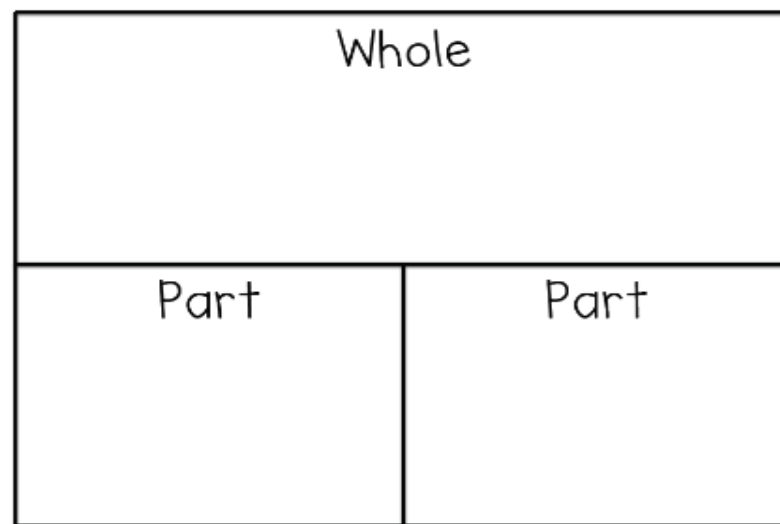


Handout 7.4: Missing Addend Homework (pg. 2)

$$10 + \underline{\quad} = 19$$



$$\underline{\quad} + 7 = 18$$



For training or questions regarding this unit,  
please contact:

[exemplarunit@mdek12.org](mailto:exemplarunit@mdek12.org)