Name _____   Date _____

1. Mr. Baggy owns a pet store.

   He counted 10 goldfish in a big tank and 5 goldfish in a small tank. He sold 8 goldfish out of the big tank. How many goldfish did he have left in all? Explain your answer using a labeled math drawing and a number sentence.

   Mr. Baggy had _____ goldfish.

2. Write the numbers that make the number sentences true.

   a.   12 – 9 = _____   11 – 8 = _____   15 – 6 = ____

   b.   9 + ____ = 13   8 + ____ = 12   12 = ____ + 7

   c. Write a related subtraction fact for each of the three problems in the last row in the spaces below.

      _____   _____   _____

3. Write a number bond in each number sentence to show how to use ten to subtract. Draw 5-groups and some ones to show each subtraction sentence.

a. 13 – 9 = 4

b. 12 – 8 = 4

c. Use your pictures and numbers to explain how both subtraction problems equal 4.

4. Mr. Baggy also has 9 birds, 15 snakes and 12 turtles.

a. Show the number of snakes as a ten and some ones with a number bond, a 5-group drawing, and a number sentence.

b. Mr. Baggy sold some snakes. Now he has 5. How many snakes did he sell?
Explain your solution using a number bond or a math drawing. Write a number
sentence. Complete the statement.

Mr. Baggy sold _____ snakes.

c. Mr. Baggy sold 8 turtles. How many turtles does he have left? Explain your
solution using a number bond or a math drawing. Write a number sentence.
Complete the statement.

Mr. Baggy has _____ turtles left.

d. Mr. Baggy's daughter says she can find the number of turtles Mr. Baggy has left
using subtraction or addition. Show 2 ways Mr. Baggy's daughter can solve this
problem.

e. As Mr. Baggy gets ready to close his pet store for the day, he needs to know how many animals he has altogether. How many birds, snakes, and turtles does Mr. Baggy have left in his store altogether? Explain your solution using number bonds or math drawings. Write a number sentence. Complete the statement.

Mr. Baggy has _____ animals left.

f. True or false: You will get a different answer if you add 9 and 5 first, then add 4, than if you add 9 and 4 first, then add 5. (Circle one.)   **True**   **False**
Use pictures or words to show how you know.

End-of-Module Assessment Task	Topics A–D
Standards Addressed	

Represent and solve problems involving addition and subtraction.

1.OA.1   Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

1.OA.2   Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction.

1.OA.3   Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.) *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)*

1.OA.4   Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.*

Add and subtract within 20.

1.OA.6   Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).

Understand place value.

1.NBT.2   Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

     a.   10 can be thought of as a bundle of ten ones—called a "ten."

     b.   The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

Evaluating Student Learning Outcomes

A Progression Toward Mastery is provided to describe steps that illuminate the gradually increasing understandings that students develop *on their way to proficiency.* In this chart, this progress is presented from left (Step 1) to right (Step 4). The learning goal for each student is to achieve Step 4 mastery. These steps are meant to help teachers and students identify and celebrate what the student CAN do now, and what they need to work on next.
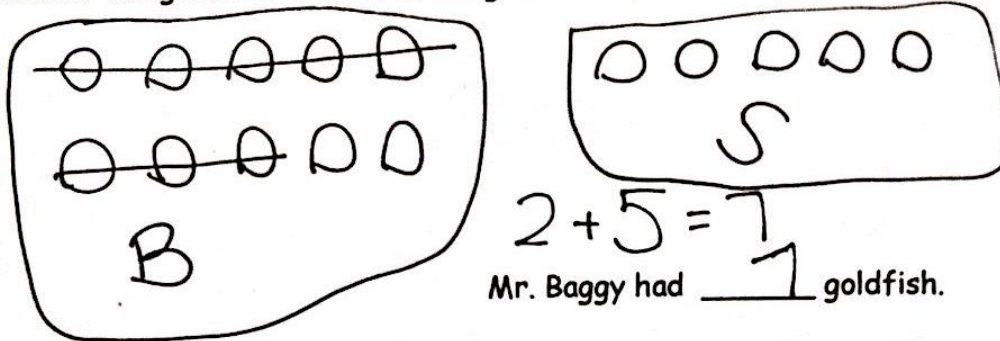
COMMON CORE   **Module 2:**   Introduction to Place Value Through Addition and Subtraction Within 20   **engage**ny   **2.S.14**

Date: 3/12/14

A Progression Toward Mastery				
Assessment Task Item	STEP 1 Little evidence of reasoning without a correct answer. (1 Point)	STEP 2 Evidence of some reasoning without a correct answer. (2 Points)	STEP 3 Evidence of some reasoning with a correct answer or evidence of solid reasoning with an incorrect answer. (3 Points)	STEP 4 Evidence of solid reasoning with a correct answer. (4 Points)
1 1.OA.1	The student's drawing and number sentence are completely unrelated to the problem, showing no understanding of the problem.	The student has the incorrect answer but shows some understanding through drawings or number sentences.	The student answers correctly (7), but is missing the drawing or the number sentence. Or the student draws a picture or number sentences to show her thinking, but has an incorrect answer.	The student correctly: ▪ Answers 7. ▪ Explains using a drawing and a number sentence (i.e., 2 + 5 = 7 or 10 − 8 = 2).
2 1.OA.3 1.OA.4 1.OA.6	The student answers one to two answers problems correctly, demonstrating a limited understanding of the problems.	For each problem, the student: ▪ Subtracts from a teen number, ▪ Finds the missing addend, ▪ Writes the corresponding subtraction sentences, with three or four calculation errors.	For each problem, the student: ▪ Subtracts from a teen number, ▪ Finds the missing addend, ▪ Writes the corresponding subtraction sentences, with one or two calculation errors.	For each problem, the student correctly: ▪ Subtracts from a teen number. ▪ Finds the missing addend. ▪ Writes the corresponding subtraction sentences.
3 1.OA.3 1.OA.6	The student is not able to correctly accomplish any component of the task, demonstrating a lack of understanding of the problems.	The student may show some understanding and skill with 5-group drawings but is unable to execute the bonds or explain his thinking. Or, the student is able to show the bonds, but is unable to draw the 5-groups or explain appropriately.	The student draws the bonds and 5-groups but is unable to explain how both have an answer of 4. Or the student explains well, and draws 5-groups well, but does not execute the bonds accurately.	The student correctly: ▪ Models the number bonds and 5-group drawings. ▪ Explains how both problems equal 4 using pictures or numbers (i.e., 1 + 3 = 2 + 2).

A Progression Toward Mastery

4 **1.OA.1** **1.OA.2** **1.OA.3** **1.OA.4** **1.OA.6** **1.NBT.2a** **1.NBT.2b**	Answers one or fewer questions correctly, and is unable to show work, thus demonstrating a lack of understanding of the concepts.	Answers two of the questions correctly with all accompanying models, but demonstrates inconsistent understanding of the take from ten strategy, the connection between addition and subtraction, or the associative property.	Answers three of the four questions correctly and with all requested models and number sentences. Computes and explains the final question, but may have errors in previous computations that impact accuracy (i.e., 1 or 2 off).	The student correctly: ▪ Represents 15 with a number bond, 5-group drawing, and number sentence. ▪ Explains that 10 birds were sold. ▪ Explains that 4 turtles are left. ▪ Writes both an addition and subtraction equation 12 – 8 = 4 and 8 + 4 = 12. ▪ Explains that 18 animals are left altogether. Identifies the statement as false, and explains why citing the associative property with pictures or words (no formal terms necessary).

1. Mr. Baggy owns a pet store.

   He counted 10 goldfish in a big tank and 5 goldfish in a small tank. He sold 8 goldfish out of the big tank. How many goldfish did he have left in all? Explain your answer using a labeled math drawing and a number sentence.

$2 + 5 = 7$

Mr. Baggy had ___7___ goldfish.

2. Write the numbers that make the number sentences true.

   a. $12 - 9 = \underline{3}$ $\quad$ $11 - 8 = \underline{3}$ $\quad$ $15 - 6 = \underline{9}$

   $\overset{\wedge}{10 \quad 2}$ $\quad 1+2 \quad$ $\overset{\wedge}{10 \quad 1}$ $\quad 2+1 \quad$ $\overset{\wedge}{10 \quad 5}$ $\quad 4+5$

   b. $9 + \underline{4} = 13$ $\quad$ $8 + \underline{4} = 12$ $\quad$ $12 = \underline{5} + 7$

   c. Write a related subtraction fact for each of the three problems in the last row in the spaces below.

   $\underline{13 - 9 = 4}$ $\qquad$ $\underline{12 - 8 = 4}$ $\qquad$ $\underline{12 - 7 = 5}$

3. Write a number bond in each number sentence to show how to use ten to subtract. Draw 5-groups and some ones to show each subtraction sentence.

a. $13 - 9 = 4$
$$10 \quad 3 \qquad 1 + 3$$
⊘⊘⊘⊘⊘ ⊘⊘⊘⊘⊘ ○○○

b. $12 - 8 = 4$
$$10 \quad 2 \qquad 2 + 2$$
⊘⊘⊘⊘⊘ ⊘⊘⊘⊘⊘ ○○

c. Use your pictures and numbers to explain how both subtraction problems equal 4.

$$1 + 3 = 2 + 2$$
$$10 - 9 \qquad\qquad 10 - 8$$
$$4 = 4$$

4. Mr. Baggy also has 9 birds, 15 snakes and 12 turtles.

a. Show the number of snakes as a ten and some ones with a number bond, a 5-group drawing and a number sentence.

$$15 = 10 + 5$$
$$10 \quad 5$$

○○○○○ ○○○○○   ○○○○○
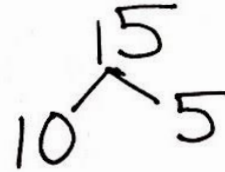$$15$$

b. Mr. Baggy sold some snakes. Now he has 5. How many snakes did he sell? Explain your solution using a number bond or a math drawing. Write a number sentence. Complete the statement.
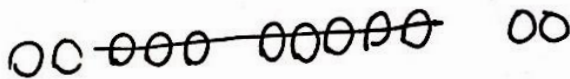
$$15 - \boxed{} = 5$$

$$15 - 5 = \boxed{10}$$

Mr. Baggy sold __10__ snakes.

c. Mr. Baggy sold 8 turtles. How many turtles does he have left? Explain your solution using a number bond or a math drawing. Write a number sentence. Complete the statement.

$$12 - 8 = 4$$

Mr. Baggy has __4__ turtles left.

d. Mr. Baggy's daughter says she can find the number of turtles Mr. Baggy has left using subtraction or addition. Show 2 ways Mr. Baggy's daughter can solve this problem.
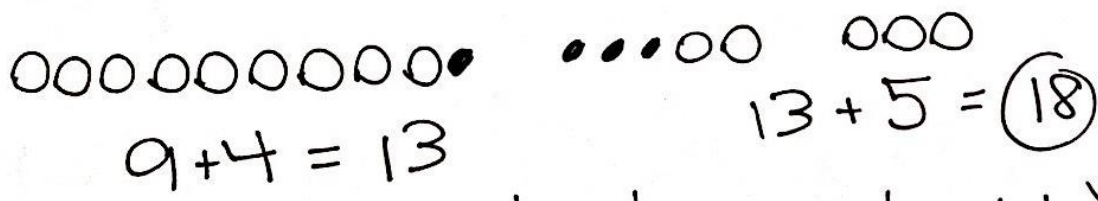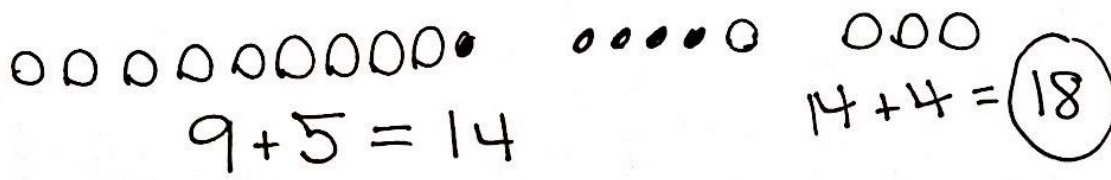
$$8 + \boxed{} = 12 \qquad\qquad 12 - 8 = \boxed{}$$

e. As Mr. Baggy gets ready to close his pet store for the day, he needs to know how many animals he has altogether. How many birds, snakes and turtles does Mr. Baggy have left in his store altogether? Explain your solution using number bonds or math drawings. Write a number sentence. Complete the statement.

$$B \qquad S \qquad +$$
$$9 + 5 + 4$$

1   3
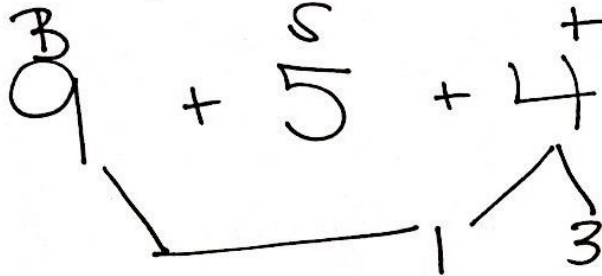
$$10 + 8 = 18$$ Mr. Baggy has __18__ animals left.

f. True or false: You will get a different answer if you add 9 and 5 first, then add 4, than if you add 9 and 4 first, then add 5. (Circle one.)   True   (False)
   Use pictures or words to show how you know.

OOOOOOOOOO●   ●●●●O   OOO
$$9 + 5 = 14$$ $$14 + 4 = \boxed{18}$$

OOOOOOOOO●   ●●●OO   OOO
$$9 + 4 = 13$$ $$13 + 5 = \boxed{18}$$

Your just starting with a difrent number, but your adding them all.