

Name _____ Date of Test: October 29

Unit 4 Addition within 20: Facts and Strategies Study Guide

This study guide is identical to the test students will take. Please feel free to use this to practice at home! It is not mandatory to complete, but it will be very helpful as a reference to see what your student needs additional support with at home! **You do not need to bring this back to school!**

1.PAFR.1.1 Determine and explain if an equation within 10 is true using a variety of equation formats.

1. Which sentence is true? Circle the correct answer.

A. $7 = 3 + 4$

B. $8 = 4 + 6$

C. $6 = 7 + 3$

2. The teacher asked if $4 + 5 = 8 + 2$. Circle true or false and draw a picture to explain. (1 point for true/false and 1 point for drawing to explain)

True or **False**

Model:

1.PAFR.1.4 Add and subtract number combinations flexibly and accurately within 10.

3-5. Write the sum of each equation in the lines below.

$4 + 2 = \underline{\hspace{2cm}}$

$\underline{\hspace{2cm}} = 6 + 4$

$\underline{\hspace{2cm}} = 9 + 1$

1.PAFR.1.5 Apply and explain the Commutative Property of Addition to find the sum (through 20) of two addends and explain that the value does not change when the order of the two numbers changes

6. Angie says $11 + 5 = 16$. Which equation gives the same sum? Circle the correct answer.

A. $5 + 11 = 16$

B. $11 + 5 = 9$

C. $11 + 14 = 5$

7. Suzy says that $3 + 8$ is the same as $8 + 3$. Is she correct or incorrect? Explain how you know. (1 point for correct/incorrect and 1 point for explanation)

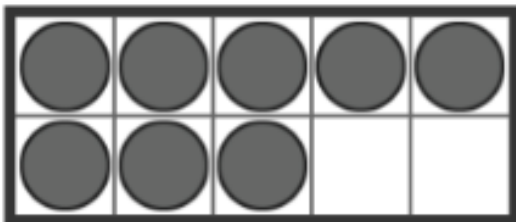
Correct

or

Incorrect

1.PAFR.1.6 Determine an unknown number in addition and subtraction equations within 10.

8. Use the ten frame below to complete the equation.



_____ **+ 5 = 8**

9. What is the unknown addend? Show your thinking.

$10 = 5 + \underline{\hspace{2cm}}$

1.PAFR.1.3 Solve add-to, take-from, and part-part-whole real-world situations to find sums and differences within 20. Situations to find sums and differences within 20. Situations include result or change unknown, both addends unknown, and total or one part unknown.

10. Neville hikes 6 miles on Monday and 3 miles on Wednesday. How many miles did Neville hike? Write the equation below.

_____ + _____ = _____ miles

11. Mom has 7 flowers. She picked 2 more flowers. How many flowers does mom have now? Draw a picture below to match the story. Write the equation. (1 point for the correct drawing and 1 point for the correct equation)

1.PAFR.1.2 Compose and decompose numbers less than or equal to 20 in more than one way. Record each composition or decomposition as an equation.

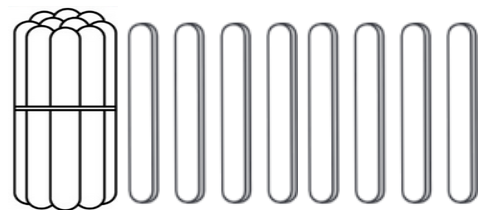
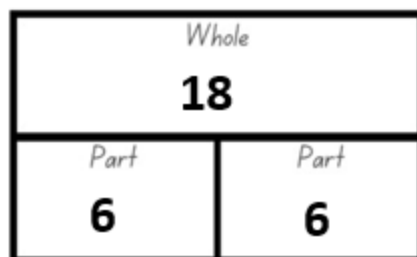
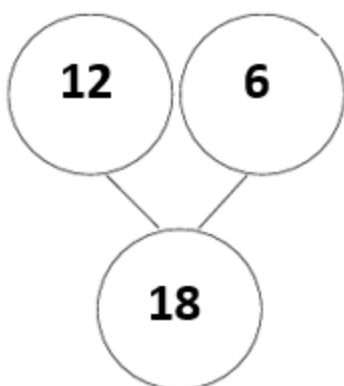
12. Which **TWO** equations are correct ways to compose the number 14?
(1 point for each correct answer)

A. $7 + 7 = 14$

B. $1 + 4 = 14$

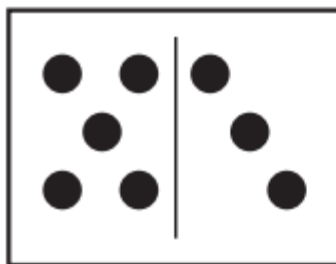
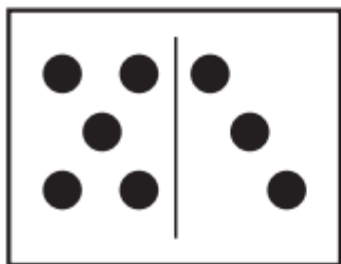
C. $8 + 6 = 14$

13. Circle **TWO** different ways to compose the number 18.
(1 point for each correct answer)



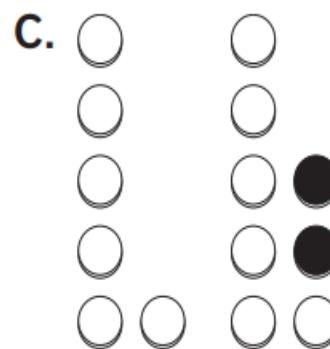
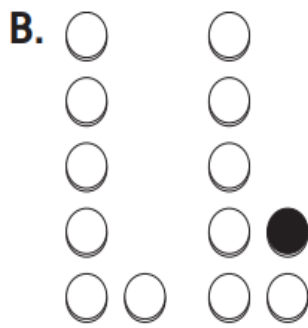
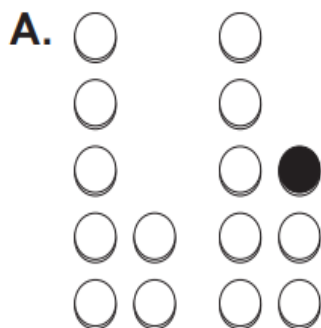
1.PAFR.1 Understand and apply properties of operations and the relationship between addition and subtraction to solve problems. *This section focuses on the **STRATEGIES** that may involve multiple PAFR.1 indicators.

14. How many total dots are there? Write an equation to match the dominos.



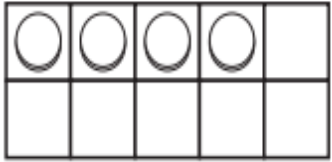
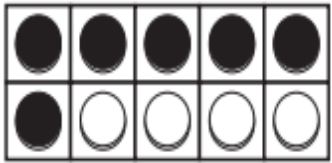
_____ + _____ = _____

15. Which shows near doubles to add $6 + 7$? Circle the correct answer.

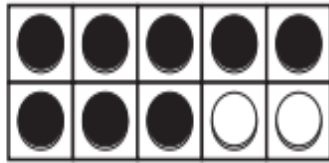


16. Mr. Seppi sees 6 black birds and 8 white birds. Which shows how many in all? Circle the correct answer.

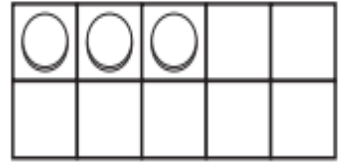
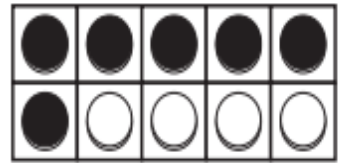
A.



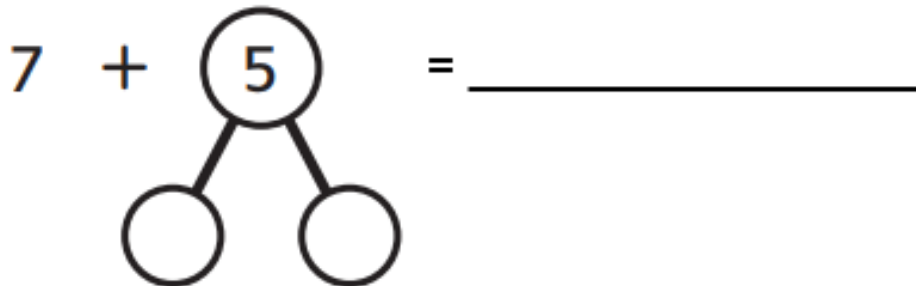
B.



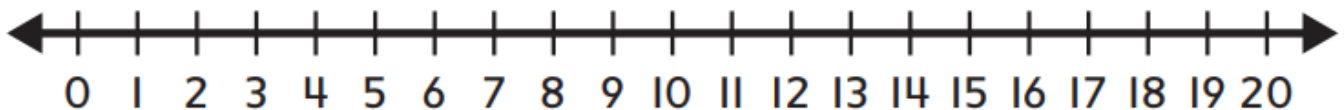
C.



17. Look at the number bond. Write the missing addends in the number bond that could be used to **make a ten** when adding to 7. Write the sum of $7 + 5$. (1 point if "Make a Ten" strategy is used correctly and 1 point for the correct sum)



18. Lilly has 9 points. Ellen has 8 points. How many points do they have together? Write the equation below.



Standards Covered: 1.PAFR.1.1; 1.PAFR.1.4; 1.PAFR.1.5; 1.PAFR.1.6; 1.PAFR.1.3; 1.PAFR.1

Item Breakdown:

Question Number	Standard Addressed	DOK Level	Item Type	Answer Key
1	1.PAFR.1.1	2	Multiple Choice	A
2	1.PAFR.1.1	3	Short Answer	False, Model shows that $9 \neq 10$
3	1.PAFR.1.4	1	Short Answer	6
4	1.PAFR.1.4	1	Short Answer	10
5	1.PAFR.1.4	1	Short Answer	10
6	1.PAFR.1.5	2	Multiple Choice	A
7	1.PAFR.1.5	3	Short Answer	Correct, Explanation or model demonstrates understanding of commutative property.
8	1.PAFR.1.6	2	Short Answer	3
9	1.PAFR.1.6	2	Short Answer	5
10	1.PAFR.1.3	2	Short Answer	$6 + 3 = 9$ or $3 + 6 = 9$
11	1.PAFR.1.3	3	Short Answer	Student draws a picture that shows a group of 7 flowers and another group of 2 flowers and writes $7 + 2 = 9$
12	1.PAFR.1.2	2	Short Answer	A, C
13	1.PAFR.1.2	2	Short Answer	Number bond & Bundle + 8
14	1.PAFR.1	2	Short Answer	$8+8=16$
15	1.PAFR.1	2	Multiple Choice	B
16	1.PAFR.1	2	Multiple Choice	A
17	1.PAFR.1	2	Short Answer	Addends are 3 and 2: Sum is 12
18	1.PAFR.1.2	2	Short Answer	$9 + 8 = 17$

Addition within 20: Facts and Strategies Assessment Rubric

Consistently Meets or Exceeds (M)	Shows Expected Growth/Progress (P)	Beginning to Progress (B)	Needs Intensive Support (N)
20-24 correct	15-19 correct	10-14 correct	0-9 correct