Math Test Notice

Dear Parent(s) and Student,

We will be having a post assessment over the Unit 6; Fraction concepts on _____.

The attached study guide is an excellent way to review and practice for the final test. It would also be helpful to use the CORE book to review the necessary skills. The test will cover concepts from lessons 1-10.

There are also two resources we use in class that would be helpful while you're reviewing. The CORE and HW & Remembering books have examples of problems we have worked on. Students may complete any incomplete problems as practice for the test.

Please note that if this study guide is signed and returned on the day of the review _____, you will receive extra credit toward your overall subject grade.

There is an answer key included in the back of this letter (for parents' eyes only). Thank you!

Good luck and happy studying!

_____ I have reviewed the Unit 6 concepts with my child.

Parent signature _____

Student signature _____

Date: _____

Study Guide — For Parents eyes

Name _____ Date _____

1 Represent the shaded part of the fraction bar as the product of a whole number and a unit fraction.

| | | | | | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ |

$$\frac{8}{12} = 8 \cdot \frac{1}{12}$$

2 In the morning, Kateri rides her bike for $\frac{2}{5}$ hour. After lunch, she rides her bike for another $\frac{1}{5}$ hour. How long does Kateri ride her bike? Write an equation. Then solve. Equations may vary.

Equation: $r = \frac{2}{5} + \frac{1}{5}$

Solution: $r = \frac{3}{5}$ hr

3 For exercises 3a–3d, write a fraction from the tiles to make a true equation.

3a. $\frac{8}{8} = \frac{3}{8} + \frac{2}{8} + \boxed{\frac{3}{8}}$

3c. $\frac{5}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \boxed{\frac{2}{8}}$

3b. $1 = \frac{1}{8} + \frac{3}{8} + \boxed{\frac{4}{8}}$

3d. $\frac{4}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \boxed{\frac{1}{8}}$

Name _____ Date _____

4 Multiply the expression to complete the table.

Expression	Written as a Fraction	Written as a Mixed Number
$6 \cdot \frac{1}{5}$	$\frac{6}{5}$	$1\frac{1}{5}$
$11 \cdot \frac{1}{3}$	$\frac{11}{3}$	$3\frac{2}{3}$
$4 \cdot \frac{3}{8}$	$\frac{12}{8}$	$1\frac{4}{8}$

5 For exercises 9a–9f, choose True or False for the equation.

9a. $\frac{4}{8} - \frac{1}{8} = \frac{3}{8}$ ⦿ True ○ False

9b. $\frac{3}{6} + \frac{2}{6} = \frac{5}{12}$ ○ True ⦿ False

9c. $\frac{12}{5} + \frac{2}{5} = 2\frac{4}{5}$ ⦿ True ○ False

9d. $1\frac{6}{10} + 5\frac{2}{10} = 6\frac{8}{20}$ ○ True ⦿ False

9e. $\frac{6}{8} + \frac{4}{8} = \frac{10}{16}$ ○ True ⦿ False

9f. $6\frac{6}{8} - 4\frac{5}{8} = 2\frac{1}{8}$ ⦿ True ○ False

6 Darya says this problem can be solved using addition. Caspar says it can be solved using multiplication. Explain why both students are correct.

Juan practices karate $\frac{5}{6}$ hour every day. How many hours does he practice in 6 days?

Possible answer: Juan practices for $\frac{5}{6}$ hour six times. Both students are correct because you can find the answer by adding $\frac{5}{6} + \frac{5}{6} + \frac{5}{6} + \frac{5}{6} + \frac{5}{6} + \frac{5}{6}$ or by multiplying $6 \cdot \frac{5}{6}$. Both students will get the same answer, $\frac{30}{6}$ hours or 5 hours.

Name _____ Date _____

7 For 11a and 11b, find the sum or difference. Write your answer as a mixed number or a whole number, when possible.

11a.
$$4\frac{3}{4}$$
$$+ 6\frac{2}{4}$$
$$\overline{11\frac{1}{4}}$$

11b.
$$7\frac{3}{6}$$
$$- 2\frac{5}{6}$$
$$\overline{4\frac{4}{6}}$$

8 On Monday, Erin measures $\frac{3}{4}$ inch of snow. It snows some more. Now there are $3\frac{1}{4}$ inches of snow. How many more inches of snow fell?

Part A

Draw a model for the problem. Then solve. Explain how your model helps you solve the problem. Models will vary.

Possible model is shown.

$\frac{3}{4}$

$2\frac{2}{4}$ inches; Possible explanation: The model represents 4 inches divided into fourths. The shaded parts represent the total snow that falls. The first three shaded parts represent the snow that Erin measures. The ten remaining shaded parts represent the additional snow that falls. $\frac{10}{4} = 2\frac{2}{4}$
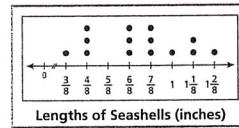
9 **Part B**

On Tuesday, it snowed an additional $2\frac{2}{4}$ inches. How many total inches of snow fell on Monday and Tuesday? Show your work.

$5\frac{3}{4}$ inches; $3\frac{1}{4} + 2\frac{2}{4} = (3 + 2) + (\frac{1}{4} + \frac{2}{4}) = 5 + \frac{3}{4} = 5\frac{3}{4}$

Name _____ Date _____

10 The line plot shows the lengths of some seashells Colton collected at the beach.

Lengths of Seashells (inches)

Colton wants to glue shells along a 4-inch edge of a picture frame. He could use all of the $\frac{6}{8}$-inch and $\frac{7}{8}$-inch shells. Describe two other combinations of shells he could use.

Possible answer: one $\frac{6}{8}$-inch shell and all of the 1-inch and $1\frac{1}{8}$-inch shells; two $\frac{1}{2}$-inch shells and all of the $\frac{7}{8}$-inch and $1\frac{2}{8}$-inch shells

11 Select the expression that is equivalent to $3\frac{3}{5}$. Mark all that apply.

Ⓐ $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{3}{5}$

Ⓓ $\frac{30}{5} + \frac{3}{5}$

Ⓑ $\frac{3}{5} + \frac{3}{5} + \frac{3}{5}$

Ⓔ $\frac{5}{5} + \frac{5}{5} + \frac{5}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

Ⓒ $1 + 1 + 1 + \frac{3}{5}$

Ⓕ $\frac{5}{5} + \frac{5}{5} + \frac{3}{5} + \frac{3}{5} + \frac{2}{5}$

12 Explain how to change $\frac{13}{5}$ to a mixed number.

Possible answer: Write $\frac{13}{5}$ as an equivalent sum with as many $\frac{5}{5}$s as you can: $\frac{5}{5} + \frac{5}{5} + \frac{3}{5}$. Each $\frac{5}{5}$ is 1 whole, so this is $1 + 1 + \frac{3}{5}$, or $2\frac{3}{5}$.

1 Represent the shaded part of the fraction bar as the product of a whole number and a unit fraction.

| $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ |

2 In the morning, Kateri rides her bike for $\frac{2}{5}$ hour. After lunch, she rides her bike for another $\frac{1}{5}$ hour. How long does Kateri ride her bike? Write an equation. Then solve.

Equation: _____

Solution: _____

3 For exercises 3a–3d, write a fraction from the tiles to make a true equation.

| $\frac{1}{8}$ | $\frac{2}{8}$ | $\frac{3}{8}$ | $\frac{4}{8}$ |

3a. $\frac{8}{8} = \frac{3}{8} + \frac{2}{8} + \boxed{}$

3c. $\frac{5}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \boxed{}$

3b. $1 = \frac{1}{8} + \frac{3}{8} + \boxed{}$

3d. $\frac{4}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \boxed{}$

Name _____ Date _____

8 Multiply the expression to complete the table.

Expression	Written as a Fraction	Written as a Mixed Number
$6 \cdot \frac{1}{5}$	_____	_____
$11 \cdot \frac{1}{3}$	_____	$3\frac{2}{3}$
$4 \cdot \frac{3}{8}$	_____	_____

9 For exercises 9a–9f, choose True or False for the equation.

9a. $\frac{4}{8} - \frac{1}{8} = \frac{3}{8}$ ○ True ○ False

9b. $\frac{3}{6} + \frac{2}{6} = \frac{5}{12}$ ○ True ○ False

9c. $\frac{12}{5} + \frac{2}{5} = 2\frac{4}{5}$ ○ True ○ False

9d. $1\frac{6}{10} + 5\frac{2}{10} = 6\frac{8}{20}$ ○ True ○ False

9e. $\frac{6}{8} + \frac{4}{8} = \frac{10}{16}$ ○ True ○ False

9f. $6\frac{6}{8} - 4\frac{5}{8} = 2\frac{1}{8}$ ○ True ○ False

10 Darya says this problem can be solved using addition. Caspar says it can be solved using multiplication. Explain why both students are correct.

Juan practices karate $\frac{5}{6}$ hour every day. How many hours does he practice in 6 days?

z

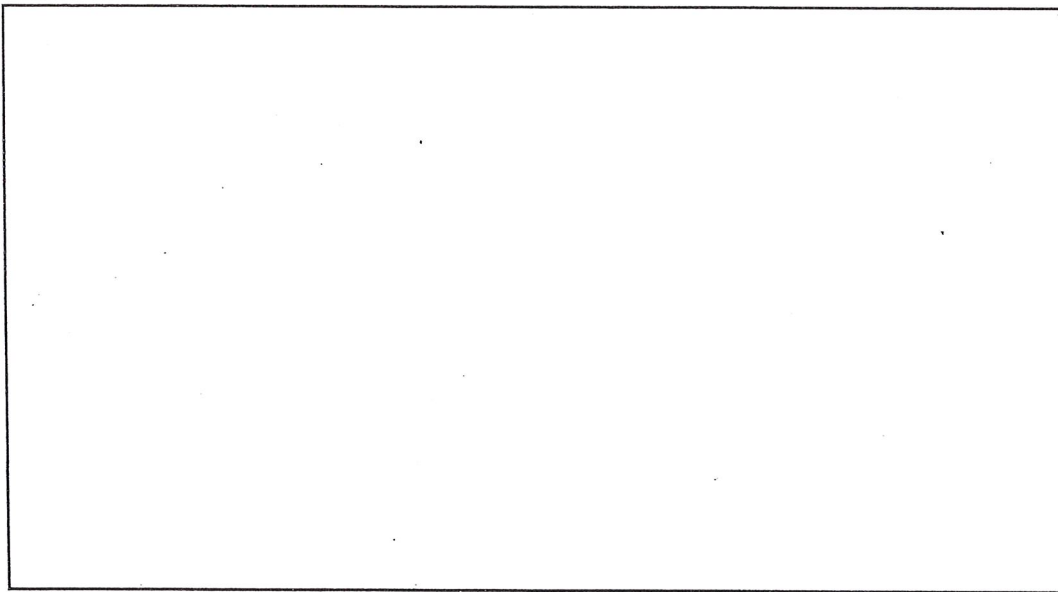**11** For 11a and 11b, find the sum or difference. Write your answer as a mixed number or a whole number, when possible.

11a. $4\frac{3}{4}$
    $+ 6\frac{2}{4}$
    ☐

11b. $7\frac{3}{6}$
    $- 2\frac{5}{6}$
    ☐

12 On Monday, Erin measures $\frac{3}{4}$ inch of snow. It snows some more. Now there are $3\frac{1}{4}$ inches of snow. How many more inches of snow fell?
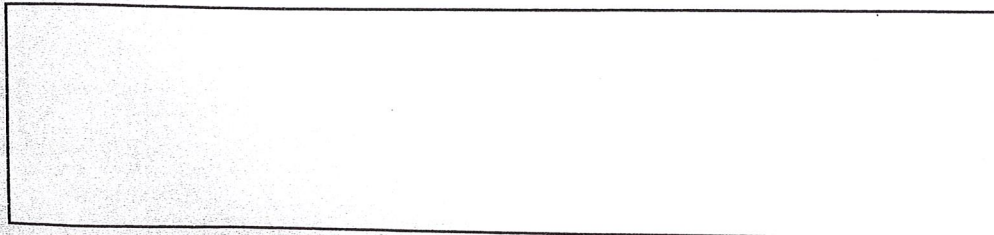
Part A

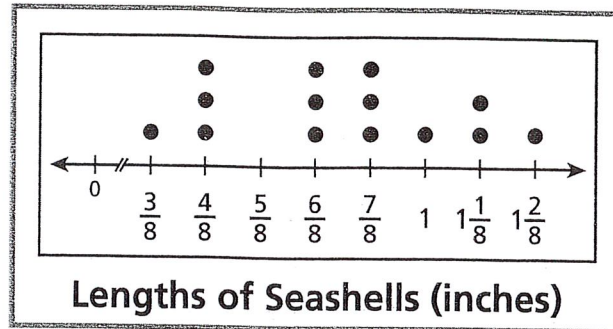Draw a model for the problem. Then solve. Explain how your model helps you solve the problem.

Part B

On Tuesday, it snowed an additional $2\frac{2}{4}$ inches. How many total inches of snow fell on Monday and Tuesday? Show your work.

10 The line plot shows the lengths of some seashells Colton collected at the beach.

Lengths of Seashells (inches)

Colton wants to glue shells along a 4-inch edge of a picture frame. He could use all of the $\frac{6}{8}$-inch and $\frac{7}{8}$-inch shells. Describe two other combinations of shells he could use.

11 Select the expression that is equivalent to $3\frac{3}{5}$. Mark all that apply.

Ⓐ $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{3}{5}$

Ⓓ $\frac{30}{5} + \frac{3}{5}$

Ⓑ $\frac{3}{5} + \frac{3}{5} + \frac{3}{5}$

Ⓔ $\frac{5}{5} + \frac{5}{5} + \frac{5}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

Ⓒ $1 + 1 + 1 + \frac{3}{5}$

Ⓕ $\frac{5}{5} + \frac{5}{5} + \frac{3}{5} + \frac{3}{5} + \frac{2}{5}$

12 Explain how to change $\frac{13}{5}$ to a mixed number.