Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**CFS for top quality work**

* + Initial complex fraction is written
  + Complex fraction written as a **division expression**
  + Unit rate calculated using rules for dividing fractions

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

UNIT 5 LESSON 10

**AIM**: SWBAT calculate unit rates with fractions

**THINK ABOUT IT!**

Emmy and Roscoe both run every day. Yesterday, Emmy ran 8 miles in two hours. Roscoe ran 6 ½ miles in 1 ½ hours. Determine who ran faster by comparing their unit rates.

Test the Conjecture #1) A bathtub is being filled up and after 2 ¾ minutes there is 8 ½ gallons in it. How many gallons are flowing each minute?

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Test the Conjecture #2) Winston found $3.75 for in change on the beach with his metal detector over the course of 3 1/3 hours. Write a unit rate that describes this situation

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Conjecture

|  |
| --- |
| Unit rates with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ can be calculated by dividing the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. |

**PARTNER PRACTICE**

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| *Bachelor Level* |

1. Gabby mixes ½ tablespoon of paprika for every ¾ teaspoon of salt. Calculate a unit rate to represent the amount of paprika per 1 tsp of salt.

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1. Which of the following expressions could be used to determine the unit rate in miles per hour for 3 ½ miles in ¼ hour? Select all that apply.

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| *Master Level* |

1. Mr. Roble was attempting to make blueberry muffins this weekend…The recipe called for cup of sugar and cup of butter. While he was busy watching the NBA playoffs, he accidently poured a whole cup of butter into the mixing bowl! For the recipe to come out proportionally correct, how many cups of sugar would he need to put in the mixing bowl?

**INDEPENDENT PRACTICE**

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| *Bachelor Level* |

1. Part A: While preparing for a marathon, a runner determined that he could run of a mile in of a minute. If the runner ran for 1 mile how many minutes would it take?

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Part B: If the runner ran for 1 minute, how many miles would he have run?

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Part C: If the runner ran for 8 miles at the same rate, how many minutes would it take?

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| *Master Level* |

1. A recipe for a special sauce calls for of a cup of ginger and 1 cups of pineapple juice. Read each statement below and decide whether it is “true” or “false.”

|  |  |  |
| --- | --- | --- |
| Statement | True | False |
| There are cups of ginger for every 1 cup of pineapple juice |  |  |
| There are cups of ginger for every 1 cup of pineapple juice |  |  |
| If we want to know how many cups of ginger needed if we have 3 cups of pineapple juice, we would set up our ratio like this: |  |  |
| If we have 3 cups of pineapple juice, we need about 2 cups of ginger |  |  |

1. Two different paint companies are trying to determine whose mixture is redder. Company 1 says that for every cup of red, they use cup of blue. Company 2 says that for every cup of red, they use cup of blue paint. Which company has the redder mixture? Explain your reasoning.

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| *PhD Level* |

1. A cheetah was racing a gazelle and a lion. For every of a mile the cheetah ran, the gazelle ran of a mile and the lion ran of a mile. If the cheetah ran 20 miles miles, how many miles did the gazelle and lion run?

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**EXIT TICKET**

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| --- | --- | --- | --- |
| Self-assessment | I mastered the learning objective today. | I am almost there. | Need more practice and feedback. |
| Teacher feedback | You mastered the learning objective today. | You are almost there. | You need more practice and feedback. |

1. Martin can run 3 ¾ miles in 2/3 of an hour. Write a unit rate to describe the situation and explain the context.

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1. 3 1/3 lb. of turkey costs $10.50. What is the price per pound of turkey?

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Bonus: How can you use this to determine the cost of 5 ½ pound of turkey?

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