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

UNIT 1 LESSON 6

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| AIM: | SWBAT divide using the standard algorithm  |

**THINK ABOUT IT!**

Mr. Cruse has to figure out the number of homerooms that AF Summit Middle School needs for next year. The school is growing and will have a total of 274 students. Mr. Cruse wants to put 28 students in each homeroom. How many homerooms does Mr. Cruse need to create? Solve using any method.

Key Point

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| --- |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ helps us divide large numbers by telling us how many \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to start with.  |

**Interaction with New Material**

**Ex. 1)** Evaluate the expression below 47,950 ÷ 14

**Ex. 2)** There are 14,994 songs on Jesse’s iPhone. Over the course of 49 days, Jesse listens to every song once. He listened to the same number of songs each day. How many songs did he listen to each day?

**PARTNER PRACTICE**

CFS for top quality work

* Problem is annotated with margin notes to provide additional meaning
* Model is drawn to represent known and unknown information
* Equation is written
* Estimate is completed
* All calculations are shown
* Check is performed
* Answer statement is written
* Work is organized and neat

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| --- |
| *Bachelor Level* |

***Solve and check your answer.***

1. 1,755 ÷ 27

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| *Master Level* |

1. Veronica is planning a birthday party for her friend. She invited 34 friends to the party and wants to give them each the same number of skittles in their gift bags. She bought 12 large bags of skittles. In total, there are 2,200 skittles in the 12 bags. She splits the skittles among the gift bags and keeps any that are leftover for herself. How many skittles will go in each gift bag? How many, if any, will Veronica keep for herself?
2. Ben is dividing 56,773 by 47 and he is feeling really overwhelmed. Help him get started! How would you explain to him how to find the quotient?

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 Find the actual quotient.

**Check for Understanding:**

What is the quotient of 608 and 16?

a) 3 R4

b) 4 $\frac{2}{16}$

c) 38

d) 308

**INDEPENDENT PRACTICE**

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| *Bachelor Level* |

***Directions: Evaluate each expression and check your answer.***

1. 15,990 ÷ 78
2. 5,900 ÷ 123

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| *Master Level* |

1. For the upcoming season, 14,116 players signed up for soccer. How many 126-player soccer clubs can be formed?
2. A farmer needs to pack 2,903 apples into crates to ship to supermarkets. Each crate can hold only 30 apples. Choose True or False for each statement.

|  |  |  |
| --- | --- | --- |
| Statement | True | False |
| The farmer needs 96 crates to ship out all the apples |  |  |
| The farmer needs 97 crates to ship out all the apples |  |  |
| At least one of the crates will not be filled to capacity |  |  |
| To determine the number of crates needed, divide 2,903 by 30 |  |  |

1. For each word problem, draw a model, write an equation, and solve the problem
	1. Elise 572 quarters that she has collected over the last several years. She wants to exchange all of her quarters for pennies. How many pennies will she receive in exchange for 572 quarters?
	2. Thomas has 575 pennies that he wants to exchange for quarters. How many quarters will he receive in exchange for his 575 pennies?

1. In each box, write the appropriate digit to complete the division algorithm.



1. Alonso and his sister each have rectangular backyards that have the same width. The length of his sister’s yard is ½ that of Alonso’s yard. The area of Alonso’s yard is 624 square feet and the length is 24 feet. What is the area of his sister’s yard?

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| *PhD Level* |

1. Lauren stacked 17 boxes on top of each other. The total volume of all the boxes is 2,448 cubic inches. The length of each box is 9 inches and the width is 8 inches. What is the height of the entire stack of boxes?

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

CFS for top quality work

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**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. Charlie and Rosa both divided two numbers and got the same quotient. Rosa divided 15,265 by 215. Charlie divided by a two digit number.
	1. What quotient did Rosa get?

**BONUS:**

* 1. Fill in the boxes to show one possibility for the division problem that Charlie solved:

 ÷  = 