**Math 6 - Unit 1: Number System Fluency** Name:

*Factors, Multiples, GCF and LCM Review*

Class Period: 1 2 3 4 Date:

*Use the divisibility rules to determine if 2, 3, 4, 5, 6, 9 or 10 are factors of the given numbers. Circle each of the numbers that are factors in the problems below.*

1) 144:

2 Y N Why?

3 Y N Why?

4 Y N Why?

5 Y N Why?

6 Y N Why?

9 Y N Why?

10 Y N Why?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2) 27: | 2 3 4 5 6 9 10 |  | 3) 4518: | 2 3 4 5 6 9 10 |
| 4) 36: | 2 3 4 5 6 9 10 |  | 5) 57: | 2 3 4 5 6 9 10 |
| 6) 102: | 2 3 4 5 6 9 10 |  | 7) 144: | 2 3 4 5 6 9 10 |

*Use a factor rainbow or a table of factors to help you list* ***ALL*** *the factors for the following numbers:*

8) 140

9) 39

*Find the first 5 multiples of the following numbers.*

10) 11: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

11) 6: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

*Use the sled method or the list method to find the GCF (Greatest Common Factor).*

12) 40 and 60

13) 8 and 15

*Use the sled method or the list method to find the LCM (Least Common Multiple).*

14) 6 and 9

15) 4 and 6

*Use the sled method or the list method to find the GCF* ***AND*** *LCM.*

16) 3 and 2

Use the sled method or the list method to apply GCF or LCM to solving the problems:

17) 10 and 4

18) Skylar wants to make party bags for a birthday. Glitter pens come in packs of 6 and stickers come in sheets of 4. What is the fewest number of bags she can prepare with one of each item in every party bag with no supplies left over? How many packs of pens and sheets of stickers does she need to buy?

GCF or LCM

# of bags \_\_\_\_\_\_\_ # of apples\_\_\_\_\_\_\_

# of pears \_\_\_\_\_\_\_

19) Acayo has 45 apples and 75 pears to sell. She wants to put the fruit in bags so that there are the same number of pieces of each fruit in each bag. What is the greatest number of bags of fruit that Acayo can have? How many pieces of each kind of fruit will be in the bag?

**Math 6 - Unit 1: Number System Fluency** Name: **KEY**

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1) 144:

2 Y N Why?

3 Y N Why?

4 Y N Why?

5 Y N Why?

6 Y N Why?

9 Y N Why?

10 Y N Why?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2) 27: | 2 3 4 5 6 9 10 |  | 3) 4518: | 2 3 4 5 6 9 10 |
| 4) 36: | 2 3 4 5 6 9 10 |  | 5) 57: | 2 3 4 5 6 9 10 |
| 6) 102: | 2 3 4 5 6 9 10 |  | 7) 144: | 2 3 4 5 6 9 10 |

*Use a factor rainbow or a table of factors to help you list* ***ALL*** *the factors for the following numbers:*

8) 140

1 x 140, 2 x 70, 4 x 35, 5 x 28, 7 x 20, 10 x 14

9) 39

*Find the first 5 multiples of the following numbers.*

10) 11: \_11\_\_, \_\_22\_, \_33\_\_, \_\_44\_, \_\_55\_

11) 6: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

*Use the sled method or the list method to find the GCF (Greatest Common Factor).*

12) 40 and 60

40: 1, 2, 4, 5, 8, 10, **20**, 40

60: 1, 2, 3, 4, 5, 6, 10, 12, 15, **20**, 30, 60

13) 8 and 15

*Use the sled method or the list method to find the LCM (Least Common Multiple).*

14) 6 and 9

6: 6, 12, **18**, 24, 30…

9: 9, **18**

15) 4 and 6

*Use the sled method or the list method to find the GCF* ***AND*** *LCM.*

16) 3 and 2

GCF = 1

LCM = 6

Use the sled method or the list method to apply GCF or LCM to solving the problems:

17) 10 and 4

18) Skylar wants to make party bags for a birthday. Glitter pens come in packs of 6 and stickers come in sheets of 4. What is the **fewest** number of bags she can prepare with one of each item in every party bag with no supplies left over? How many packs of pens and sheets of stickers does she need to buy?

*# BAGS = 12*

*# PACKS OF PENS = 2*

*# STICKER SHEETS = 3*

GCF or LCM

# of bags \_\_\_\_\_\_\_ # of apples\_\_\_\_\_\_\_

# of pears \_\_\_\_\_\_\_

19) Acayo has 45 apples and 75 pears to sell. She wants to put the fruit in bags so that there are the same number of pieces of each fruit in each bag. What is the **greatest** number of bags of fruit that Acayo can have? How many pieces of each kind of fruit will be in the bag?

# BAGS = 9

# APPLES PER BAG = 5

# PEARS PER BAG = 15