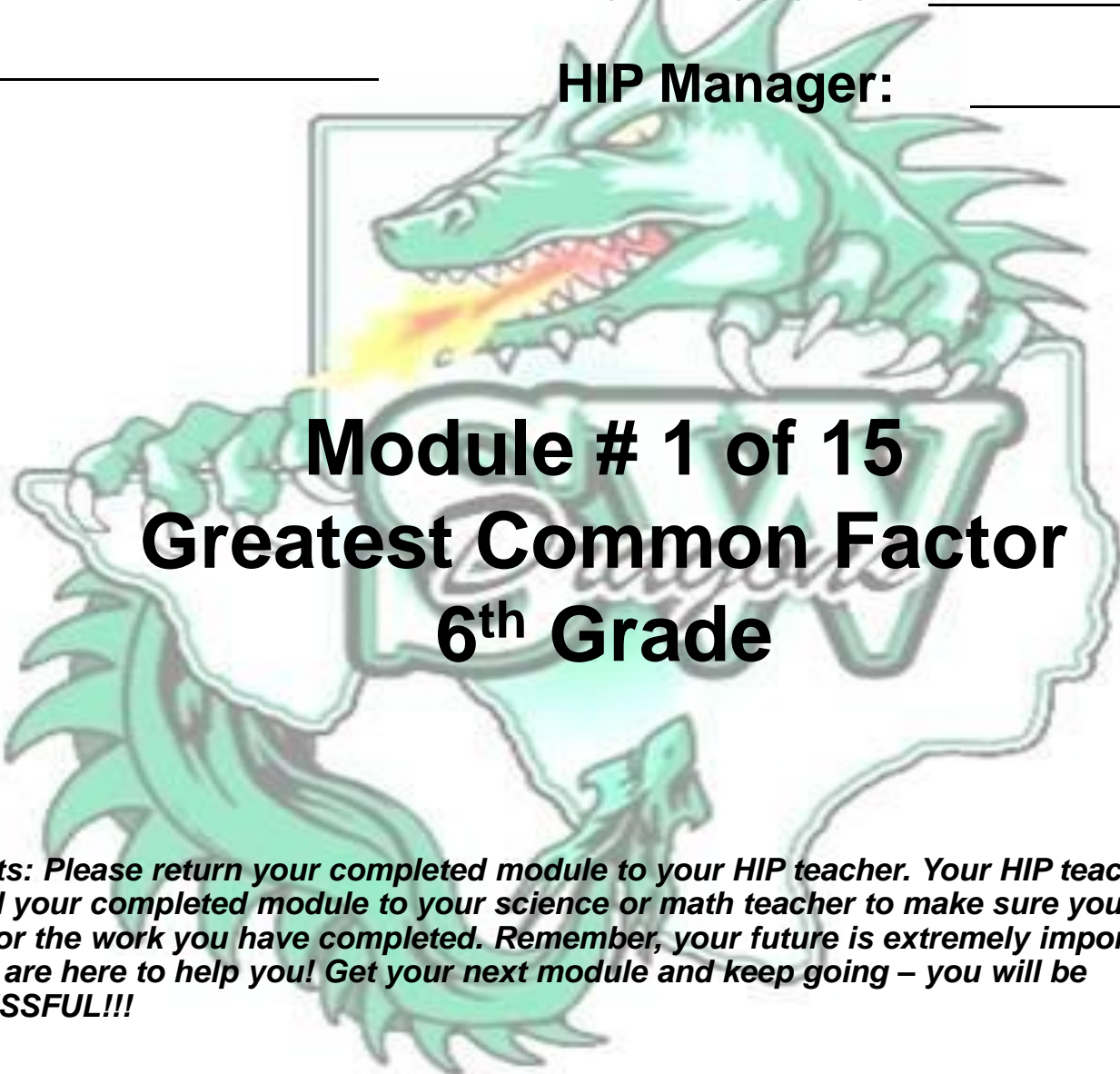


**Student  
Name:** \_\_\_\_\_

**Math Teacher:** \_\_\_\_\_

**HIP Manager:** \_\_\_\_\_



**Module # 1 of 15  
Greatest Common Factor  
6<sup>th</sup> Grade**

*Students: Please return your completed module to your HIP teacher. Your HIP teacher will forward your completed module to your science or math teacher to make sure you receive credit for the work you have completed. Remember, your future is extremely important to us and we are here to help you! Get your next module and keep going – you will be **SUCCESSFUL!!!***



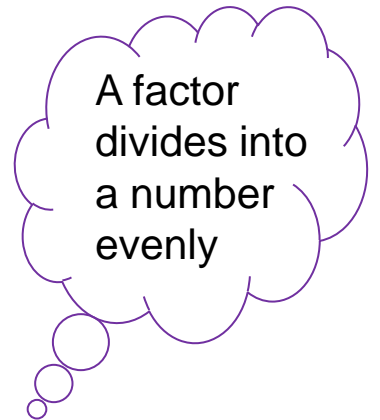
**MATH DRAGON PRESENTS**

**"GCF"**

# **GREATEST COMMON FACTOR "GCF"**

The greatest common factor of two numbers or a set of numbers is the largest factor that those numbers have in common.

# GCF



Let's find the GCF of 12 and 18.

First, make two T-charts to list your factors:

12	
1	12
2	6
3	4

18	
1	18
2	9
3	6

# GCF

Second, circle factors that are “common” (the same) for both numbers:

12		18	
1	12	1	18
2	6	2	9
3	4	3	6

The factors 12 and 18 have in common are 1,2,3 and 6. The greatest (largest) number they have in common is 6.

So the GCF is 6.



**TIME TO PRACTICE!!!**

# LIST THE FACTORS & FIND THE GCF

9 and 27

9

27

GCF: \_\_\_\_\_

Check: 9

20 and 36

20

36

GCF: \_\_\_\_\_

Check: 4

Don't forget to  
circle your  
common factors.



# LIST THE FACTORS & FIND THE GCF

7 and 18

7

18

11 and 44

11

44

Don't forget to  
circle your  
common factors.

GCF: \_\_\_\_\_

GCF: \_\_\_\_\_





# LIST THE FACTORS & FIND THE GCF

8 and 12 and 24

8

12

24

Only circle  
factors that are  
common to ALL  
three numbers.



GCF: \_\_\_\_\_



**LETS SEE HOW MUCH YOU  
HAVE LEARNED!!!**

# LIST THE FACTORS & FIND THE GCF

15 and 30

15

30

12 and 20

12

20

Don't forget to  
circle your  
common factors.

GCF: \_\_\_\_\_

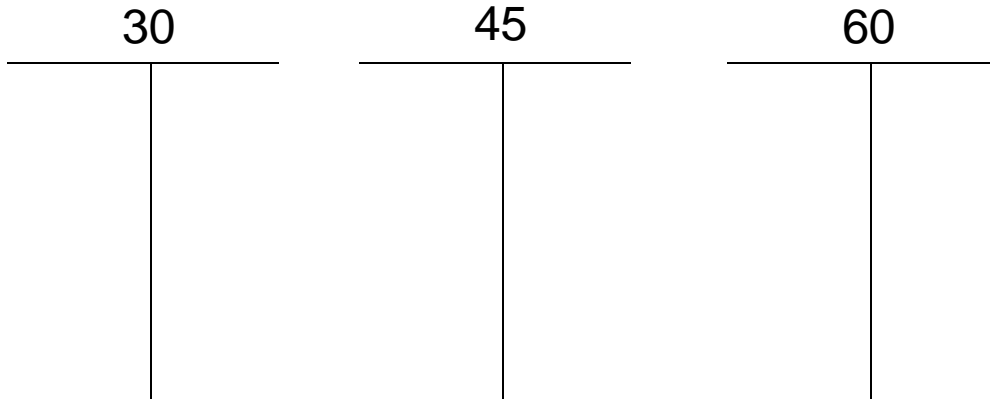
GCF: \_\_\_\_\_



# How do we solve a word problem?

Mrs. Sandoval has 60 folders, 45 pairs of scissors, and 30 rulers. What is the greatest common factor Mrs. Sandoval can use to divide the school supplies into equal groups?

- A 3
- B 5
- C 10
- D 15



List all the factors of 30, 45 and 60. Then find the largest one.



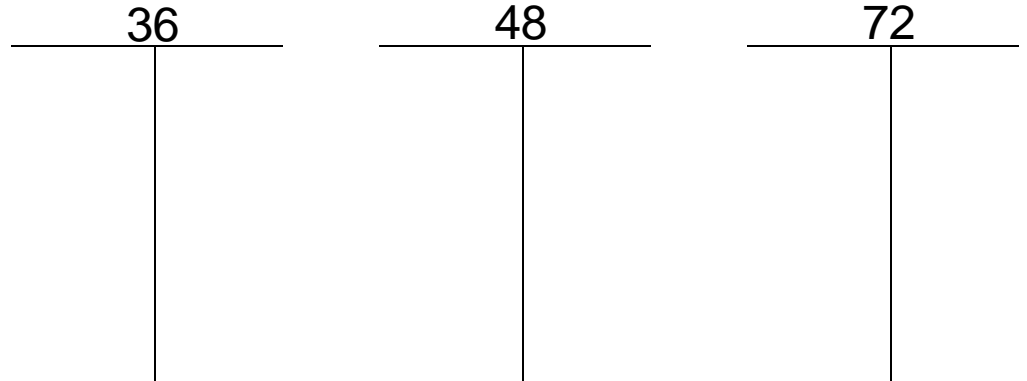
# Solving a GCF Problem

Earl has 36 red jelly beans, 48 blue jelly beans, and 72 yellow jelly beans. He wants to divide his jelly beans evenly among his friends. What is the greatest number Earl can use to divide the jelly beans evenly?



Circle common factors...look for the biggest one...then find your answer on the left.

- A 6**
- B 8**
- C 12**
- D 18**





**NOW YOU WILL CREATE A GCF  
PROBLEM OF YOUR OWN!!!**

# CREATE YOUR OWN

- You are going to write your own word problem.
- It must be a problem that requires finding the GCF to get the answer.
- Extra points can be earned by drawing a picture to go with your word problem.
- It must be a story problem...do not just ask what is the GCF of two numbers.
- Finally, you need to explain what the correct answer is and WHY?
- Remember what you learned and don't be afraid to take a math adventure like our Math Dragon!!

# Your Word Problem





**CONGRATULATIONS!!!**

**JOB WELL DONE, AND WE WILL SEE YOU AGAIN SOON**

**IN**

**"MATH DRAGON'S**

**MATH ADVENTURE!!!"**