# Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**GCF and LCM Word Problems**

**Solve each word problem by finding GCF or LCM.**

1. Pencils come in packages of 10. Erasers come in packages of 12. Phillip wants to purchase the **smallest** **number of pencils and erasers** so that he will have exactly **1 eraser per pencil**. How many packages of pencils and erasers should Phillip buy?

1. 4 packages of pencils and 3 packages of erasers
2. 5 packages of pencils and 4 packages of erasers
3. 6 packages of pencils and 5 packages of erasers
4. 12 packages of pencils and 10 packages of erasers

2. Kiara baked 30 oatmeal cookies and 48 chocolate chip cookies to package in plastic containers for her friends at school. She wants to divide the cookies into identical containers so that each container has the **same number of each kind of cookie**. If she wants each container to have the **greatest** **number of cookies possible**, how many plastic containers does she need?

3. Boxes that are 14 inches tall are being stacked next to boxes that are 10 inches tall. What is the **shortest** **height** at which the two stacks will be the **same** **height**?

4. Beginning at 8:30 A.M., tours of the National Capitol and the White House begin at a tour agency. Tours for the National Capitol leave every 15 minutes. Tours for the White House leave every 20 minutes. How often do the tours **leave at the same time**?

1. Every 15 minutes
2. Every 30 minutes
3. Every 45 minutes
4. Every 60 minutes

5. Two neon lights are turned on at the same time. One blinks every 6 seconds and the other blinks every 4 seconds. In 60 seconds, how many times will they **blink at the same time**?

6. The table below shows the number of students in the school choir.

**School Choir**

|  |  |
| --- | --- |
| **Students** | **Number** |
| Girls | 48 |
| Boys | 64 |

The choir teacher plans to arrange the students in equal rows. Only girls or boys will be in each row. What is the **greatest number of students** that could be in each row?

1. 16 B. 12 C. 8 D. 4

7. At a display booth at an amusement park, every visitor gets a gift bag. Some of the bags have items in them as shown in the table below.

**Items in the Gift Bags**

|  |  |
| --- | --- |
| **Items** | **Bags** |
| Hat  | Every 2nd visitor |
| T-shirt | Every 7th visitor |
| Backpack | Every 10th visitor |

How often will a bag **contain all three items**?

 A. Every 14 bags

B. Every 19 bags

C. Every 70 bags

D. Every 140 bags

8. Bridget has swimming lessons every fifth day and diving lessons every third day. If she had a swimming lesson and a diving lesson on May 5, when will be the next date on which she has **both swimming and diving lessons**?