

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_  
8.1.2-1

**GCF and LCM Word Problems**

**Greatest Common Factor (GCF)**

1. Sally had 10 purple beads, 25 yellow beads and 30 red beads. She is going to make identical bracelets for her friends. What is the maximum number of bracelets she can make if she wanted to use all of her beads?
2. The Student Council collected 60 pens, 90 pencils and 45 packs of paper to donate to students who cannot afford the supplies. They made packages with the same number of supplies in each. What is the maximum number of packages the group could make if they used all of the supplies?
3. The PTA put together baskets for a silent auction. The students donated the items for baskets. Altogether the PTA collected 100 movie tickets, 50 boxes of microwave popcorn and 75 bottles of soda. What is the maximum number of identical baskets they can make if they used all of the items collected?

**Least Common Multiple (LCM)**

4. Robbie and Cynthia are cousins. Robbie visits his grandmother every 6 days. Cynthia visits her grandmother every 5 days. Over the next 40 days, how many will the two cousins visit their grandmother on the same day?
5. Peggy has three plants. She waters the cactus every 3 days, the spider plant every 3 days and the violet every 2 days. She watered all three plants on October 1st. What is the next day that she will water all three plants on the same day?
6. Gary made 20 treat bags for his Halloween party. In every 3rd bag he put lollipops, in every 6th bag he put Hershey Kisses and in every 9th bag he put fake eyeballs. How many of the 20 bags have all three items in them?

**GCF or LCM? Figure it out!**

7. Julie made identical necklaces out of the shells she collected on the beach. Altogether she used 10 brown shells, 15 black shells and 20 blue shells. If she made the maximum number of