**Where might we use LCM and GCF in everyday life?**

When should I be calculating the GCF?

* To arrange two or more groups or things into rows or groups
* To divide things into smaller sections
* Figuring out how many people can be invited or receive something

When should I be calculating the LCM?

* To figure out when two or more events will happen at the same time or on the same date
* To purchase or get multiple items of two or more different things in order to have enough
* About something that is or, will be happening over and over again

**EXAMPLES**

1. There are 12 boys and 18 girls in Ms. Frizzle’s science class. Each lab group must have the same number of boys and the same number of girls. What is the greatest number of groups Ms. Frizzle can make if every student must be in a group?
2. Lauren’s family is provide juice boxes and granola bars for 24 players on her soccer team. Juice comes in packs of 6, and granola bars in packs of 8. What is the least number of packs of each needed so that every player has a drink and a granola bar and there are none left over?
3. Larry is arranging video games onto shelves. He has 24 racing games and 16 sports games. Each shelf will have the same numbers of racing and sports games. If Larry must place all of the books on shelves, what are the possible numbers of shelves Carlos will use?
4. Jack swims every fourth day while his sister Jill swims every third day. If they both begin their swim lessons on the first of the month, when will Jack and Jill be at the pool on the same day?

**Use the train schedule to answer the following questions**

1. The red line and the blue line trains just arrived at the station. When will they next arrive at the station at the same time?

In \_\_\_\_\_\_\_\_\_\_\_\_\_minutes

|  |  |
| --- | --- |
| **Train Schedule** | |
| **Train** | **Train arrives every…** |
| Red line | 8 minutes |
| Blue line | 10 minutes |
| Yellow line | 12 mintes |

1. The blue line and the yellow line trains just arrived at the station. When will they next arrive at the station at the same time?

In \_\_\_\_\_\_\_\_\_\_\_\_\_minutes

1. All three trains just arrived at the station. When will they

next all arrive at the station at the same time?

In \_\_\_\_\_\_\_\_\_\_\_\_\_minutes

1. Dory has two pieces of ribbon, one 20 cm long and the other 15 cm long. To decorate an album, she wants to cut them up to produce many pieces of ribbon that are all of the same length, with no ribbon left over. What is the greatest length, in cm’s, that she can make them?