

BACK TO SCHOOL

LCM Performance Task

Task Card 1

You and your partner watch the following video (you may want to refer back to this video, when you reach task card 7) :

<http://studyjams.scholastic.com/studyjams/jams/math/fractions/least-common-multiple.htm>

After watching, you and your partner will click on WATCH OUT, where it discusses prime factorization. Next, click on TRY THIS for some practice problems with LCM.

Task Card 2

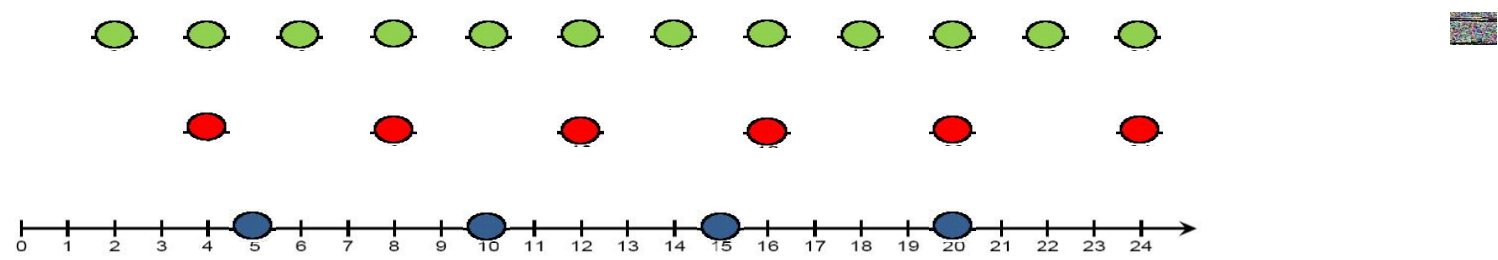
Part 1: Music

- You and your friends have tickets to attend a music concert. While standing in line, the promoter states he will give a gift card for a free album download to each person that is a multiple of 2. He will also give a backstage pass to each fourth person and floor seats to each fifth person.
- Which person will receive the free album download, backstage pass, and floor seats?

Task Card 3

Green = gift card
Red = backstage pass
Blue = Floor Seats

MUSIC
Gift Card



Task Card 4

Solution:

The gift card number line illustrates multiples of 2. The backstage pass number line illustrates multiples of 4. The floor seats number line illustrates multiples of 5. The number 20 is a multiple of 2, 4, and 5 which is illustrated on each of the above number lines. For that reason, the number 20 is a common multiple of 2, 4, and 5. Since the number 20 is the smallest common multiple, it is the least common multiple of 2, 4, and 5. This concept is illustrated as the first common multiple on the above number lines. In view of that, the number 20 represents the 20th person in line who will receive a free album download gift card, a backstage pass, and floor seats to the concert.

Task Card 5

- **Part 2: School Supplies**

- The Parents Teachers Association (PTA) at your school donated school supplies to help increase student creativity and student success in the classroom. Your teacher would like you to create kits that include one package of colored pencils, one glue stick, and one ruler. When you receive the supplies, you notice the colored pencils are packaged 12 boxes to a case, the rulers are packaged 30 to a box, and glue sticks are packaged 4 to a box.

What is the **smallest number** of each supply you will need in order to make the kits and **not have supplies left over**? Explain your thought process on paper and show your solution. (you may use number lines, as was illustrated in the Music problem)

Task card 6

How many packaged rulers, colored pencils, and glue sticks will you need in order to make the kits? Explain the process you used to determine how many packages are needed for each supply, on paper.

Task Card 7

You and your partner CONSTRUCT (level 4) a word problem where the LCM is needed to find the solution.

Record this on your paper and be prepared to share with the class.