Name: Key

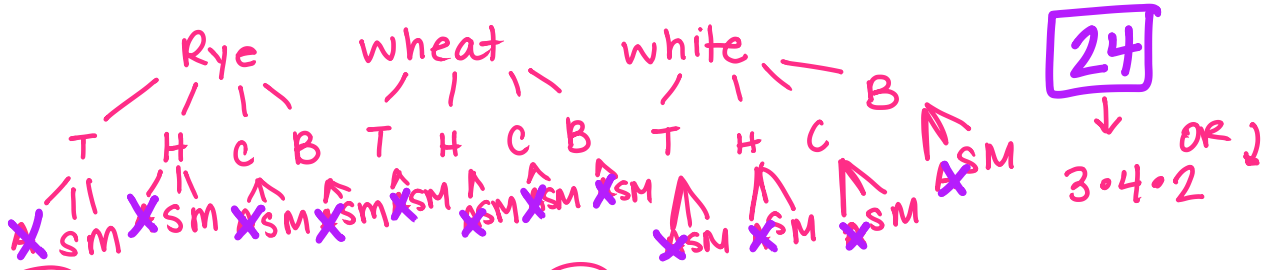
Unit 11 Day 2 – Homework

Fundamental Counting Principle

1. Lilia is making a sandwich. She has 3 options for bread (rye, wheat, and white), 4 options for meat (turkey, ham, chicken, bologna), and 3 options for cheese (American, Swiss, and Munster). How many ways can she make a sandwich?

$3 \cdot 4 \cdot 3 = 36$

2. Lilia just realized that the American cheese went moldy. How many options does she have now?



3. Luke has three different construction trucks and five different trains to play with. He can only bring one with him to preschool. How many choices does he have?

$3 + 5 = 8$

4. How many 3 letter words can you make out of the word "CENTRAL"? (7)

$7 \cdot 6 \cdot 5 = 210$

5. You need to create a password for your email account. The first unit needs to be a letter followed by four digits that do not repeat.

$26 \cdot 10 \cdot 9 \cdot 8 \cdot 7 = 131{,}040$