**Tree Diagram Notes Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Examples: Create a Tree Diagram to represent each situation.**

1) Sally visits the yogurt shop. She can get a cup or a cone with vanilla, chocolate, or swirl yogurt. How many different options does Sally have?

2) Your family is going on a trip to New York City. You can drive or take a plane. You can stay at a hotel, your cousin’s house, or your grandma’s house. You can visit the Empire State Building or Central Park. How many different combinations do you have?

3) How many different ways can you arrange the letters in the name JOHN?

**![C:\Documents and Settings\jainslie\Local Settings\Temporary Internet Files\Content.IE5\6W2FJPU3\MC900432687[1].png]()**

**Pause the video and try the problems on the back on your own!**

**Then press play and check your answers with a color pen.**

1) George is going to the zoo. He can walk, take the bus, or take the train. When he’s there, he can see the zebras, elephants, or lions. For a snack, he can have fruit or a snack bar. How many different combinations can George have for his trip to the zoo?

2) How many different ways can you arrange the word CAT?

**STOP!** Do not try the next part on your own.

Press play, check your “You Try,” then come back and learn a neat short cut to tree diagrams ☺

**Fundamental Counting Principal**: The use of multiplication to find the different combinations of events.

Example 1:

Example 2:

Example 3:

You Try 1: You Try 2: