"Plenty of Possibilities" Station
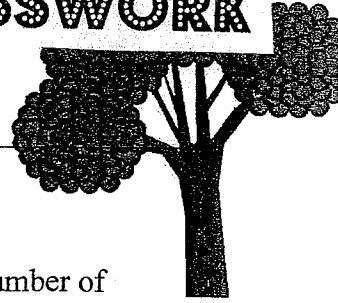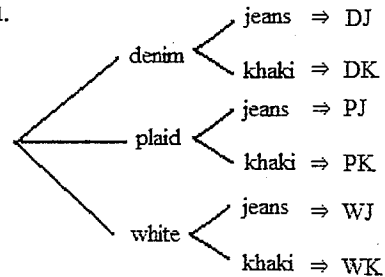
tree diagrams

Name:_____

Directions: With your group, make a tree diagram for each exercise and find the number of **possible outcomes**. An example has been done for you.

Example: Jenny has a choice of denim, plaid, or a white shirt with a choice of jeans or khaki pants.

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            denim   jeans  ⇒ DJ
                    khaki  ⇒ DK
            plaid   jeans  ⇒ PJ
                    khaki  ⇒ PK
            white   jeans  ⇒ WJ
                    khaki  ⇒ WK
```

There are 6 possible outcomes.

**What does "possible" outcome mean? Use your textbook to find a definition and record it on your vocab sheet.

1. At the yogurt shop, you have a choice of strawberry, banana, or vanilla yogurt with a choice of one topping. Your choice of toppings include strawberries, walnuts, or M & M's. There are _____ possible outcomes.

2. Soccer uniforms come in three sizes: small, medium, and large. The basic colors are gold, black, red, and orange. There are _____ possible outcomes.

3. School folders come in 3 colors: black, red, and purple. They come in 2 styles, one with pockets and no brads, and one with pockets and brads. There _____ possible outcomes.

4. As part of the unit on the Revolutionary War, students in Mrs. Spiller's class were given a choice of three books to read, *My Brother Sam is Dead*, *Johnny Tremain* or *Toliver's Secret*. They were also asked to choose an accompanying project, a diorama, dress up as a character or make a model. There are _____ possible outcomes.