## Student Activity: To examine the Fundamental Principle of Counting.

## Use in conjunction with the file "Fundamental Principle of Counting" on the Student's CD.

1. John is buying a car and he has a choice of 3 makes in his price range. Each car comes in 4 colours. How many cars does he have to choose from, if these are the only options to be considered? Show calculations.
2. A café offers 5 types of bread and 6 types of sandwich filling. How many different sandwiches can they offer their customers, using only 1 filling at a time? (Note each slice of bread in a sandwich must be of the same type.) Show calculations.
$\qquad$
$\qquad$
3. A T shirt factory has 5 designs and each come in 6 colours. How many different types of T shirts can be produced? Show calculations.
$\qquad$
4. A café offers starters, main courses and desserts. It has 4 kinds of starters, 6 kinds of main courses and 5 desserts.
a. How many choices is it offering it's customers, if each takes a starter, main course and dessert? Show calculations.
b. How many choices is it offering it's customers, if each customer only takes a starter and main course? Show calculations.
5. Sheelagh is buying a jumper and she has 12 jumpers to choose from. Each brand of jumper comes in 4 colours. How many brands is she choosing from? Show calculations.
$\qquad$
$\qquad$
6. A café offers it's customers 18 choices and each customer has a starter, main course and dessert. it offers 3 main courses and 2 starters. How many different desserts does it offer? Show calculations.
