MBF3CI: UNIT 3 - One Variable Statistics

## 3.3: Types of Data and Graphs

## Types of Data

Look at these 3 questions. How is the data collected by each question different?

1. Please circle the reason for your previous work absence.

Illness
Vacation and/or Holiday *this is categorical data
Funeral
2. How many km/L of gas does your current car get per tank?
3. How many years of schooling does your career require?
*this is continuous data
*this is discrete data
Definitions to memorize:
Categorical Data

## Continuous Data

## Discrete Data

Example \#1 For each of these examples, state what type of data it represents
a) number of pets at home
b) types of pets at home
c) amount of coffee (in mL) drank in one day
d) mark on a tes $\dagger$
e) gender
f) age
g) weight
h) hair colour

## TYPES OF GRAPHS

There are several different types of graphs used to represent each data type. (Some of these are a recap from the first lesson in this unit)

## HISTOGRAM



BAR GRAPH


## CIRCLE GRAPH

## PICTOGRAPH



Example \#2 Display the data in the following chart in a circle graph.

These data show 24 highschool students answers to the question: "What are your plans after graduation?"

| College | Work | College | College | College | Work |
| :---: | :---: | :---: | :---: | :---: | :---: |
| University | College | University | College | Work | Work |
| College | Work | College | University | College | College |
| University | Work | College | College | College | College |

Fill in the following chart first:

| Destination | Number of Students <br> Tally | Number of Students <br> Frequency | Relative <br> Frequency <br> $(\%)$ | Degrees <br> $\left(360^{\circ} \times R F\right)$ |
| :--- | :---: | :---: | :---: | :---: |
| College |  |  |  |  |
| University |  |  |  |  |
| Work |  |  |  |  |



