

# Outcome 1 - Frequency Tables & Bar Graphs

## Bronze example

**Examples...**

The shoe sizes for a group of students are recorded below;

|   |   |   |    |   |   |   |
|---|---|---|----|---|---|---|
| 9 | 7 | 9 | 8  | 7 | 7 | 5 |
| 9 | 7 | 6 | 10 | 7 | 6 | 7 |

Draw a tally frequency table for these results.

| Size  | Tally | Freq. |
|-------|-------|-------|
| 5     | I     | 1     |
| 6     | II    | 2     |
| 7     | IIII  | 4     |
| 8     | I     | 1     |
| 9     | IIII  | 5     |
| 10    | I     | 1     |
| Total |       | 14    |

## Silver example

**Examples...** The number of visitors to a local library was recorded each day for two weeks. The results are shown below;

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| 24 | 38 | 55 | 33 | 49 | 50 | 64 |
| 72 | 65 | 47 | 34 | 44 | 48 | 40 |

Draw a tally frequency table for these results.

**\*\*Choose suitable intervals\*\***

| Age   | Tally | Freq. |
|-------|-------|-------|
| 20-29 | I     | 1     |
| 30-39 | III   | 3     |
| 40-49 | IIII  | 5     |
| 50-59 | II    | 2     |
| 60-69 | II    | 2     |
| 70-79 | I     | 1     |
| Total |       | 14    |

## Gold example

**Examples...**

The table shows the different sports a group of people like to watch on television. Illustrate this information in a bar graph.

| Sports    | Football | Tennis | Rugby | Cricket |
|-----------|----------|--------|-------|---------|
| Frequency | 10       | 6      | 4     | 8       |

1. Give your graph a title
2. Choose an appropriate scale
3. Draw your bars and label them.

For this graph, going up in 2's.

**\*\*Remember to EVENLY space your bars\*\***

## Bronze Questions

Draw tally frequency tables for the following data sets...

1. Ages of children at a youth club...

|    |    |    |    |    |
|----|----|----|----|----|
| 11 | 10 | 12 | 11 | 10 |
| 12 | 13 | 12 | 10 | 12 |

2. Number of exams being sat by a group of S4's.....

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 6 | 4 | 6 | 6 | 5 | 7 |
| 7 | 8 | 6 | 7 | 7 | 6 |

3. Ages of the members of a seniors bowling club...

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| 62 | 61 | 67 | 62 | 64 | 62 | 63 |
| 64 | 67 | 66 | 62 | 67 | 63 | 68 |

4. Scores in a Rigour Check-up...

|   |   |   |   |    |    |   |   |
|---|---|---|---|----|----|---|---|
| 6 | 6 | 5 | 8 | 7  | 10 | 9 | 9 |
| 7 | 8 | 3 | 8 | 10 | 9  | 8 | 8 |

## Silver Questions

Draw tally frequency tables for the following data sets...

1. Number of students at supported study...

|    |    |    |    |    |
|----|----|----|----|----|
| 53 | 68 | 38 | 41 | 50 |
| 56 | 63 | 58 | 32 | 52 |

2. Number of customers in a shop...

|    |    |    |    |    |    |
|----|----|----|----|----|----|
| 34 | 46 | 57 | 45 | 33 | 68 |
| 59 | 44 | 34 | 31 | 63 | 78 |

3. The number of people visiting a stall...

|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| 22 | 19 | 12 | 8  | 23 | 33 | 29 |
| 47 | 21 | 7  | 15 | 34 | 48 | 17 |

4. The number of people in a cinema...

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| 78 | 54 | 83 | 60 | 54 | 83 | 98 | 43 |
| 73 | 58 | 45 | 98 | 93 | 76 | 84 | 91 |

## Gold Questions

Construct neat bar graphs for the information below...

1. Favourite Subject

| Subject   | English | Maths | P.E. | Music |
|-----------|---------|-------|------|-------|
| Frequency | 2       | 16    | 8    | 12    |

2. Equipment most used at the gym

| Equipment | Treadmill | Bike | Rowing | Weights |
|-----------|-----------|------|--------|---------|
| Frequency | 9         | 4    | 2      | 11      |

3. Ways of getting to school

| Way       | Car | Bus | Walk | Cycle |
|-----------|-----|-----|------|-------|
| Frequency | 60  | 30  | 90   | 70    |

4. Different pets in class S3

| Pet       | Hamster | Cat | Dog | Goldfish |
|-----------|---------|-----|-----|----------|
| Frequency | 10      | 40  | 35  | 25       |