Data Representation – Frequency Distribution Exercises. Name: _____

1. Use the frequency distribution table below to answer the following questions.

Score	Frequency
11	6
12	12
13	9
14	7
15	6

(a) How many data results were collected?
(b) Which score had the highest frequency?
(c) Which score(s) had the lowest frequency?

2. A random sample of 20 young people was surveyed to find the number of colours they have in their hair. Here are the raw data collected:
1, 3, 4, 2, 1, 2, 2, 2, 1, 1, 2, 2, 3, 3, 1, 2, 3, 1, 1, 2.

(a) Organise the data into a frequency distribution table

(b) How many people have 1 colour in their hair?

(c) Which score has the highest frequency?

3.

Score	Frequency
3.5	3
4	0
4.5	7
5	11
5.5	2
6	15

Are the following statements true or false?
(a) There are 30 pieces of data.
(b) The most common frequency is 5.
(c) The score with a frequency of 15 is 6.

4. The data below shows the number of tries scored in 20 games of Rugby League.
2 3 4 5 0 6 3 5 4 3
1 3 2 6 3 2 3 5 2 0

(a) Put the data into a frequency table.

(b) Display the results in a combined frequency histogram and polygon.

5. The following data shows the number of children in each household in a suburban street:
2, 2, 3, 2, 3, 4, 3, 1, 3, 2, 3, 3, 4, 1, 1, 2, 2, 2

(a) Display the information in a frequency table.

(b) Display the information as a histogram/frequency polygon combination graph.

(c) How many people were surveyed?

6. The data below shows the scores on a test out of 50 achieved by a class of 20 students.

45 28 42 31 32 37 28 49 39 40
45 28 37 33 38 41 25 29 42 40

(a) Complete the frequency table below

Class	Frequency
25–29	
30–34	
35–39	
40–44	
45–49	

(b) Display the data in a frequency histogram and polygon.

7. The data below shows the results of 10 people who give a hotel a rating of between 1 and 5 stars. The results are:
2 3 4 1 4 2 5 2 3 4.

Display this data on a dot plot.

8. A clothing store is open from 9.00 am until 5.00 pm six days per week. The stem-and-leaf plot drawn below shows the number of sales made in the store during each hour that the store is open.

Key: 1 | 4 = 14

Stem	Leaf
0	4 5 7 7 9
1	0 1 1 3 3 3 5 6 6 7 9
2	0 0 1 1 1 2 2 3 4 5 5 6 6 7 8 9 9
3	1 3 3 5 5 5 7 7 7 7 7 8 9 9
4	6

(a) How many hours was the store open for?

(b) What was the most number of sales made in an hour?

(c) In how many hours were less than 10 items sold?

(d) What was the most common number of sales made per hour?

9. A fast food restaurant has 30 employees. The number of hours worked by each employee during the past week is shown below.

23 27 34 18 38 25 19 27 26 30
28 41 28 22 15 28 33 37 42 17
36 35 37 31 28 42 19 18 29 35

Display the data on an ordered stem-and-leaf plot.

10. The scores obtained by 20 divers during a diving competition are shown below.

9.9	9.2	8.6	8.8	7.9	8.2	5.6	9.2
6.8	7.2	8.0	6.9	7.5	5.8	8.2	7.1
7.2	8.5	9.0	8.1				

Display the data in an ordered stem-and-leaf plot.