**Interpreting Histograms ANSWERS**

For each question, draw the Histogram and answer the questions on interpretation. Remember: - Frequency Density = Frequency ÷ Classwidth

- Plot even intervals on the axes!

|  |  |  |
| --- | --- | --- |
| **Spending on Food (per week in £)** | **Frequency** | **Frequency Density** |
| 0 – less than 10 | 7 | 0.7 |
| 10 – less than 30 | 15 | 0.75 |
| 30 – less than 50 | 30 | 1.5 |
| 50 – less than 70 | 60 | 3 |
| 70 – up to 100 | 45 | 1.5 |

1)

1. Plot a Histogram of this information.
2. Use the Histogram to estimate the number of people who spend £40 - £60 per week on food.

45 people

2)

|  |  |  |
| --- | --- | --- |
| **School days missed in a year** | **Frequency** | **Frequency Density** |
| 0 – 2 | 30 | 15 |
| 2 – 4 | 26 | 13 |
| 4 – 7 | 27 | 9 |
| 7 – 10 | 18 | 6 |
| 10 - 15 | 20 | 4 |

a) Plot a Histogram to show the information on school days missed over a year.

b) How many people would you guess missed between 8 and 11 days?

16 pupils

|  |  |  |
| --- | --- | --- |
| **IQ** | **Frequency** | **Frequency Density** |
| 80 < IQ ≤ 100 | 5 | 0.25 |
| 100 < IQ ≤ 110 | 30 | 3 |
| 110 < IQ ≤ 115 | 20 | 4 |
| 115 < IQ ≤ 120 | 15 | 3 |
| 120 < IQ ≤ 130 | 17 | 1.7 |
| 130 < IQ ≤ 150 | 4 | 0.2 |

3a)

a) Estimate, using a Histogram, the number of people with IQs between 112 and 125.

35.5 people = 36