Level 3 Core Formal Homework

## Statistics

(Show all working!)

1. Thirty-six arrows were fired at a target. The outside ring scored 1 point and the centre ring was worth 10 points. The results are shown below:

| 4 | 4 | 5 | 4 | 1 | 4 | 7 | 7 | 9 | 5 | 2 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 1 | 8 | 1 | 9 | 1 | 2 | 5 | 8 | 1 | 8 | 10 |
| 9 | 5 | 6 | 7 | 8 | 4 | 2 | 3 | 5 | 6 | 6 | 4 |

Copy and complete the frequency table below

| Score $(x)$ | Tally | Frequency |
| :---: | :---: | :--- |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |


2. The graph shows the distance travelled to work by a group of people:


What is the difference between the longest and the shortest distances?
3. The temperature in a classroom was recorded over the duration of 1 day:
(a) At what time was the temperature first taken?
(b) Use the graph to estimate what the temperature would have been at 11.30am.
(c) What was the average temperature for that day?

Temperature ${ }^{\circ} \mathrm{C}$

4. A group of people were asked how they preferred their potatoes to be cooked:

(a) What percentage preferred their potatoes boiled?
(b) What percentage of the group preferred theirs' mashed?
(c) If there were 60 people in the survey, how many of them preferred mashed potatoes?
(d) Were the people in this survey grown-ups or teenagers? Give a reason for your answer.
5. A survey of the ages of shoppers in a supermarket revealed the following:

| Age Range | Percentage |
| :---: | :---: |
| under 20 | $15 \%$ |
| $20-34$ | $20 \%$ |
| $35-49$ | $30 \%$ |
| $50-64$ | $25 \%$ |
| 65 or over | $10 \%$ |



Using the information in the table, what is the age range represented by the shaded section of the pie-chart?

