## Mathematics Assessment Program

## Middle School Mathematics

## Short Tasks: Statistics and Probability

1. In a shipment of 1,000 bulbs. $\frac{1}{40}$ of the bulbs were defective.

What is the ratio of defective to non-defective bulbs?
2. A vendor has 15 helium balloons for sale: 7 are yellow, 5 are red, and 3 are green. A balloon is selected at random and sold. If the balloon sold is yellow, what is the probability that the next balloon selected at random, is also yellow?
3. Joe has a bag containing 8 red sweets, 9 yellow ones and 11 green. He takes out a sweet and eats it, then, he takes out a second sweet. What is the probability that both the sweets are red?
4.

| Number of children | 0 | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: |
| Number of families | 13 | 24 | 36 | 27 |

Data were collected on the number of children per family in a certain village and tabulated as shown.
Find the average (mean) number of children per family in the village.
5.

| Number of accidents | 0 | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of drivers | 14 | 13 | 19 | 4 | 2 | 2 | 1 |

The table shows the results of a poll which asked drivers how many accidents they had had over the previous 5 years.
What is the median number of accidents per driver?

