## Sixes: Student Worksheet 1

Name $\qquad$ Year $\qquad$ Date $\qquad$

The chance of getting six is 'one in six' ( about 16.5\%). What does this really mean?
Do you expect to get a six in the first six throws? Yes $\qquad$ No $\qquad$ Why?

Do you expect to get more than one six in the first six throws? Yes $\qquad$ No $\qquad$ Why?

Use numbers to predict:
About how many sixes would you expect to get in eighteen throws? $\qquad$
Why?
About how many sixes would you expect to get in sixty throws? $\qquad$ Why?

Throw the die and record the total number of sixes after six, eighteen, then sixty throws.
Combine the totals at your table and work out the percentage of throws that resulted in six.

Record the results below:

| Number of throws | Number of sixes thrown | Percentage of throws <br> that were six |
| :--- | :--- | :--- |
| 6 throws |  |  |
| 18 throws |  |  |
| 60 throws |  |  |
| throws |  |  |

Compare to other groups' results.
How can you explain that there was less percentage variation between groups for the larger numbers of throws?

Sixes: Student Worksheet 2

Name $\qquad$ Year $\qquad$ Date $\qquad$

Throw the die. If the result is six, cross the first six. If it is one to five, write the number in the blank spaces in turn. Keep throwing the die, crossing the next six or filling in the blanks, depending on your result.

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