An experiment is an activity involving chance that can have different results. Rolling a standard number cube is an experiment.

The different results that are possible are called the outcomes of an experiment. The sample space of an experiment is the set of all possible outcomes. When rolling a standard number cube, the sample space is \{1, 2, 3, 4, 5, 6\}.

Identify the outcome shown and the sample space.

1. spinning a spinner
2. tossing a coin

If you perform an experiment many times, you can estimate the probability of an event.

To find the experimental probability of an event, use a formula.

\[
\text{probability} \approx \frac{\text{number of times the event occurs}}{\text{total number of trials}}
\]

Suppose you rolled a standard number cube 20 times and it landed on 5 six times. The probability of rolling a 5 is

\[
P(\text{rolling 5}) \approx \frac{6}{20} = \frac{3}{10}
\]

Find the experimental probability of each event.

### Pulling Marbles Out of a Bag

<table>
<thead>
<tr>
<th></th>
<th>Red</th>
<th>Blue</th>
<th>Green</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$$$</td>
<td>$$$</td>
<td>$$$</td>
</tr>
</tbody>
</table>

3. The experimental probability of pulling out a red marble.

4. The experimental probability of pulling out a green marble.