

Sample Spaces of Compound Events

The **sample space** of an event is the set of all possible outcomes. To find sample spaces of compound events, you can use tree diagrams, tables, or organized lists.

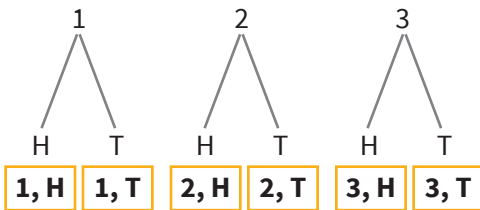
Let's try it!

Find the sample space of spinning the spinner below and flipping a coin.



The spinner can land on 1, 2, or 3. The coin can land on heads (H) or tails (T).

Tree Diagram



Table

	Heads	Tails
1	1, H	1, T
2	2, H	2, T
3	3, H	3, T

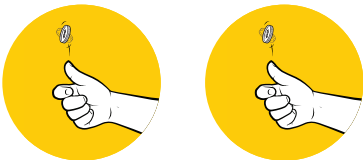
Organized list

{(1, H), (1, T),
(2, H), (2, T),
(3, H), (3, T)}

The tree diagram, table, and organized list all show that there are **6 possible outcomes** in the sample space.

Find the sample space. Use a tree diagram, table, or organized list to help. Then write the number of possible outcomes in the sample space.

1. Find the sample space of flipping two coins.



There are _____ possible outcomes in the sample space.

Sample Spaces of Compound Events

Keep going! Find the sample spaces. Use a tree diagram, table, or organized list to help. Then write the number of possible outcomes in the sample space.

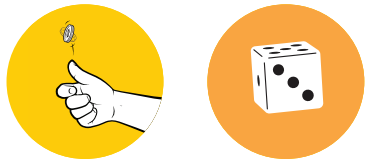
2. Find the sample space of spinning the spinner below and flipping a coin.



There are

 possible
 outcomes in the
 sample space.

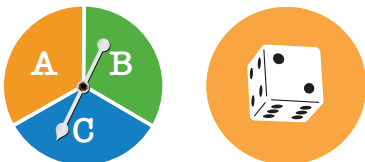
3. Find the sample space of flipping a coin and rolling a six-sided die.



There are

 possible
 outcomes in the
 sample space.

4. Find the sample space of spinning the spinner below and rolling a six-sided die.



There are

 possible
 outcomes in the
 sample space.

Sample Spaces of Compound Events

Keep going! Find the sample spaces. Use a tree diagram, table, or organized list to help. Then write the number of possible outcomes in the sample space.

5. Find the sample space of spinning the two spinners below.



There are _____ possible outcomes in the sample space.

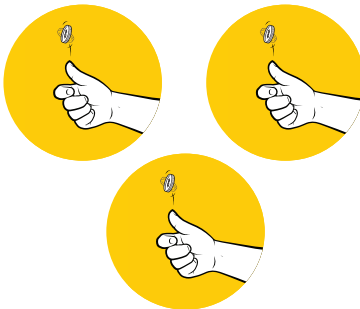
6. Find the sample space of rolling two six-sided dice.



There are _____ possible outcomes in the sample space.

Challenge yourself! Find the sample space. Use a tree diagram or organized list to help. Then write the number of possible outcomes in the sample space.

7. Find the sample space of flipping three coins.



There are _____ possible outcomes in the sample space.