



# Probability Sample Space - Definition to Sample Space List

1

List all the possible outcomes in the sample space.

A spinner with three equal-sized sections coloured red, green, and blue is spun three times.

<b>A</b>	RRG RRB RGR RGG RGB RBR RBG RBB GRG GRG GRB GGR GGC GGB GBR GBC GBB BBR BRC BRB BGR BGG BGB BBR BBG BBB	<b>B</b>	RRR RRG RRB RGR RGG RGR RBR RBG RBB GRR GRG GRB GGR GGG GGB GBR GBC GBB BBR BRC BRB BGR BGG BGB BBR BBG BBB
<b>C</b>	RRR RRG RRB RGR RGG RGB RBR RBG RBB GRR GRG GRB GGR GGB GBR GBC GBB BBR BRC BRB BGR BGG BGB BBR BBG BBB	<b>D</b>	RRR RRG RRB RGR RGG RGR RBR RBG RBB GRR GRG GRB GGR GGG GGB GBR GBC GBB BBR BRC BRB BGR BGG BGB BBR BBG

2

List all the possible outcomes in the sample space.

Two fair six-sided dice are rolled.

<b>A</b>	(1,1) (1,2) (1,3) (1,4) (1,5) (1,6) (2,1) (2,2) (2,3) (2,4) (2,5) (2,6) (3,1) (3,2) (3,3) (3,4) (3,5) (3,6) (4,2) (4,3) (4,4) (4,5) (4,6) (5,1) (5,2) (5,3) (5,4) (5,5) (5,6) (6,1) (6,2) (6,3) (6,4) (6,5) (6,6)	<b>B</b>	(1,2) (1,3) (1,4) (1,5) (1,6) (2,1) (2,2) (2,3) (2,4) (2,5) (2,6) (3,1) (3,2) (3,3) (3,4) (3,5) (3,6) (4,1) (4,2) (4,3) (4,4) (4,5) (4,6) (5,1) (5,2) (5,3) (5,4) (5,5) (5,6) (6,1) (6,2) (6,3) (6,4) (6,5) (6,6)
<b>C</b>	(1,1) (1,2) (1,3) (1,4) (1,5) (1,6) (2,1) (2,2) (2,3) (2,4) (2,5) (2,6) (3,1) (3,2) (3,3) (3,4) (3,5) (3,6) (4,1) (4,2) (4,3) (4,4) (4,5) (4,6) (5,1) (5,2) (5,3) (5,4) (5,5) (5,6) (6,1) (6,2) (6,3) (6,4) (6,5) (6,6)	<b>D</b>	(1,1) (1,2) (1,3) (1,4) (1,5) (1,6) (2,1) (2,2) (2,3) (2,4) (2,5) (2,6) (3,1) (3,2) (3,3) (3,4) (3,5) (3,6) (4,1) (4,2) (4,3) (4,4) (4,5) (4,6) (5,1) (5,2) (5,3) (5,4) (5,5) (5,6) (6,1) (6,2) (6,3) (6,4) (6,5) (6,6)

3

List all the possible outcomes in the sample space.

Two fair coins are flipped.

<b>A</b>	HH HT TT
<b>B</b>	HH HT TH
<b>C</b>	HH HT TH TT
<b>D</b>	HT TH TT

4

List all the possible outcomes in the sample space.

A fair six-sided die is rolled and a spinner with red, green, and blue sections is spun.

<b>A</b>	(1,G) (1,B) (2,R) (2,G) (2,B) (3,R) (3,G) (3,B) (4,R) (4,G) (4,B) (5,R) (5,G) (5,B) (6,R) (6,G)	<b>B</b>	(1,G) (1,B) (2,R) (2,G) (2,B) (3,R) (3,G) (3,B) (4,R) (4,G) (4,B) (5,R) (5,G) (5,B) (6,R) (6,G) (6,B)
<b>C</b>	(1,B) (2,R) (2,G) (2,B) (3,R) (3,G) (3,B) (4,R) (4,G) (4,B) (5,R) (5,G) (5,B) (6,R) (6,G) (6,B)	<b>D</b>	(1,G) (1,B) (2,R) (2,G) (2,B) (3,R) (3,G) (3,B) (4,R) (4,B) (5,R) (5,G) (5,B) (6,R) (6,G) (6,B)

5

List all the possible outcomes in the sample space.

Four fair coins are flipped.

<b>A</b>	HHHT HHHT HHHT HTHH HTHT HTHT HTHT THHT THHT THTT THTT THTT TTTT	<b>B</b>	HHHT HHHT HHHT HTHH HTHT HTHT HTHT THHT THHT THTT THTT THTT TTTT
<b>C</b>	HHHT HHHT HHHT HTHH HTHT HTHT HTHT THHT THHT THTT THTT THTT TTTT	<b>D</b>	HHHT HHHT HHHT HTHH HTHT HTHT HTHT THHT THHT THTT THTT THTT TTTT

6

List all the possible outcomes in the sample space.

A spinner with three equal-sized sections coloured red, green, and blue is spun twice.

<b>A</b>	RG RB GR GG GB BR BG BB	<b>B</b>	RG RB GR GB BR BG BB
<b>C</b>	RG RB GR GG GB BR BG	<b>D</b>	RB GR GG GB BR BG BB

7

List all the possible outcomes in the sample space.

A fair coin is flipped and a spinner with red, green, and blue sections is spun.

<b>A</b>	(H,R) (H,G) (H,B) (T,R) (T,G)
<b>B</b>	(H,G) (H,B) (T,R) (T,G) (T,B)
<b>C</b>	(H,R) (H,G) (H,B) (T,G) (T,B)
<b>D</b>	(H,R) (H,G) (H,B) (T,R) (T,G) (T,B)

8

List all the possible outcomes in the sample space.

A fair coin is flipped and a fair six-sided die is rolled.

<b>A</b>	(H,3) (H,4) (H,5) (H,6) (T,1) (T,2) (T,3) (T,4) (T,5) (T,6)	<b>B</b>	(H,2) (H,3) (H,4) (H,5) (H,6) (T,2) (T,3) (T,4) (T,5) (T,6)
<b>C</b>	(H,2) (H,3) (H,4) (H,5) (H,6) (T,1) (T,2) (T,3) (T,4) (T,5)	<b>D</b>	(H,2) (H,3) (H,4) (H,5) (H,6) (T,1) (T,2) (T,3) (T,4) (T,5) (T,6)