

Sample Spaces

What is a Sample Space?

The sample space of an experiment is the set of all possible outcomes.

EXAMPLE: Tossing a coin once has a sample space of {H, T}.

Instructions: Find the sample space for the experiments below.

Note: Use tree diagrams to help you find the sample spaces.

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| 1 | Tossing a coin two times. |
| 2 | Tossing a coin three times. |
| 3 | Rolling a 6-sided die. |
| 4 | Tom picks a bead from a bag twice. The bag contains: white beads, green beads, purple beads and red beads. |



5

Picking a drink then picking a snack from a coffee shop.

Drinks: coffee, hot chocolate and tea

Snacks: muffin, cookie and pastry

6

Picking out what shirt, pants and shoes you are wearing today one by one.

Shirts: blue, white and red

Pants: green, yellow and brown

Shoes: purple, orange and grey