Sample spaces can contain many different kinds of objects.
E.g., T's and H's, $(5, 1)$ die values, could even have shapes, etc.
For instance, if we pick a randomly chosen song, we might have

$$S = \{\text{“blues jingle”}, \text{“jazzy morning”}, \text{“country troubles”}, \text{“rock anthem”}, \ldots\}$$

$$S = \{b, j, c, r, \ldots\}$$

$$S = \{2{:}45, 5{:}12, 6{:}30, 4{:}47, \ldots\}$$

$$S = \{2.1\text{MB}, 4.8\text{MB}, 5.4\text{MB}, 3.9\text{MB}, \ldots\}$$

Often an outcome describes several things happen in tandem, i.e., together. E.g., if we pick not just one but exactly two songs at random, and we keep track of the songs in order,

$$S = \{(b,b), (b,c), (b,j), (b,r), (c,b), (c,c), (c,j), (c,r), (j,b), (j,c), (j,j), (j,r), (r,b), (r,c), (r,j), (r,r)\}$$