Discrete random variables or continuous random variables

We can make a list of the possible values the random variable takes. e.g. counts, integers, classification, fractions, etc.

Continuous random variables are usually used for measurements, e.g. time, length, height, width, age (if including decimals).

We cannot put the possible values into a list; instead the values come in intervals, e.g.:

- $(0, \infty)$
- $[0, \infty)$
- $[0, 1]$
- $[0, 20]$

If your random variable can take on any of the values in an interval, it is a continuous random variable.