Choose a (uniformly) random number in $\{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$.

- What is the probability it is <u>even</u>?

  <u>Answer</u>:

- But now suppose I told you that the number is a <u>multiple of 3</u>. What is the probability it is even?

  <u>Answer</u>: