## Counting

- Say that  $|\Omega| = n < \infty$ ;
- ullet Put uniform distribution on  $\Omega$ 
  - i.e., all events are equally likely
  - $p(\omega)$  is the same for all  $\omega \in \Omega$
- Then  $p(\omega) = \frac{1}{n}$  for all  $\omega$ ;
- And

$$\mathbb{P}(E) = \frac{|E|}{n}.$$

In short, computing probabilities == counting!