

Ω : sample space



...

$$X_1: \Omega \rightarrow \mathbb{R}$$

“height of the animal in cm”

$$X_1(\text{chick}) = 9.6$$

$$X_1(\text{dog}) = 72.8$$

...

$$X_2: \Omega \rightarrow \mathbb{R}$$

“weight of the animal in kg”

$$X_2(\text{chick}) = 1.02$$

$$X_2(\text{dog}) = 17.4$$

...

$$X_3: \Omega \rightarrow \mathbb{N}^+$$

“fur colour of the animal”

$$X_3(\text{chick}) = 1$$

$$X_3(\text{dog}) = 3$$

...

(1: yellow, 2: blue, 3: orange, ...)