The primary way that we will organize data is called the tabular data model. Data are arranged into a grid of rows and columns.



The primary way that we will organize data is called the tabular data model. Data are arranged into a grid of rows and columns.

the individual entries are called values	breed	weight	height
	Shih-Tzu	5.5	24
	Labrador	33	56
	Beagle	10.2	34
	Newfoundland	70	69
	Chihuahua	1.3	20
	Affenpinscher	9.6	27



The primary way that we will organize data is called the tabular data model. Data are arranged into a grid of rows and columns.

the individual entries are called values	breed	weight	height
Rows ⇒ Observations	Shih-Tzu	5.5	24
	Labrador	33	56
each row represents one	Beagle	10.2	34
observation	Newfoundland	70	69
	Chihuahua	1.3	20
	Affenpinscher	9.6	27



Columns ⇒ **Features**

The primary way that we will organize data is called the tabular data model. Data are arranged into a grid of rows and columns.

each feature has name and a data type the individual entries are called values weight height breed Shih-Tzu 5.5 24 Labrador 56 33 **Rows** ⇒ **Observations** Beagle 10.2 34 each row represents one observation Newfoundland 69 70 Chihuahua 1.3 20 Affenpinscher 9.6 27



Each feature (column) in the tabular data model has a **data type** associated with it. This is not always explicit in way the dataset is saved, but will be defined when we are working with it in R.

The two most common data types we will see are:

- → **numeric:** everything can be represented by a number
- → character: arbitrary sequences of any characters

There is a single type for each feature; we cannot mix and match data types. We will see other data types as they arise in our work.



Implied data types in our example:

character	numeric	numeric
breed	weight	height
Shih-Tzu	5.5	24
Labrador	33	56
Beagle	10.2	34
Newfoundland	70	69
Chihuahua	1.3	20
Affenpinscher	9.6	27

