Excel Data
types, checking, and conversions

Four Main Data Types in Excel
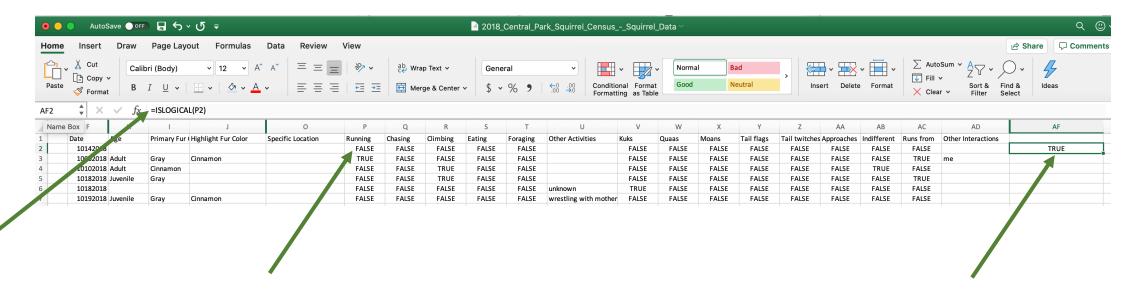
- Number
- Text
- Date
- Logical

Number – 100, 2.5, 892.407
Text – red, Joshua, Florida
Dates – 2008-02-08, 1986-09-10, 2020-02-11
Logical – TRUE, TRUE, FALSE

You can check the type of data in a cell using

ISNUMBER()
ISTEXT()
ISDATE() – not available in Excel
ISLOGICAL()

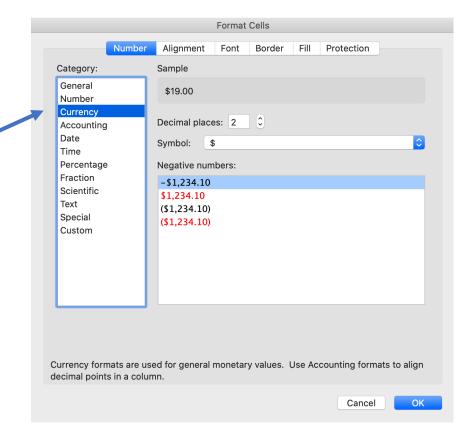You can check whether the value in **P2** is just text that says **FALSE** or an actual logical data type.

Converting data types

Text → Number

N()

Logical → Number

N()

Number → Percentage

TO_PERCENT()

Rounding data

ROUND(<value>)
ROUND(<value>, <number of decimal places to round to>)
FLOOR(<value>)
CEILING(<value>)

For some format transformations, using Format Cells is the best option! Lots of data categories

Format Cells

| Number | Alignment | Font | Border | Fill | Protection |

Category:

General
Number
Currency
Accounting
Date
Time
Percentage
Fraction
Scientific
Text
Special
Custom

Sample

$19.00

Decimal places: 2

Symbol: $

Negative numbers:

−$1,234.10
$1,234.10
($1,234.10)
($1,234.10)

Currency formats are used for general monetary values. Use Accounting formats to align decimal points in a column.

Cancel   OK

CONVERT() Function

Syntax: CONVERT(value, from_measurement, to_measurement)

CONVERT(22, "C", "F") will convert 22 from degrees Celsius to degrees Farenheit
CONVERT(100, "yd", "m") will convert 100 from yards to meters

The list of from/to measurements is extensive and can be found at https://exceljet.net/excel-functions/excel-convert-function

Exercises

1. Insert a column to the right of the age column. Call it age_is_number? Write a formula to check whether the value in the age column is a number.

2. Insert a column to the right of the height column in the Star Wars dataset. Call this height_inches. Write a formula in the new column to convert height from centimeters to inches. Round it to the nearest whole number.

3. Insert a column to the right of the mass column. Call the new column weight. Write a formula to convert the mass column from kilograms to pounds. Round this to the nearest whole number. What is Jabba the Hutt's weight in pounds?