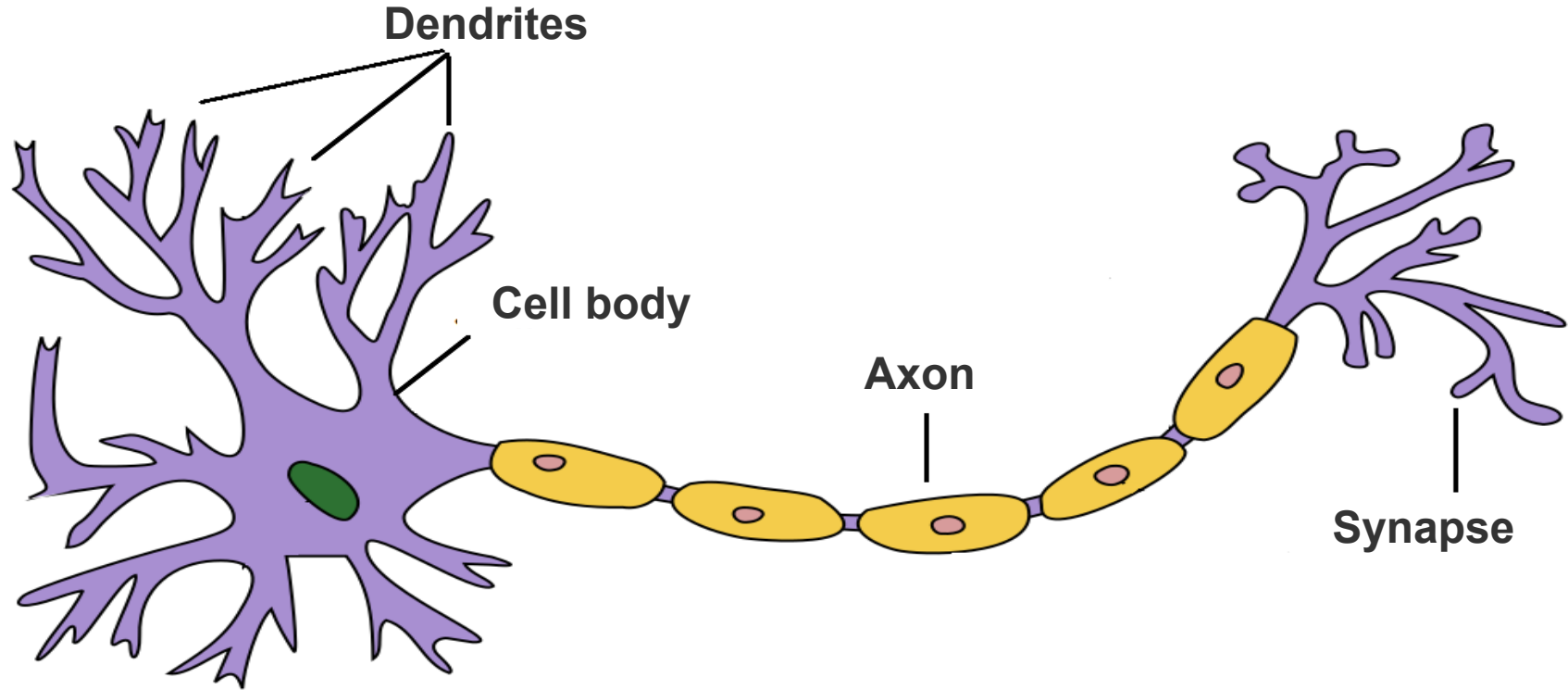
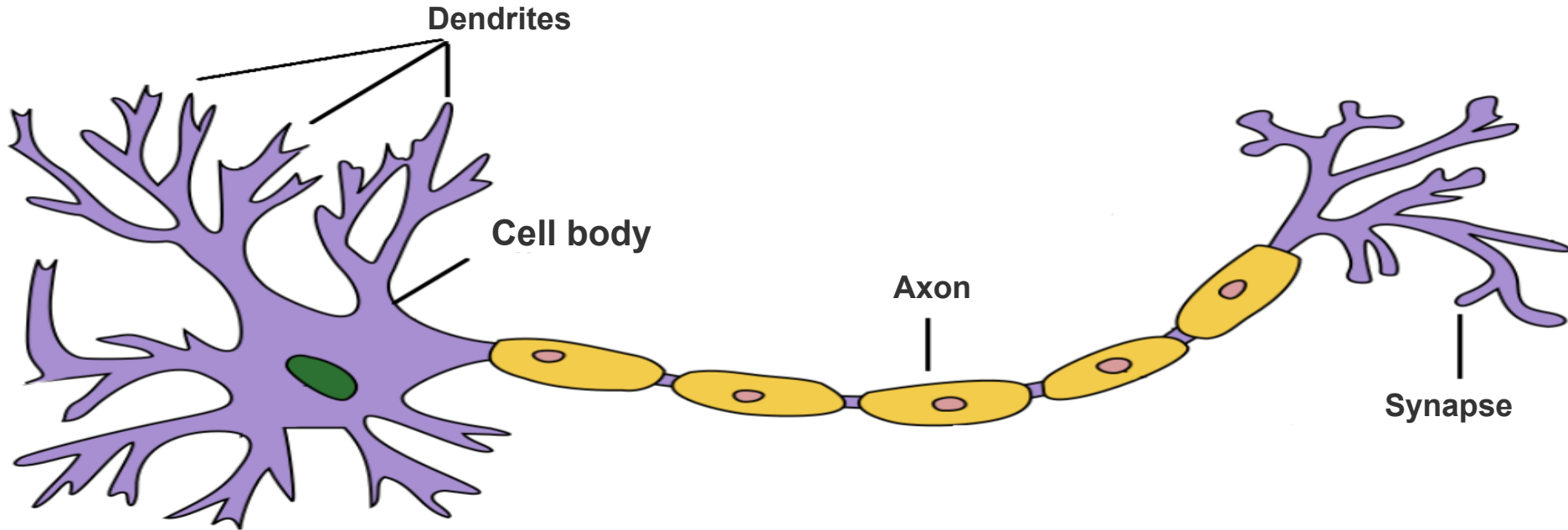


# Neural Networks

# What's a neuron : Let's talk about biology!



# What's a neuron : biological decomposition



Input

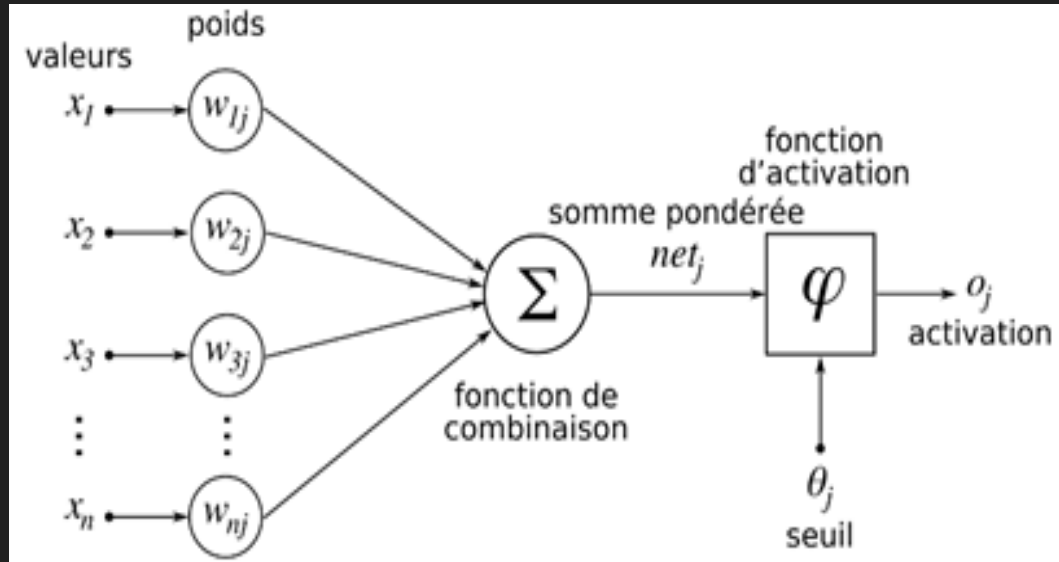
weight

combined

transform

output

# What's a neuron: Artificial neuron



Source: docs.microsoft.com

# Let's design an artificial neuron

Implement a neuron object

*Hints* : the neuron should contain

- weights with a random initialization method(for now)
- an activation function (identity for now)
- a *forward* method

Create an instance with 2 inputs.

# Let's design an artificial neuron

Implement a neuron object

*Hints* : the neuron should contain

- weights with a random initialization method(for now)
- an activation function (identity for now)
- a *forward* method

Create an instance with 2 inputs.

Try various values as inputs. What do you notice?

For a scientific purpose fix the seed of the random initialization.