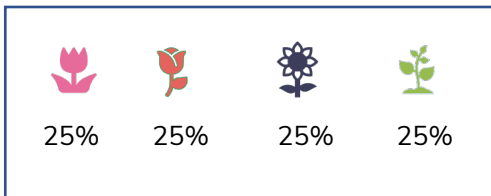# UNDERSTANDING ALPHA DIVERSITY
An analogy

Garden 1

🌷	🌹	🌼	🌱
25%	25%	25%	25%

Garden 2

🌷	🌹	🌼	🌱
8%	66%	8%	16%
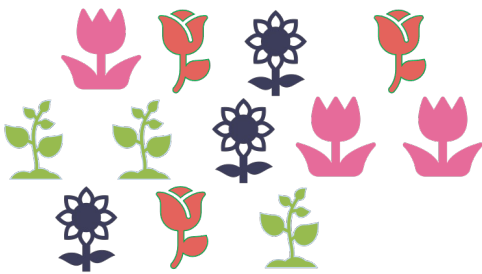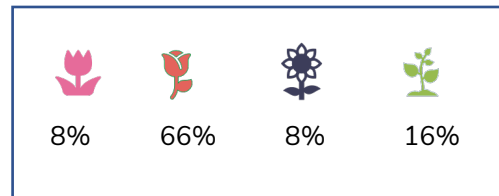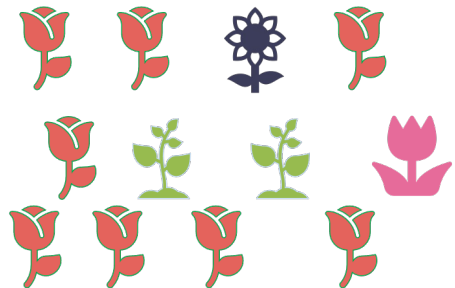
Here are two hypothetical gardens. Garden 1 and Garden 2 both contain 4 different types of flowers. That means that both gardens have the same **Richness**.

In Garden 1 there are 3 of each type of flower. In Garden 2 there are 8 roses, but only 1 sunflower, 1 tulip and 2 vines. Therefore, these two gardens have different species **Evenness**.

Alpha diversity measures both **Richness** and **Evenness** of a sample.