Experiment 3: Testing the fungi in the soil

Healthy soils are held together by soil glues, or **glomalin**, that are produced by fungi. Soils rich in soil biota hold together, while soils devoid of soil life fall apart. This experiment compares two samples to see which is more stable.

Materials required:

- 2 large-mouthed jars or beakers - one for each soil type
- 2 strips of wire mesh (approx 5cm x 15cm)
- water
- 2 clods of soil about the size of an egg. They should come from the top layer of soil and be sources from two different areas, for example:
  - a lawn
  - a construction site
  - a garden
  - a river bank
  - a path.

Instructions:

1. Use the wire mesh to create small baskets at the top of each jar. These will hold a clod of dirt each and the dirt should sit below the mouth of the jar (**TIP: Use the information here to help guide you in this step**).
2. Fill each jar with water leaving 1cm of headroom at the top of the jar.
3. Place one clod into each jar and observe the results.

Notes: Soils rich in soil biota hold together, while soils devoid of soil life fall apart and form a layer of sediment in the bottom of the jar.

Experiment adapted from: https://www.soils4teachers.org/lessons-and-activities/lesson/60/