

TD N° 3: The Constituent Elements of Soil

1) Find the term that defines the following statement:

- The electrolytes help tiny soil particles (especially clay) come together and form larger clumps:
- The polymers (large organic molecules, like humus) act like glue, linking soil particles into bigger aggregates:
- The force that cause the sedimentation of particles:
- The forces which can lead to either attraction or repulsion between particles:

2) Explain the two main roles of limestone in the soil

3) How we can identify the limestone in the soil?

4) Find the term that defines the following statement:

- A deposit and a thin film of limestone particles around soil aggregates or along pore spaces:
- A compact slab that can exceed one meter in thickness, occupying a single horizon or the entire soil profile:
- The heterogeneous distribution of limestone particles within a horizon or throughout the entire soil profile:

5) What is the difference between total limestone and active limestone?

6) Active limestone plays a crucial role in soil properties and plant growth by:

- Increase organic matter content
- Acts as a cementing agent
- Helps increase soil acidity
- Maintaining a suitable pH for living organisms

7) Identify the soil texture using texture triangle and its properties

Soil 1: Silt: 46%, Clay: 45%, Sand: 9%

Soil 2: Silt: 18%, Clay: 30%, Sand: 52%

