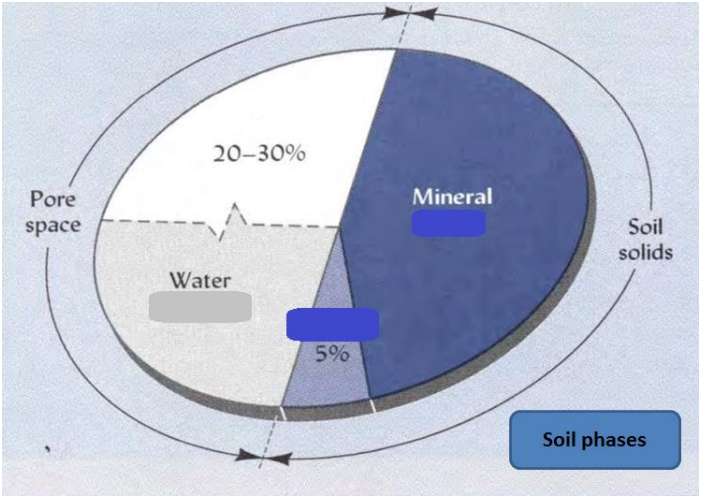
TD N° 2 : The Constituent Elements of Soil

Q1: Complete the following :



Q2: complete the table:

Quartz (SiO_2)		**Feldspars**
	○ A silicate mineral ○ sheet-like structure ○ releasing potassium during weathering	

Q3: Explain briefly the difference between primary and secondary minerals.

Q4: What are the key processes of soil chemical weathering?

Q5: soil CEC contribute to:

- Increase soil fertility
- Loss of soil mineral
- Source of mineral elements
- Regulate soil pH

Q6: what are the most important group of secondary minerals?

Q7: Factors Affecting Mineral Composition

- Parent Material
- Soil pH
- Climate
- Soil structure

Q8: What are the sources of soil organic matter?

Q9: Role of Organic Matter in Soil

- Decrease soil CEC
- Water retention
- Promotes the formation of soil aggregates
- Nutrient cycling and stop biological activities

Q10: How is soil humus formed?

Q11: Define colloidal Complexes in Soil

Q12: true or false:

- **Inorganic Colloids** is mainly humus, which is formed from the decomposition of organic matter.
- **Inorganic Colloids** are derived from the weathering of rocks and minerals.

Q13: Complete the table

High Surface Area		
	Colloids carry negative charges attract and hold positively charged	swell when wet and shrink when dry, Affect soil structure and porosity.

Q14: complete the following :