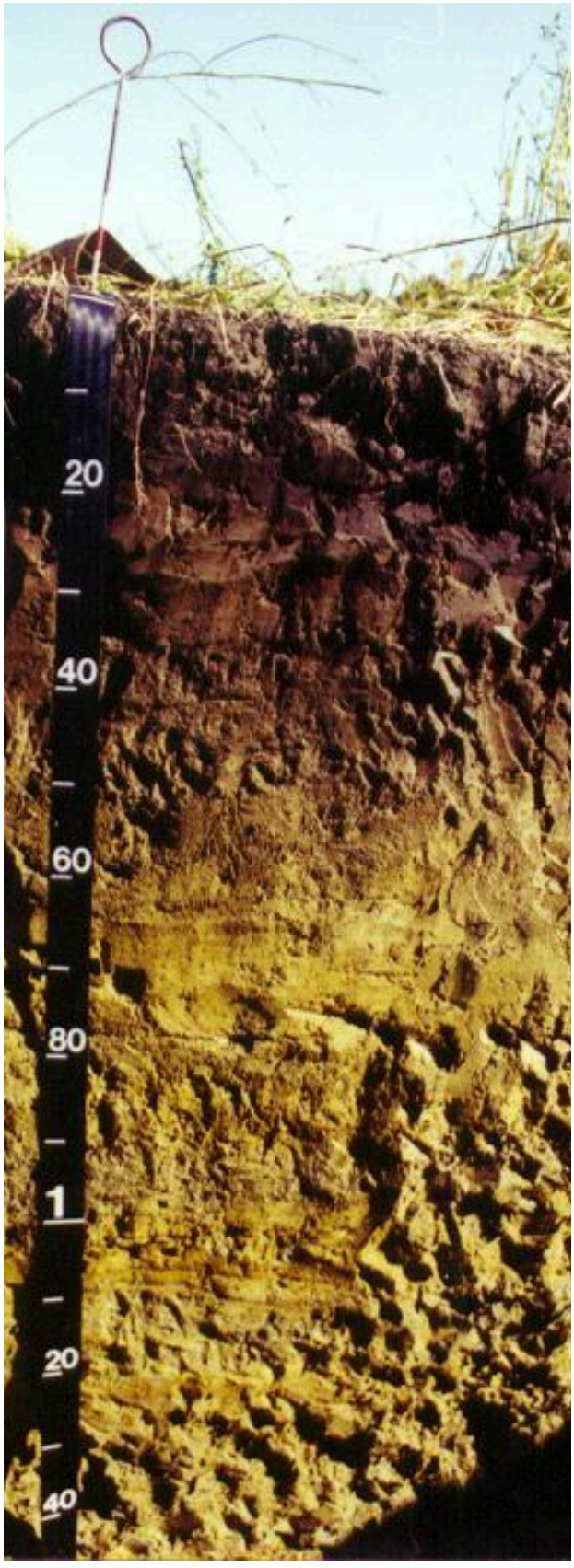
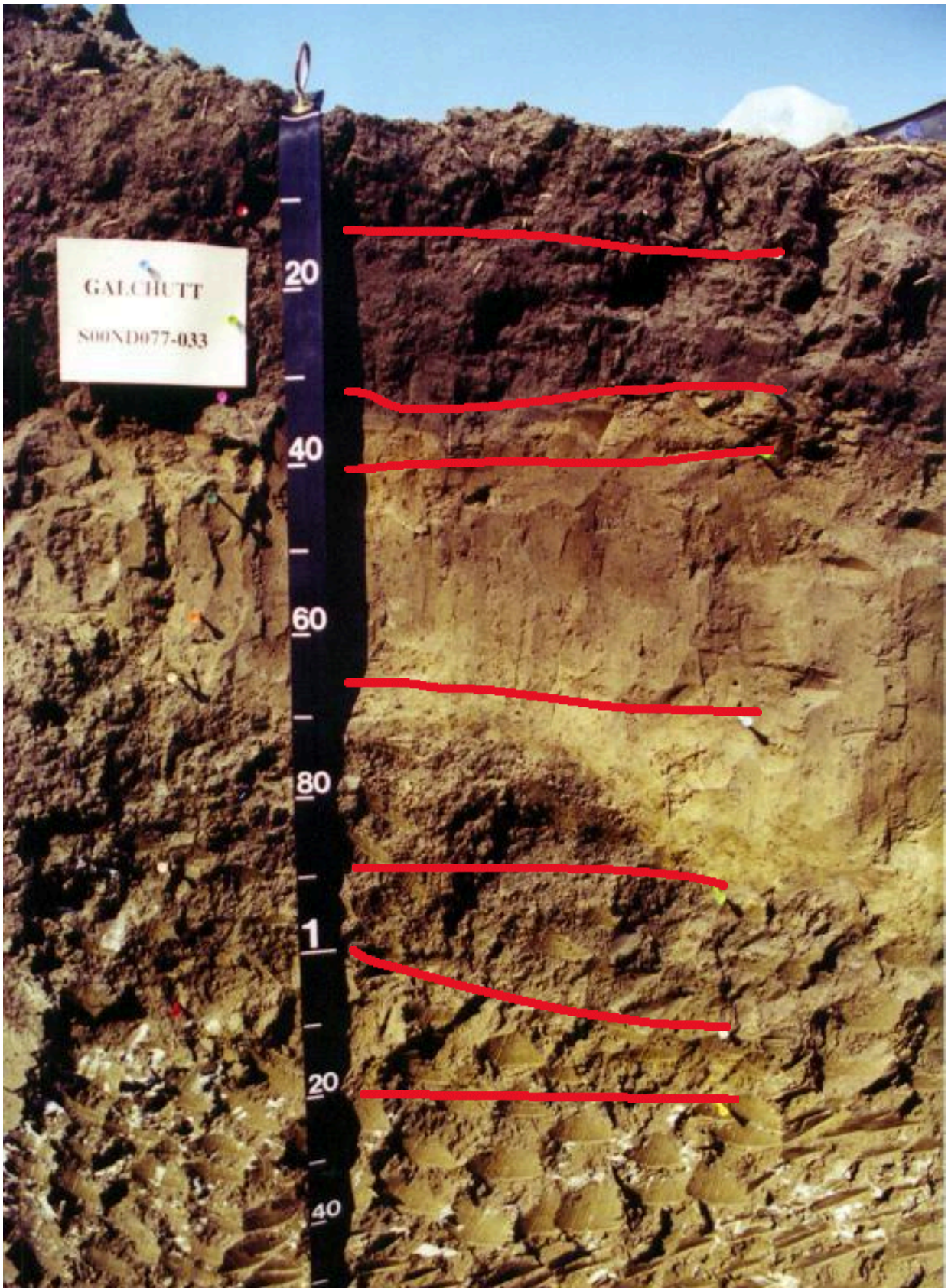
1) Consider the soil Profile below. Where would you draw lines between the different soil horizons? Measurement tape is in cm.



Answer: Answers will Vary. Below is what the Soil Scientists decided.

Consider the soil Profile below. Where would you draw lines between the different soil horizons? Measurement tape is in CM.

Answer: Answers may vary, but this is what the Soil Scientists Said.



3. What things helped you to make those decisions based off photos?

Answer: different colors, different structure, different features.

4. What are somethings you are unable to tell from the picture that would help you make these decisions?

Answer: Texture, does it fizz/HCL/ Soil Chemistry, where the soil is in relation to the landscape.

5. (Bonus)

Choose a soil from the list below and look up it's Official Series Description at the link provided. Based on the horizonation listed in the Official Series Description, draw and color what you think a profile of that soil might look like. Make sure to label the depths of your horizons and what each horizon is.

Link to look up the Official Series Description:

https://soilseries.sc.egov.usda.gov/osdname.aspx

Soil List:

Amor

Bearden

Seroco

Tonka

Walsh

Notes For Teachers:

On the “answer” photos, the Soil Scientist who described these soils marked their horizonation with golf teas. Each golf tea was put between each horizon.

The first soil profile is of the Mantador series. The typical example of Mantador has 8 horizons. These 8 horizons are not always present in every Mantador soil profile and may vary depending on site specific conditions.

The Official Mantador Series Description Can be found below:

https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MANTADOR.html

The second soil profile is of the Galchutt series. The typical example of Galchutt has 6 horizons. These 6 horizons are not always present in every Galchutte soil profile.

The Official Mantador Series Description can be found below:

https://soilseries.sc.egov.usda.gov/OSD_Docs/G/GALCHUTT.html

Soil Scientists use a combination of soil color, soil texture, and soil chemistry to help them pick out the different horizons or layers in the soil. Knowledge of the surrounding area, where they are on the landscape, and other soil features contribute to what types of horizons may be present.