

Rounding Off Numbers

Soil Taxonomy

Guidance for Classifying Soils with Lab Data

When using a series of numbers in a calculation (for example, when calculating a weighted average clay for the particle-size control section), only round the final result, not the individual values used in the calculation.

When applying values to determine if criteria in Soil Taxonomy are met, you must round the number to the same number of digits as used in the criteria. For example, particle-size classes are determined in part by the percent of clay as a whole number, not to one decimal place as reported by the laboratory.

Rules for rounding off numbers:

If the digit immediately to the right of the last significant figure is more than 5, you round up.

If the digit immediately to the right of the last significant figure is less than 5, you round down.

34.8 rounds to 35 (round up because it is more than half-way between 34 and 35).

34.4 rounds to 34 (round down because it is less than half-way between 34 and 35).

If the digit immediately to the right of the last significant figure is equal to 5, you round to the adjacent even number, either up or down.

17.5 rounds to 18 (round up because the result is an even number).

34.5 rounds to 34 (round down because the result is an even number).