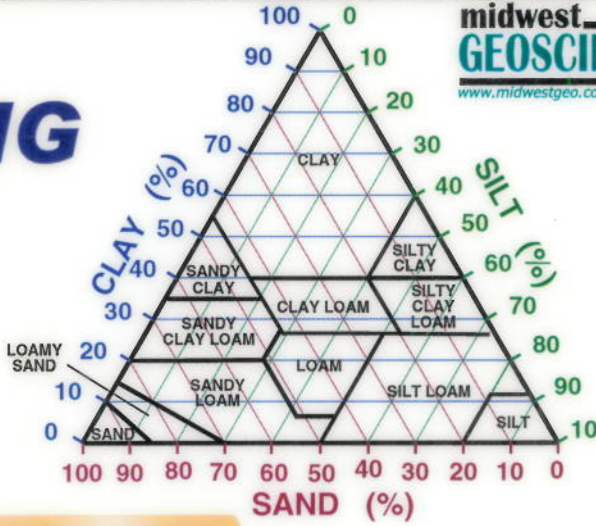
USDA SOIL TEXTURING FIELD FLOW CHART



midwest GEOSCIENCES group
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Remove any material larger than 2 mm in size and start with approximately 25g of sediment in palm. Add water dropwise and knead the soil to break down all aggregates. Stop adding water when soil is plastic and moldable.

Add dry sediment

Does soil hold together when squeezed? → NO → Is soil too dry? → NO → Is sediment too wet? → NO → **SAND**

Is soil too dry? → YES

Is sediment too wet? → YES → Add dry sediment

Does soil hold together when squeezed? → YES

Place ball of soil between thumb and forefinger gently pushing the soil with the thumb, squeezing it upward into a ribbon. Form the ribbon with uniform thickness and width. Allow the ribbon to extend over the forefinger, breaking from its own weight.

YES

Does the soil form a ribbon? → NO → **LOAMY SAND**

YES

Is the ribbon less than 2.5cm long before breaking? → >2.5 CM? → Is the ribbon from 2.5 to 5.0cm long before breaking? → >5.0 CM? → Is the ribbon greater than 5.0cm long before breaking?

YES

Excessively wet a small pinch of soil in palm and rub with forefinger

Is soil very sandy? → YES → **SANDY LOAM**
NO
Is soil moderately sandy? → YES → **LOAM**
NO
Does sample have little or no sand? → YES → **SILT LOAM**

Does soil feel very gritty? → YES → **SANDY CLAY LOAM**
NO
Does soil feel slightly gritty? → YES → **SILTY CLAY LOAM**
NO
Does soil feel smooth? → YES → **CLAY LOAM**

Does soil feel very gritty? → YES → **SANDY CLAY**
NO
Does soil feel slightly gritty? → YES → **SILTY CLAY**
NO
Does soil feel smooth? → YES → **CLAY**

TEXTURE MODIFIERS
Fragment Content % by Volume

< 15%	No modifier
15% to <35%	Add modifer
36% to <60%	Add "very" with modifier
60% to 90%	Add "extremely" with modifier
>90%	No modifer; use Size Class only

ROCK FRAGMENT MODIFIERS
Size Class & Quantity

Gravelly	>15% but <35% gravel
Fine Gravelly	>15% but <35% fine gravel
Medium Gravelly	>15% but <35% med. gravel
Large Gravelly	>15% but <35% large gravel
Very Gravelly	<35% but <60% gravel
Extremely Gravelly	>60% but <90% gravel
Cobbly	>15% but <35% cobbles
Very Cobbly	<35% but <60% cobbles
Extremely Cobbly	>60% but <90% cobbles
Stony	>15% but <35% stones
Very Stony	<35% but <60% stones
Extremely Stony	>60% but <90% stones
Bouldery	>15% but <35% boulders
Very Bouldery	<35% but <60% boulders
Extremely Bouldery	>60% but <90% boulders

COMPOSITIONAL TEXTURE MODIFIERS
Organic Class

Grassy	> 15% grassy fibers
Herbaceous	> 15% herbaceous fibers
Mossy	>15% moss fibers
Mucky	Minerals >10% but <17% fibers
Peaty	Minerals >10% but >17% fibers
Woody	>15% wood fragments or fiber