



CMG GardenNotes #252

## Worksheet: Soil Texture and Free Lime Lab

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### 1. Soil texture by feel

Identifying the soil samples to coarse (sandy), medium or fine (clayey).

[Reference: *The Science of Gardening*, page 89]

Soil Sample	Describe the feel: <ul style="list-style-type: none"><li>○ Gritty = sand</li><li>○ Silk smooth = silt</li><li>○ Sticky = clay</li></ul>	How long will it ribbon out?	What is the soil texture? <ul style="list-style-type: none"><li>○ Ribbons &lt;1",<ul style="list-style-type: none"><li>▪ Feels gritty = coarse texture (sandy soil)</li><li>▪ Not gritty = medium texture (high in silt)</li></ul></li><li>○ Ribbons 1-2 inches<ul style="list-style-type: none"><li>▪ Feels gritty = medium texture</li><li>▪ Not gritty = fine texture</li></ul></li><li>○ Ribbons &gt;2" = fine texture clayey soil</li></ul>
1			
2			
3			
Your soil			

## 2. Soil Texture by Measurement

Using the jar method, what is the soil textural class for a sample with the following amounts of sand, silt, and clay? [Reference: *The Science of Gardening*, page 87-88]

- How long do you shake the bottle of soil?
- When do you measure the sand, silt and clay levels?

Sand \_\_\_\_\_ Silt \_\_\_\_\_ Clay \_\_\_\_\_

- Determine the soil texture for the following sample:

		Depth of layer	Percent	Soil Textural Class <small>(from <i>Soil Textural Triangle</i>, page 87)</small>	Will this soil behave as a sandy or clayey soil?
<b>Sample 1</b>	<b>Sand</b>	3.0"			
	<b>Silt</b>	0.5"			
	<b>Clay</b>	1.5"			
	<b>Total</b>	5.0"			
<b>Sample 2</b>	<b>Sand</b>	3.5"			
	<b>Silt</b>	1"			
	<b>Clay</b>	0.5"			
	<b>Total</b>	5"			

## 3. Free Lime Test

On your soil sample, do a vinegar test for free lime (calcium carbonate). [Reference: *The Science of Gardening*, page 159 and 166-167]

- Did it fizz (have high calcium carbonate)? Yes No
- What does this indicate about your soil being prone to iron chlorosis? Can you lower the pH?