

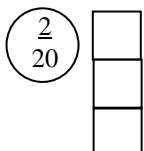
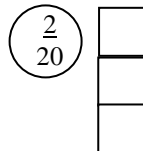
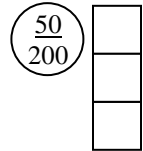
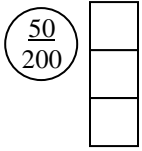
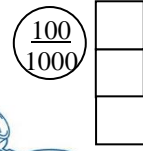
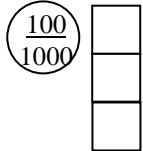
MICROPIPETTING: MANIPULATING SMALL VOLUMES

Name _____ Per _____

1. Complete the following statements or explain the reason for each of the following:

- When changing the volume of a micropipette be careful... _____
- Always use a disposable tip with the micropipette or else... _____
- Always hold the loaded micropipette in a vertical position because... _____
- When using the micropipette always push and release the micropipette plunger _____

2. Show the correct dial reading for the following volumes (using a P20, P200 micropipettes):

a. 10 μL	b. 9.5 μL	c. 100 μL	d. 250 μL	e. 100 μL	f. 250 μL
					



3. What is the approximate volume of a microfuge tube? _____

METRIC PRACTICE -Fill in the metric unit table below

		Deca-	Liter	Deci-			x	x		x	x	
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1. Complete the following metric conversions:

- | | | |
|----------------------------------|---------------------------------|----------------------------------|
| a. 2 nm = _____ mm | c. 10 μL = _____ mL | e. 0.06 mL = _____ μL |
| b. _____ mL = 1000 μL | d. _____ μL = 1.5 mL | f. _____ mL = 250 μL |

2. Which volume is larger? Circle the larger volume.

- | | | |
|--|------------------------------|--------------------------------|
| a. 10 μL or 10 mL | c. 0.5 mL or 5 μL | e. 0.25 mL or 20 μL |
| b. 7 μL or 10 μL | d. 7 μL or 0.8 mL | f. 1,100 μL or 1 mL |

3. Put the following volumes in order from largest to smallest.

- 2.5 mL, 250 μL , 0.025 mL, 2.5 μL , _____, _____, _____, _____.
- 100 μL , 0.01 mL, 250 μL , 0.015 mL, _____, _____, _____, _____.