Multi-digit addition:

1. Show how to add base 5. Show your thinking with numbers, words or pictures.
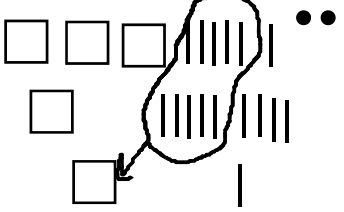
a.
$$2 \quad 1 \quad 3_5$$
$$+ \quad 1 \quad 3 \quad 4_5$$

b.
$$1 \quad 4 \quad 3_5$$
$$+ \quad 1 \quad 4 \quad 2_5$$

2. For each step, write out what you would say as a teacher modeling the process:

	$$2 \quad 8 \quad 4$$ $$+ \quad 1 \quad 6 \quad 9$$	
	$$2 \quad \overset{1}{8} \quad 4$$ $$+ \quad 1 \quad 6 \quad 9$$ $$\hline \quad\quad\quad 3$$	
	$$\overset{1}{2} \quad \overset{1}{8} \quad 4$$ $$+ \quad 1 \quad 6 \quad 9$$ $$\hline \quad\quad 5 \quad 3$$	
	$$\overset{1}{2} \quad \overset{1}{8} \quad 4$$ $$+ \quad 1 \quad 6 \quad 9$$ $$\hline 4 \quad 5 \quad 3$$	

3. For each step, fill in the missing manipulative picture, number word or explanatory sentence:

	3 6 5 + 1 9 7	
		Put together the 5 units and the 7. Group 10 units and trade them for a ten stick. Write 1 over the tens column to show the new tens stick. There are 2 units left. Put 2 in the ones place of the sum.
	$\overset{1}{3}\ \overset{1}{6}\ 5$ + 1 9 7 5 6 2	

4. Solve each of these using the expanded addition algorithm:

    3 8 6
+ 2 6 7

    5 4 8
+ 3 7 2