Learning Goals

1a B Use a compass and straightedge to construct geometric figures.
1b D Identify properties of polygons.
1c D Classify quadrangles according to side and angle properties.
1d S **Name, draw, and label line segments, lines and rays.**
1e S **Name, draw, and label angles, triangles, and quadrangles.**
1f S **Identify and describe right angles and parallel lines and line segments.**
1g S **Solve addition and subtraction facts.**

Assessment of Student Progress

**Project-Wide Assessment**

Assessment: Slate #1
Goal(s) assessed: 1g
Rubric
- B see rubric in Assessment Handbook page 39
- D
- S

Number of Students who were
- B 0 out of 22 **Mathematical Thinking:** These students had trouble remembering the “difficult” facts. They had to use their fingers to help them solve these problems or simply left them blank.
- D 4 out of 22 **Mathematical Thinking:** These students did well on the timed tests. They knew almost all of their facts and missed at most 4 on the assessment.
- S 18 out of 22 **Mathematical Thinking:** 18 of the students did well on the timed tests. They knew almost all of their facts and missed at most 4 on the assessment.

**Comments about the assessment and plan of attack:** We will be playing games throughout the year that strengthen students’ abilities to add and subtract. Students did pretty well on this activity, so I am not too worried about it.

Other Reflections about the Unit: Challenges, Opportunities, Support Needed, etc.

There is a lot of vocabulary in this unit! My class was frustrated at first, which slowed us down a bit. I had to remind them a lot that lessons 1.3-1.7 had lots of developing goals that they do not have to master. Being so early in the school year, I think many are trying extra hard to please me (let’s see if they are still trying this hard in May! ©) So, they were frustrated because they wanted to “do it all”. I need to keep reminding them that learning is a process that takes time. I have a pretty good group, and I think they will learn to view their learning differently as the year goes on. I think this is an excellent unit. I had some high school students that I coach stop down when I was working on math and they told me they wish they had learned geometry this way. We were constructing quadrangles with straws that day. It was neat for my students to hear positive reinforcement from the “big kids”. Also, the high schoolers couldn’t believe my students were learning to use compasses this young! Having done, math box 1.9 as a “pretest” for unit 2, it will be interesting to see how they do on unit 2 checking.

**Your Own Mathematical Insights**

The term quadrangle is new to me, but it makes sense. Parents seem taken aback by it. I have not found any explanation from EM that tells why they chose that term over quadrilateral. There was nothing else new in this unit for me. I am really looking forward to a great year of learning in math, now that I have a better idea of what EM has to offer.
Assessment Reflection for Grade 4 Unit 2

Name: Polly Perfect  
Grade: 4  
Building: Math Skills  
Date Completed: __/__/05  
District: Mathematics123

Learning Goals
2a  D  Display data with a line plot, bar graph, or tally chart.
2b  D  Use the statistical landmarks median, mode, and range.
2c  S  Use the statistical landmarks maximum and minimum.
2d  S  Have a successful strategy for subtracting multidigit numbers.
2e  S  Have a successful strategy for adding multidigit numbers.
2f  S  Read and write numerals to hundred-millions; give the value of the digits in numerals to hundred-millions.
2g  S  Give equivalent names for numbers.

Assessment of Student Progress

Project-Wide Assessment
Assessment: Alternative Assessment - Describe an Addition Strategy for 587 + 269 and 53 + 36
Goal(s) assessed: 2e
Rubric
B see Assessment Handbook page 42
D <Need something here>
S <Need something here>

Number of Students who were
B 10 out of 22 Mathematical Thinking: 10 of the students had difficulty solving the problems as well as explaining their thinking. They did not have a solid grasp on place value. I need to work with them in small groups on partial sums using the base-10 blocks. They also lack a solid understanding of extended facts.
D 2 out of 22 Mathematical Thinking: 2 of the students were able to solve the problems, but did not have a strong explanation. They included comments such as “I used partial sums.,” but did not explain what that meant.
S 10 out of 22 Mathematical Thinking: 10 of the students were able to solve the problems and explain their strategies. These students used a variety of strategies to solve the problems. Some of them surprised me so we spent time in class sharing some of the unique ways they used.

Comments about the assessment and plan of attack:
Many students seemed confused because of the introduction of the partial sums algorithm, which I believe reveals they do not have a true sense of place value. I encourage them to use whatever method they are most comfortable with, but partial sums is most popular. The most common mistake made was when they added three digit numerals (996+ 485) and add 900 +400 to get 1300 but add 90 + 80 and get 1700. It seems no matter how many problems we complete together, when they left to do them alone they incur the same difficulty. These students are in their first year of EM. They have not had experiences with "friendly numbers," and in fact don't understand the 100's chart and how to move about it. I've already made small charts and place them on their desks for reference. We frequently just do a problem together as we have free time or between activities. When asked to make the largest numeral possible with five or six digits, they had difficulty placing it on the place value chart from the resource book. We have completed several charts as morning work and I do see some progress. I'm just surprised that the 100s chart is such a mystery to them. If I ask students to place a finger on 56 and "go back" 10 they begin to count on their fingers! If I ask them to place their finger on 78 and go up 20, out come the fingers. I plan to continue working on navigating the 100's chart and recognizing friendly numbers.

Other Reflections about the Unit: Challenges, Opportunities, Support Needed, etc.
I was disappointed in the confusion which arose when I introduced partial sums and trades first subtraction. Partial sums seems such an easy way to add multi-digit numerals and many students do have that big "AHA" and realize what they are actually doing. Others get lost when adding in the tens place especially if the sum of the numerals exceeds 999. PLACE VALUE!!! This is not new, every year I've taught fourth grade I've experienced the same difficulty--they do not understand place value. We have borrowed the number puzzles from the third grade EM Journals and worked on those. We've developed patterns and had other students try to fill in the blanks. We will continue to do these types of activities until mastery is reached. I am encouraged because some students can explain what to do, they just can't get it on paper yet. That's progress and I'll take it anytime. I know it will come, trust the spiral!!!