

Equipping Moms for Home Schooling

Lesson 3

(Deconstructing Standards and Mathematics Strategies)

Materials: Deconstructing standards pack, E.D.I. math page, overhead, beans, tape, Sir Cumference book and manipulatives.

Theme: Be your children's cheerleader. Know that they "can do all things through Christ who strengthens them" Philippians 4:13.

1. Pick one goal/standard to teach and only teach that standard.

2. Don't get side tracked or focus on other goals/standards; stay focused.

3. Break the goal/standard down into small digestible chunks. Ex: E.D.I mathematics page.

4. Reflect on the Lesson - Did you teach the goal/standard or not?

5. Problem Solving - You want to teach a student how to think toward, in, through and beyond problems in their lives by describing their own thought processes. Ex: Word problem- There are 16 kids in class; 3 have red on, 5 have yellow on, and 4 have green on. How many kids are wearing brown?
 - a. Understand the Problem - Do you understand the words in the problem? What are you asked to find or show? Can you restate the problem in your own words? Could you think of a picture or diagram that will help solve the problem? What do you need to know to find the solution?

 - b. Make a Plan - Guess and check. Make an orderly list. Solve equivalent problem. Look for a pattern. Draw a picture. Think of a similar problem already solved. Solve a simpler problem. Use a model. Use your imagination.

c. Carry Out the Plan - Use care and patience to carry out the plan.

d. Look Back - What was the key factor that allowed you to devise an effective plan for solving this problem? Can you think of a simpler strategy for solving this problem? Can you think of a more effective way to solve this problem? Where else can this problem solving strategy be effective? Ex: Old MacDonald had a total of 37 pigs and chickens on his farm. All together they had 98 feet. How many chickens were there and how many pigs?

6. Models of Mathematics - Addition model, subtraction model, multiplication model as repeated addition, division model as repeated subtraction, and geometric shapes.

7. White Boards/Student Practice - Create white boards to check for understanding and student practice. After modeling a new skill allow time for the students to practice multiple examples.

8. Math is Abstract, Make it Concrete - Explain the abstract concept of one and zero.

9. Give Real World Examples, Use Manipulatives and Tell Stories- This will give the students concrete contexts to explore these abstract concepts.

10. Model EDI lesson on repeated addition using beans, circles, and story telling.

11. Model division as repeated subtraction use beans, circles, and story telling.

12. Model number line comprehension with tape and numbers on the ground.

13. Use Books and Stories to Present Mathematical Concepts- Circumference lesson: use book Sir Cumference.