Learning Objectives
The teacher will:
- Work concentrate on higher order thinking skills questions.
- Reflect on the lesson after and make notes on how to improve.

Tennessee Standards:
SPI 0406.4.9 Solve problems involving area and/or perimeter of rectangular figures.

Purpose – Area and Perimeter for 4th graders.

Materials
- Masking tape
- Ticket out the door
- Sliders for desks.
- Cards for each student with the description of their job for cooperative groups.

Preparation (pre-work)
- Place a slider on each desk.
- Place masking tape shapes on the floor in the classroom and hallway, and make an answer sheet for the students to use.
- Independent work in different levels of difficulty.
- Make cards for cooperative groups.
- Pull up web pages and place them on task bar for easy retrieval.

Instructional Plan
Launch –
Last night my husband and I decided to put a fence up for our little puppies. We went to Lowes and quickly realized we needed to go back home and do some math work before we bought fence. We had to measure the yard. The man at Lowes needed to know two things, how much AREA do the puppies need and what is the PERIMETER of the area we are fencing. Our backyard is shaped just like a rectangle that we learned about yesterday. Today we are going to learn how to measure a rectangle and then figure the area and perimeter of that shape.

- Explore
  - Teaching Strategies –
    - Differentiation -
      - Students will be put into groups of four and will be assigned different tasks to perform in that group. Two students will actually walk the perimeter, which is used to allow my lower leveled students the kinesthetic aspect they need, of the shape that will be laid out on the floor using masking tape, and one student will record the findings of the group. The recorder will then assist the group with figuring the area and perimeter of each shape.
      - Students will be given different independent work based on strengths and weaknesses.
  - Teaching Practice / Procedure
    - Show the following video which is a rap on area and perimeter
ELC Effective Practice Template for Teachers

Area and Perimeter / 4th Grade / Math - Lisa Crawford


- TTW draw on the board and show students the way to measure and figure area and perimeter. TTW do several examples to assure understanding. The students will take notes in their Journals while the teacher is instructing. They will use colored pencils, and as the teacher is instruction, TTW will use different colors to show all of the steps. The students will replicate what is on the board in their math journals.

- Using the following website, we will read about fencing in a yard for a puppy and complete the activity.

  - [Link](http://www.mathplayground.com/area_perimeter.html)

- Students will be put into groups and will be assigned different tasks to perform in that group, during group time. Two students will actually walk the perimeter of the shape that will be laid out on the floor using masking tape, and one student will record the findings of the group. The recorder will then assist the group with figuring the area of the shape. The shapes will be on the floor in the classroom and in the hallway.

- Summarize
  - Reflection of student learning
    - TTW gather the students at the carpet and discuss the findings of each group.
  - Next Steps / Independent Practice (*homework*)
    - Independent practice will be assigned. The difficulty of the work will be based on the level and understanding of the students. No homework will be given until the class is at the maintenance stage of this skill.
    - TTW give one last example on the board before dismissing form the carpet and the students will complete a ticket out the door as we depart for lunch.

**Assessment Options**

**Formative** (*ongoing; checking to ensure audience is with you*)

- Informal: TTW observe as notes are being taken in math journals, and will monitor and adjust where needed during cooperative groups.
- Formal: TSW complete a ticket out the door that will be graded for understanding.
- Student self assessment: the students will place their slider on the color that show where they think they are in their understanding of area and perimeter, as they hand in their ticket out the door.

- Summative: A test will be given at the end of this unit in Geometry.

**Extensions**

- Enrichment: During enrichment afternoon time, students will be given the area and perimeter of a shape and will be allowed to draw the shade on grid paper. There will also be some shapes where the area is given and only the measurement of two sides of the rectangle is given and the student will have to work backward to figure the unknown variable.
- Intervention: During intervention afternoon time, students who need additional help be meet with the teacher for remediation help.
Reflections/Insights of Teacher

• Learnings (what worked well; what didn’t work well; what will you do the same; what will you do differently; what will you not do again; cautions; advice)