Area Units

Comparing Zoo Enclosures

In this lesson, students will see that Area is additive, that the area of a figure can be determined by dissecting the figure into pieces, determining the area of each piece and then putting it back together (think area model of multiplication).

You will need:

- Worksheets with figures labeled A- F (I whited-out the dimensions after each letter) To print correctly, choose actual size)
- Ruler for each student
- Give each student all 6 pages of possible zoo enclosure for the zoo's new exhibits. Because different animals have different needs for space, the number of square feet of each enclosure must be determined. We also need to know the perimeter of each enclosure in order to determine how much fence we will need for it.
- Have students work independently and use the ruler and other methods for comparing the areas and finding the perimeters (one square inch=1 square foot in this situation). Tell students they must draw the units of area measure for A, B, and F.
- DISCUSSION:
- Start with comparing A and F- have students demonstrate different ways they compared those two figures. Then look at D. How were their strategies for finding the area of D different from A and F.
- Then move on to B, C, and E and compare strategies with focus on how the length measures can be used to find the areas of the parts of each figure.
- After discussion, give the formative assessment.