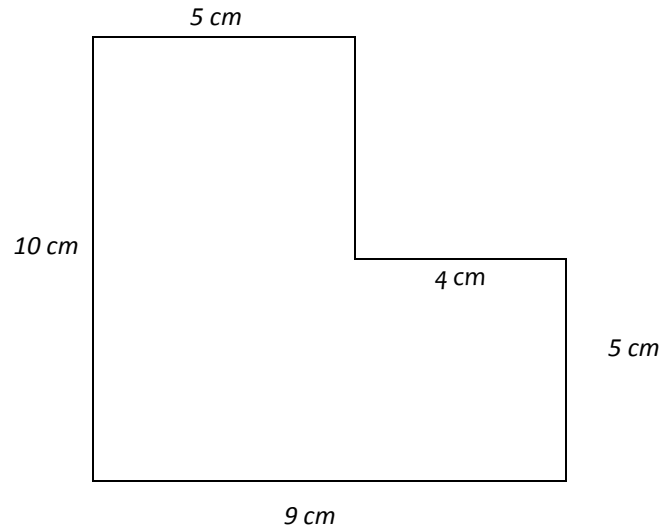


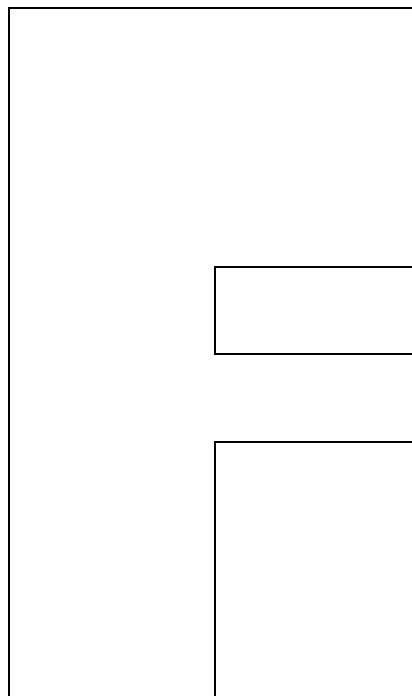
The L Task

Directions: Find as many different ways as you can to calculate the area of this shape.



The F Task

Directions: Find as many different ways as you can to calculate the area of this shape.



2nd Grade Base-10 Blocks Lesson

On Thursday, Tara was at home representing numbers with base-10 blocks.

The value of her blocks was 304.

When she wasn't looking, her little brother grabbed 2 longs and a flat.

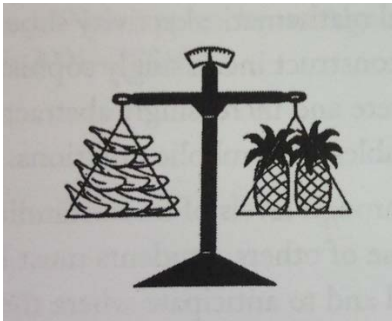
What is the value of Tara's remaining blocks?

Use pictures, words, and/or symbols to describe how you solved the problem.

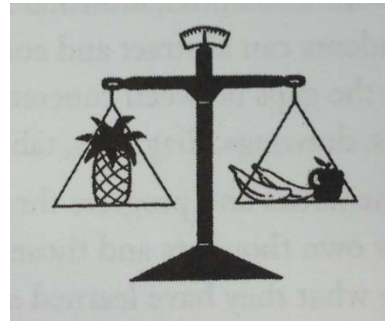
5th Grade Fruit Scales Lesson

Fruit Scales

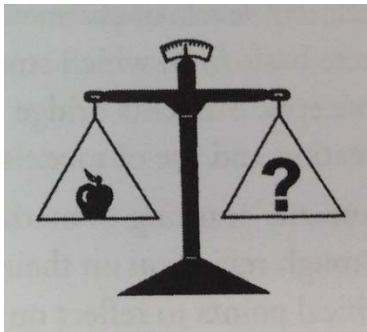
Scale 1



Scale 2



Scale 3

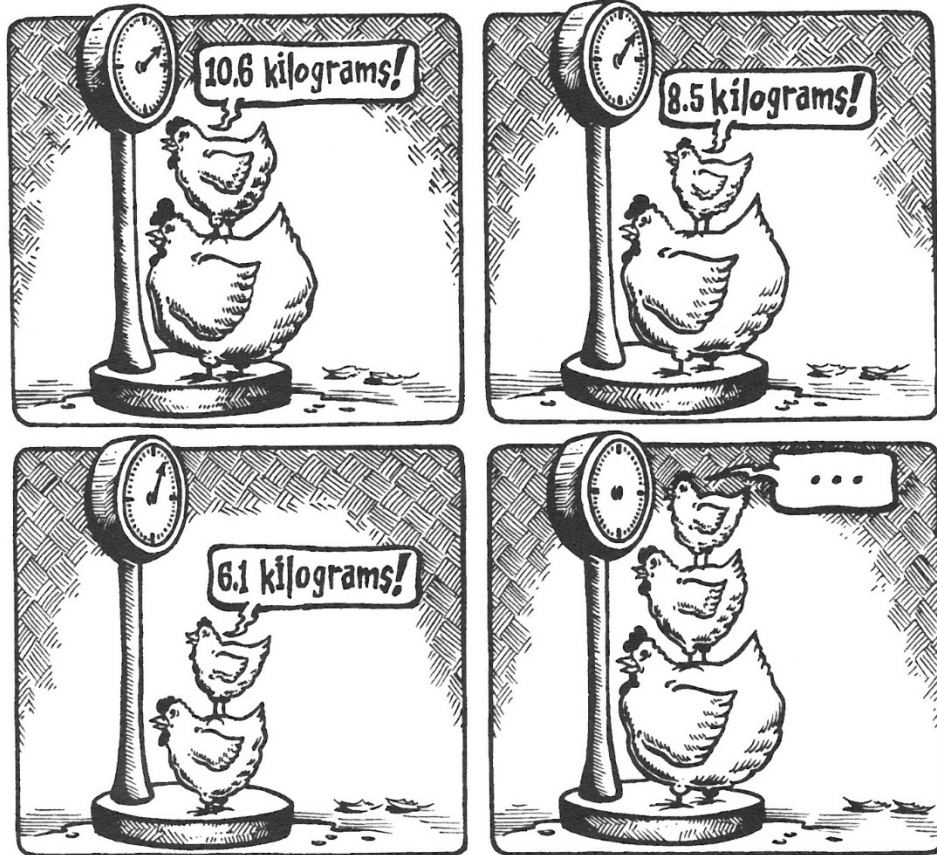


Question: How many bananas will it take to balance one apple?

Problem source: *Rich & Engaging Mathematical Tasks: Grades 5 - 9*

7th Grade Chicken Problem

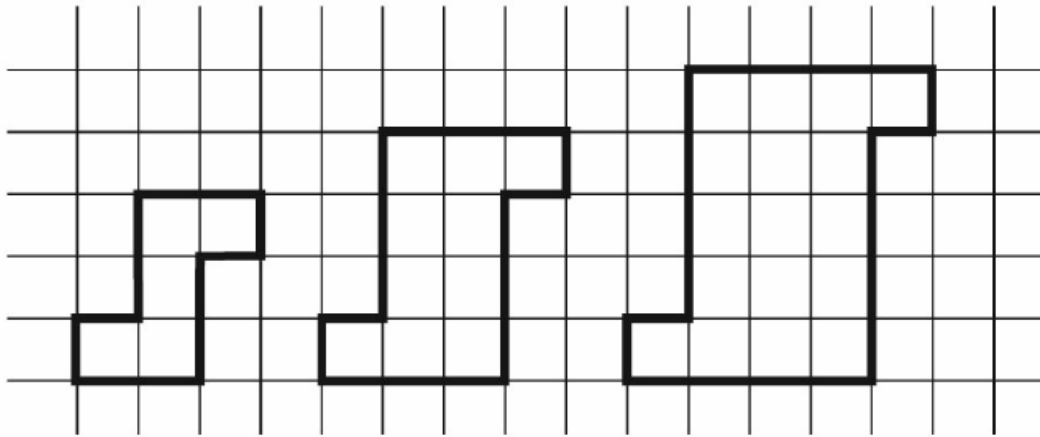
Reprinted with permission from the Mathematics in Context® program, 1999,
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Problem source: *Rich & Engaging Mathematical Tasks: Grades 5 - 9*

8th Grade Tile Patterns Lesson

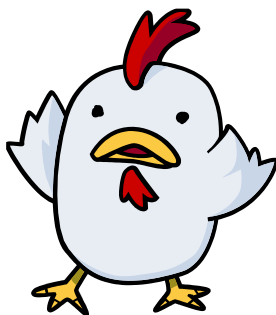
The first three figures of a pattern are shown above.



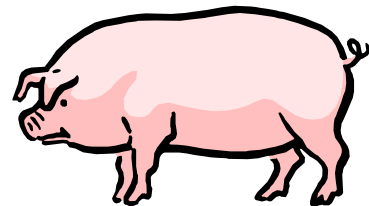
- a) Describe the 20th pattern. Explain the reasoning you used to determine this.
- b) Write a description n^{th} figure in the pattern. Can you create a formula for finding the number of squares in the n^{th} figure?

Problem source: NCTM PtoA Toolkit

3rd Grade Pigs and Chickens Lesson



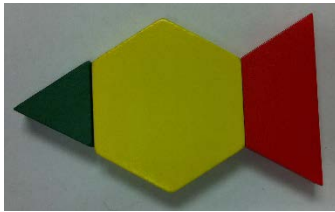
Chickens
&
Pigs



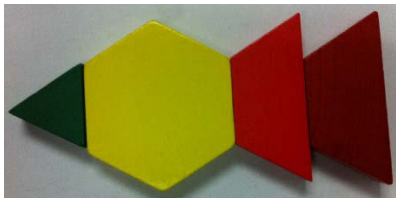
Uncle Jerry has some chickens and pigs. When I visited his farm, I saw a total of 30 legs. How many pigs are there? How many chickens are there?

1st Grade Pattern Block Fish Lesson

- Build a fish that is one year old. Point out that this fish is one year old and it took three blocks to build.



- You don't know how old she will want the fish to be but the age of the fish is related to the number of blocks you need to make the fish.
- Build a fish that is two years old. How is this fish similar to the one-year-old fish? Different?



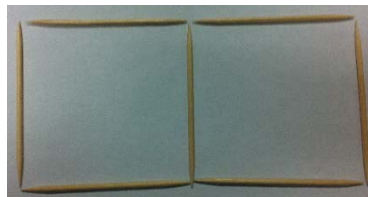
- Each student will get a card that has a number. The number is the age of the fish you have. Your task is to figure out how many blocks will be needed for that age fish. Record this number on the other side of the card.

6th Grade Toothpick Lesson

- You are going to be building a corral for your pigs using fence panels.
- Each corral has four sides of equal length (demonstrate with toothpicks).



- Corrals are constructed side-by-side (demonstrate with toothpicks).



- Each student will get a card that has a number. The number is how many corrals you have. Your task is to figure out how many fence panels will be needed for that number of corrals. Record this number on the other side of the card.

These lesson were adapted from a lesson featured in *Lesson Study Step-by-step: How Teacher Learning Communities Improve Instruction* by Catherine C. Lewis and Jacqueline Hurd.