Another Version of <u>The Statue of Liberty's Nose</u>
(Enough Structure? Too Much Structure?)

We want to solve the following problem.

> The Statue of Liberty in New York City has a nose that is 4 feet 6 inches long.
> What is the approximate length of one of her arms?

1. How long is the Statue's nose in inches?

2. Estimate how long your nose is, in inches.

3. What is the ratio of the length of the Statue's nose to your nose?

4. Estimate how long your arm is.

5. Multiply the answers from (4) and (3). What is the relationship between this number and the length of the Statue of Liberty's arm?

6. Write down a brief explanation of why you gave the answer you did in (5).

7. Pick two other body parts on the Statue of Liberty, and using the strategy from (1) through (5), figure out their lengths.

8. Explain this strategy for figuring out lengths on the Statue of Liberty. Make sure a classmate can understand it.