Measuring Length with Nonstandard Units

I. One orange rod is as long as 2 yellow rods. How many yellow rods are as long as 2 orange rods?

____ yellow rods

2. One paper clip is as long as 4 connecting cubes. How many cubes are as long as 3 paper clips?

____ cubes

3. One pencil is as long as 5 paper clips. How many paper clips are as long as 10 pencils?

____ paper clips

4. One eraser is as long as 4 beads. How many beads are as long as 6 ergsers?

_ beads

5. Kai's watch is $1\frac{1}{2}$ pencils long.

One pencil is as long as

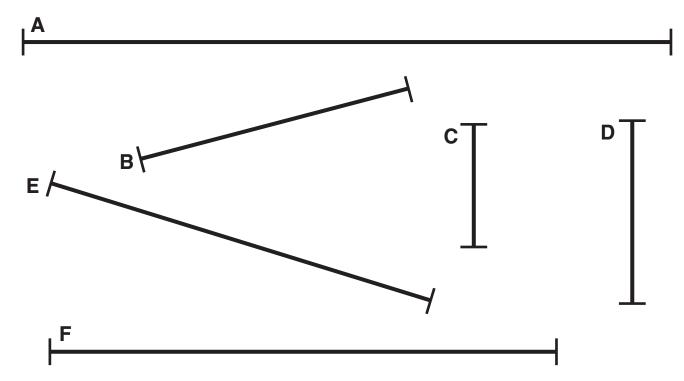
5 paper clips. How many paper

clips are as long as Kai's watch?

paper clips

Measuring to the Nearest Inch

Complete the table. Estimate. Then use a ruler to measure each line to the nearest inch.



Line	Estimate	Measure
Α	about inches	about inches
В	about inches	about inches
С	about inches	about inch
D	about inches	about inches
Е	about inches	about inches
F	about inches	about inches

Most Reasonable Estimates

Which is the most reasonable estimate? Circle it.

I. Tyra plants a rose bush. About how tall is the bush?

about 2 feet

about 20 feet

about 50 feet

2. Chris has a new puppy. About how long is the new puppy?

about 8 inches

about 80 inches

about 8 feet

3. Jake's mother buys a new sofa. About how long is it?

about 6 inches

about 6 feet

about 6 yards

4. Beth measures the length of her bracelet. About how long is it?

about 7 inches

about 7 feet

about 7 yards

5. Anna's baby sister is 4 years old. About how tall is Anna's sister?

about 3 inches

about 3 feet

about 3 yards

6. Alex measures the length of the front of his house. About how long is it?

about 2 yards

about I yard

about 15 yards

Relating Inches, Feet, and Yards

Complete the tables. Use a calculator to help you.

I.	Number of Feet	5	6	7	8	9	10	11
	Number of Inches	60	72	84				

2.	Number of Yards	6	7	8	9	10	П	12
	Number of Feet	18	21	24				

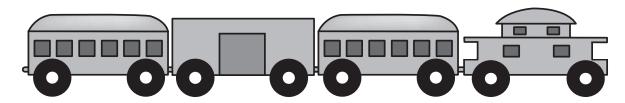
3.	Number of Feet	12	13	14	15	16	17	18
	Number of Inches	144	156	168				

4.	Number of Yards	I	2	3	4	5	6	7
	Number of Inches	36	72	108				

5.	Number of Feet	5	10	15	20	25	30	35
	Number of Inches	60	120	180				

Using Fractions to Measure Length

I. Peter connected 4 toy train cars. Each train car is $1\frac{1}{2}$ inches long. How long is the train of cars? _____ inches



2. How many cars are in a train that is 12 inches long? Each train car is $1\frac{1}{2}$ inches long.

____cars

3. How many cars are in a train that is 2 feet long? Each train car is $1\frac{1}{2}$ inches long.

____ cars

4. Jon connected 5 train cars. Each car is $2\frac{1}{2}$ inches long. How long is the train?

inches

5. Lin connected 2 cars that are each $2\frac{1}{2}$ inches long and 2 cars that are each $1\frac{1}{2}$ inches long. How long is her train?

inches

- 6. A red train has 4 cars that are each 2 inches long. A blue train has 6 cars that are each $1\frac{1}{2}$ inches long. Which color train is longer?
- 7. Jay and Mike made trains with cars that are each 1½ inches long. Jay's train has 15 cars.
 Mike's train is 2 feet long. Who has the longer train?

Measuring to the Nearest Centimeter

Angie has a set of dominoes. All of the dominoes are the same length.

I. Angie places 3 dominoes in a line. The line is 15 centimeters long. What is the length of each domino?

_____ centimeters

2. How many dominoes are in a line that is 30 centimeters long?

_____ dominoes

3. What is the length of a line of 8 dominoes?

_____ centimeters

Brian and Jan have dominoes that are a different length than Angie's dominoes.

4. Jan places 5 dominoes in a line. The line is 30 centimeters long. What is the length of each domino?

_____ centimeters

5. How many dominoes are in a line that is 18 centimeter long?

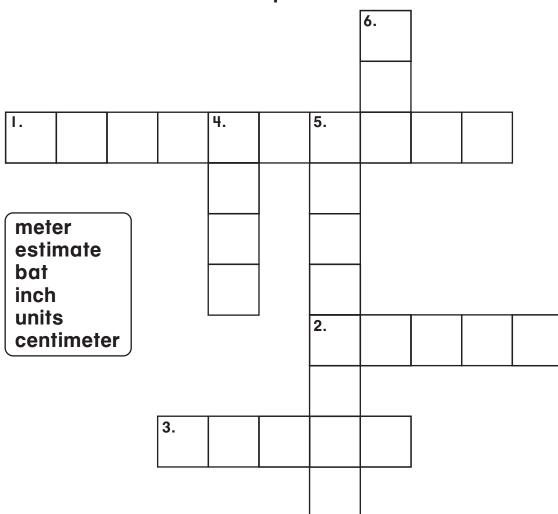
6. What is the length of a line of 8 dominoes?

_____ dominoes

____ centimeters

Measuring in Centimeters and Meters

Choose a word from the box to complete each sentence. Write the word in the puzzle.



Across

- I. One _____ is shorter than one inch.
- 2. A _____ is used to measure longer lengths.
- **3.** Centimeters and meters are metric _____ of length.

Down

- 4. The length of a paper clip is a benchmark for an _____.
- 5. When you do not need an exact answer, you can _____.
- **6.** A baseball _____ is about 1 yard long.