WEIRD MEASUREMENTS UNITS

Some of these units of length measurement are old and some are current.
Use the clues to fill in the blanks.

A *fathom* is _____ feet long. A *palm* is $\frac{1}{24}$ the length of a *fathom*, or _____ inches long. A

A

span is _____ inches long. A *span* is 5 inches longer than a *hand*. A *hand* is _____ inches.

C
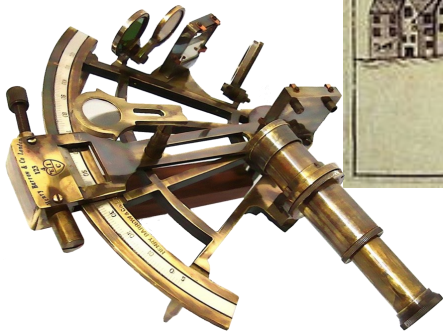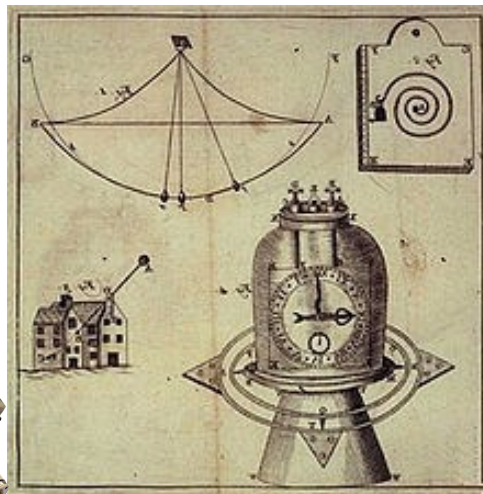
A *cubit* is equal in length to two *spans*, or _____ inches. A *bolt* is _____ yards, or _____

E   F   G

feet long. One *bolt* is 100 feet shorter than a *furlong*. A *furlong* is _____ feet long.

H

Clues

A: Perfect number < 20

C: $(4! + 3) \div 3$

H: $2 \times 10^2 + 2 \times 10^1$

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Wheel Away

Identify the number of wheels on each type of vehicle.

Unicycle	Bicycle	Car

1. 3 vehicles, 8 wheels

   _____   _____   _____
   Unicycles   Bicycles   Cars

2. 7 vehicles, 9 wheels

   _____   _____   _____
   Unicycles   Bicycles   Cars

3. 12 vehicles, 31 wheels

   _____   _____   _____
   Unicycles   Bicycles   Cars

4. 20 vehicles, 46 wheels

   _____   _____   _____
   Unicycles   Bicycles   Cars

5. 25 vehicles, 59 wheels

   _____   _____   _____
   Unicycles   Bicycles   Cars

One Thousand Numbers

Consider the numbers 1 through 1000.

How many of those numbers are:

1. Even? _____
2. Odd? _____
3. Multiples of 10? _____
4. Multiples of 100? _____
5. Multiples of 498? _____
6. Numbers with exactly two digits that are zeroes? _____
7. Divisible by 99? _____
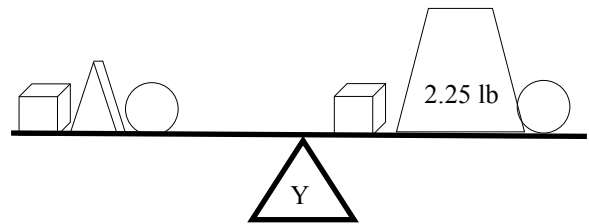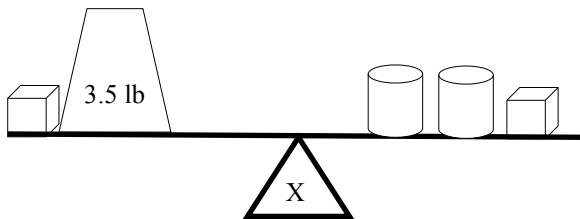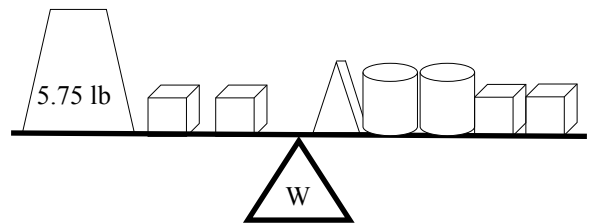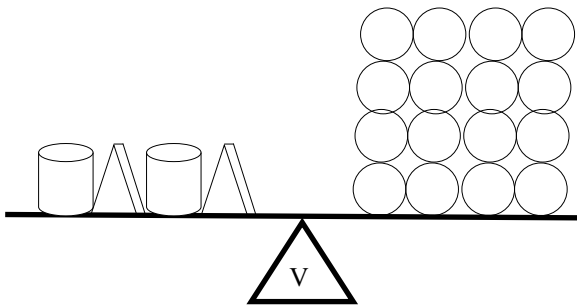8. Cubic Numbers? _____

FUNSO Pattern

Letter	F	U	N	S	O	F	U	N	S	O	F	U	N	...
Number	1	2	3	4	5	6	7	8	9	10	11	12	13	...

The FUNSO pattern continues through the number 100.

1. Letter above number 25 is _____.

2. Letter above number 91 is _____.

3. Letter above number 88 is _____.

4. There are _____ Fs in the pattern.

5. There are _____ consonants in the pattern.

Balance Craze

5.75 lb

V

W

3.5 lb

2.25 lb

X

Y

Use the balances to figure out the weight of each block.

◯ = _____ lb   ▢ = _____ lb   ⬭ = _____ lb   △ = _____ lb

βαιΖαΝθς

Balzano is a puzzle that will tap into your logical reasoning abilities. Read directions carefully, then try your hand at Balzano Shapes.

Directions:
Your job is to figure out the Desired Arrangement (the solution) of three elements (shapes) from clues that provide information about the shapes and their locations. The possible shapes are **circle, pentagon, square, trapezoid, triangle.** No shape may be repeated.

The **Arrangement Column** shows sets of shapes in rows. In the Balzano puzzle below, the second row, arranged in order from left to right, is: pentagon, circle, trapezoid.

Correct Shape in the Correct Place identifies the number of elements that are the correct shape AND in the right place. The second row has one shape in the right place.

Correct Shape in the Wrong Place identifies the number of correct shapes BUT in the wrong place. There are none of these in the second row.

Incorrect Shape identifies the number of shapes that do not belong in the arrangement. There are two of these in the second row.

	Correct Shape/ Correct Place	Correct Shape/ Wrong place	Wrong shape/ Wrong place
△ ○ ⬠	2	0	1
⬠ ○ ⬠	1	0	2
⬠ ○ □	2	0	1
□ △ ○	0	3	0
○ □ ⬠	0	1	1
	3	0	0