

What did Dr. Watson say about SHERLOCK?

Name: _____

Work any problem below and find your answer in the answer columns. Write the letter of the answer in each box at the bottom of the page that contains the problem number.
KEEP WORKING AND YOU WILL DISCOVER THE ANSWER TO THE TITLE QUESTION.

- 11** Light travels at a speed of 3×10^5 kilometers per second. Light from Sirius A, the brightest star in the heavens, takes 2.7×10^8 seconds to reach the earth. What is the distance to Sirius A?
- 12** In his book, *Six-Legged Science*, Brian Hocking estimates that the insect population of the world is at least 1×10^{18} . If the average weight of each insect is 2.5×10^{-3} grams, what is the total weight of the insect population?
- 13** The human population of the world is estimated at 4.5×10^9 . If the average weight of each human is 5.5×10^4 grams, what is the total weight of the human population?

- 1** (4×10^5) (2×10^3)
2 (3×10^{-4}) (3×10^7)
3 (9×10^3) (7×10^{-1})
4 (6×10^{-5}) (7×10^{-2})
5 (8×10^{-13}) (5×10^4)
6 (3.6×10^6) (2×10^3)
7 (5×10^{-12}) (8.1×10^{15})
8 (7.6×10^{-4}) (6×10^{-4})
9 (3.5×10^1) (4.5×10^{-10})
10 (6.8×10^{-18}) (2.5×10^{-12})

- L** 1.7×10^{-30} **E** 1.575×10^{-10}
R 4.05×10^4 **K** 9×10^3
V 8×10^7 **D** 7.2×10^8
A 8.1×10^{14} km **H** 1.7×10^{-29}
B 4.2×10^{-5} **S** 6.3×10^3
N 4.2×10^{-6} **P** 2.5×10^{15} g
I 8×10^8 **B** 2.5×10^5
Y 4.05×10^5 **M** 7.2×10^9
T 4.56×10^{-7} **A** 2.475×10^{13} g
E 8.1×10^{13} km **O** 1.575×10^{-8}
A 4×10^{-9} **L** 2.475×10^{14} g
C 4×10^{-8} **G** 4.56×10^{-8}

8	10	11	7	11	3	4	9	12	9	13	1	5	11	13	1	2	11	10	9	13	6	11	3
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Did You Hear About...

A	B	C	D	E	F	G
H	I	J	K	L	M	N
						?

2×10^{10} —AWAY
2×10^{12} —FIVE
2.6×10^4 —TEN
8×10^{-2} —MUSIC
1.5×10^{12} —WERE
1.2×10^{-2} —WHO
2×10^{-4} —TIGERS
3×10^5 —A
4×10^{-6} —TWO
5×10^{-1} —CASH
5×10^2 —GOT
2.6×10^3 —THE
3×10^{-8} —STORE
4×10^{-5} —FOR

DIRECTIONS: Work any problem below. Find your answer in one of the answer columns and notice the word next to it. Write this word in the box with the same letter as the problem.

KEEP WORKING AND YOU WILL HEAR ABOUT SOMETHING NOTEWORTHY!

- (A) 9×10^6
- (B) $\frac{8 \times 10^3}{2 \times 10^9}$
- (C) $\frac{6 \times 10^{-1}}{3 \times 10^4}$
- (D) $\frac{4.8 \times 10^{-7}}{4 \times 10^{-5}}$
- (E) $\frac{7.5 \times 10^8}{5 \times 10^{-2}}$
- (F) $\frac{3.5 \times 10^{-3}}{7 \times 10^{-9}}$
- (G) $\frac{6.4 \times 10^3}{8 \times 10^4}$
- (H) $\frac{4.5 \times 10^{-6}}{1.5 \times 10^2}$
- (I) $\frac{7.2 \times 10^{-10}}{1.8 \times 10^{-3}}$
- (J) $\frac{4 \times 10^5}{8 \times 10^2}$
- (K) $\frac{3 \times 10^3}{1.5 \times 10^{-7}}$
- (L) $\frac{8 \times 10^{-1}}{1.6 \times 10^{-8}}$

(M) Jupiter, the largest planet in our solar system, is 7.8×10^8 kilometers from the sun. The speed of light is 3×10^5 kilometers per second. How many seconds does it take sunlight to reach Jupiter?

(N) The total length of all the drawers in a library card catalog is 5×10^3 centimeters. If each card has a thickness of 2.5×10^{-2} centimeters, how many cards will fit in the card catalog?

1.2×10^{-1} —FROM
1.5×10^{10} —ROBBED
5×10^{-6} —TEN
3×10^4 —THE
3×10^{-10} —HORN
4×10^{-7} —AND
5×10^7 —WITH
4×10^{-5} —BIG
2×10^4 —BED
2×10^5 —LUTE
6×10^2 —DOUGH
2×10^{-5} —GUYS
5×10^5 —A
8×10^2 —BIG