



SpaceX's Starship is the world's most powerful rocket ever built, and it got us thinking...

BLAST OFF THROUGH BIG NUMBERS!

From Skateboards to Starships



How BIG can numbers get?

A skateboard can cost less than one hundred dollars, while a cruise ship can cost billions. Whether they're designed for the sidewalk, the ocean, or even outer space, vehicles can come with some surprising price tags.

Before we can understand huge numbers, we need to understand place value.

NUMBER LADDER

10

Tens (1 zero)

100

Hundreds (2 zeros)

1,000

Thousands (3 zeros)

10,000

Ten Thousands (4 zeros)

100,000

Hundred Thousands (5 zeros)

1,000,000

Millions (6 zeros)

1,000,000,000

Billions (9 zeros)

1,000,000,000,000

Trillions (12 zeros)

MATCH THE VEHICLE TO ITS ESTIMATED VALUE

Draw a line from Column A to Column B.

COLUMN A



1. Skateboard



2. Private Jet



3. E-Bike



4. Helicopter



5. SpaceX Starship



6. Semi Truck



7. Motorcycle



8. Roller Skates



9. Cruise Ship



10. Family Car

COLUMN B

A. About \$5,000,000 (Millions)

B. About \$15,000 (Tens of Thousands)

C. About \$2,000 (Thousands)

D. About \$200 (Hundreds)

E. About \$150,000 (Hundreds of Thousands)

F. About \$20,000,000 (Tens of Millions)

G. About \$75 (Tens)

H. About \$5,000,000,000 (Billions)

I. About \$40,000 (Tens of Thousands)

J. About \$1,000,000,000 (Billions)

BONUS CHALLENGE

Circle the biggest number:

9,000

5,000,000,000

6,000,000

2,000,000,000,000

Mission Control: Check Your Answers!

-  = About \$75 (Tens)
-  = About \$20,000,000 (Tens of Millions)
-  = About \$2,000 (Thousands)
-  = About \$5,000,000 (Millions)
-  = About \$5,000,000,000 (Billions)
-  = About \$150,000 (Hundreds of Thousands)
-  = About \$15,000 (Tens of Thousands)
-  = About \$200 (Hundreds)
-  = About \$1,000,000,000 (Billions)
-  = About \$40,000 (Tens of Thousands)

How many answers did you get right?

Which answer surprised you the most?

WHAT DOES "FIGURES" MEAN?

Adults sometimes describe money using "**figures**."

The number of **figures** tells you how many digits are in the number.

5 Figures = \$10,000+

6 Figures = \$100,000+

7 Figures = \$1,000,000+ (Millionaire)

8 Figures = \$10,000,000+

9 Figures = \$100,000,000+

10 Figures = \$1,000,000,000+ (Billionaire)

13 Figures = \$1,000,000,000,000+ (Trillionaire)

SPACE CHALLENGE

Match the term to the correct number.

- | | |
|------------------|----------------------|
| _____1. Million | A. 1,000,000,000,000 |
| _____2. Billion | B. 1,000,000 |
| _____3. Trillion | C. 1,000,000,000 |

MIND-BLOWING FACT

- ✓ A million seconds is about 11 days.
- ✓ A billion seconds is about 32 years.
- ✓ A trillion seconds is about 31,700 years!

That's why a trillion is MUCH bigger than a billion.

DESIGN YOUR DREAM VEHICLE

If you could invent the next great vehicle, what would it be?

What would you call it?

How much would it cost?

\$

What special features would it have? (flying, diving underwater etc.)

What type of fuel would the engine run on?

What problem could it solve?