

Who Owns the Solar System?

Don't copy down

Over the years scientist have discovered that there are many valuable resources on other planets, moons, and asteroids. But the question arises:

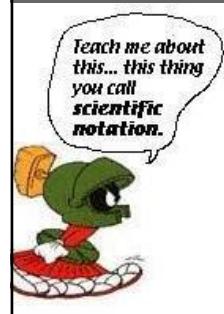
"Who owns the rights to collect these valuable resources?"

Activity from page 441



For homework have students research information that supports their side of the debate. Student must bring their information to class tomorrow for a mini debate warm up.

Distance in Space we use scientific notation

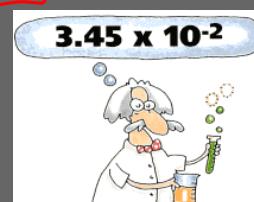


The scientific notation allows us to write very large or small numbers using mathematical abbreviations. Using this notation, a number is written with a digit between 1 and 9 before the decimal, followed by a power of 10.

Example:
 $32\ 000\ 000 \text{ km} = 3.2 \times 10^7 \text{ km}$

Example:
 $43\ 000 =$

3.45 x 10⁻²



32000000

3.2×10^7

33000000

6700000000

6.7×10^{10}

0.00000035

Displacement

7.5×10^{-7} # of Positions
Decimal is Moving

5000000

5.0×10^6

Scientific Notation

1) $10 \times 10 \times 10 \times 10 \times 10 = 10000$

$10000 = 1.0 \times 10^4$

4) $7 \times 10 \times 10 \times 10 \times 10 \times 10 = 70000$

$70000 = 7.0 \times 10^4$

2) $10 \times 10 \times 10 \times 10 \times 10 \times 10 =$

$100000 = 1.0 \times 10^5$

5) $1.000.000.000.000 =$

1.0×10^{12}

3) $3 \times 10 \times 10 \times 10 = 3000$

$3000 = 3.0 \times 10^3$

6) $000000000000000000000002 =$

2.0×10^{-18}

Please write the expanded number

7) $1 \times 10^4 = 1.0 \times 10^4$

$1.0000 = 10000$

9) $3 \times 10^{-3} = 3.0 \times 10^{-3}$

$0.0030 = 0.003$

11) $8.21 \times 10 = 82.1$

13) $3540000 = 3.54 \times 10^6$

8) $1 \times 10 = 1.0 \times 10$

$1.0 = 10$

10) $9 \times 10^4 = 9.0 \times 10^4$

12) $9.0000 = 90000$

$6.45 \times 10^{-5} = 0.0000645$

14) $5.47 \times 10^5 = 547000$