

## Why Did the Scientist Create an Exact Duplicate of Himself?

Choose the correct answer for each exercise and circle the letter pair next to it. Write the upper case letter in the box containing the lower case letter.



In Exercises 1-2, choose the number that is written in scientific notation.

1. **h•R**  $12.3 \times 10^4$     **k•T**  $1.23 \times 10^5$     **f•Y**  $0.123 \times 10^6$   
 2. **n•P**  $0.45 \times 10^{-2}$     **b•X**  $4.5 + 10^{-3}$     **u•A**  $4.5 \times 10^{-3}$

In Exercises 3-6, find the value of  $n$ .

3.  $72,000,000 = 7.2 \times 10^n$     **v•K** 6    **f•S** 10  
 4.  $33,300,000,000 = 3.33 \times 10^n$     **q•I** 7    **p•F** 12  
 5.  $0.00008 = 8 \times 10^n$     **d•P** -3    **s•K** -8  
 6.  $0.00000000625 = 6.25 \times 10^n$     **x•U** -5    **m•C** -9

In Exercises 7-12, write the number in *standard form*.

7.  $4.9 \times 10^5$     **z•D** 49,000    **w•B** 0.0000049  
 8.  $4.9 \times 10^{-5}$     **j•V** 4900    **b•E** 490,000  
 9.  $4.90 \times 10^4$     **o•O** 0.000049    **y•R** 4,900,000  
 10.  $8.75 \times 10^6$     **a•S** 875    **e•A** 8,750,000  
 11.  $8.75 \times 10^{-2}$     **t•M** 875,000    **i•U** 0.000000875  
 12.  $8.75 \times 10^{-7}$     **r•N** 0.0875    **c•F** 0.0000000875

In Exercises 13-18, write the number in scientific notation.

13. 34,000    **k•R**  $3.4 \times 10^{-4}$     **s•G**  $3.4 \times 10^{-6}$   
 14. 3,400,000,000    **q•K**  $3.4 \times 10^{-7}$     **a•H**  $3.4 \times 10^9$   
 15. 0.0000034    **w•O**  $3.4 \times 10^4$     **e•B**  $3.4 \times 10^{10}$   
 16. 92,200,000    **j•S**  $9.22 \times 10^7$     **n•F**  $9.22 \times 10^8$   
 17. 0.00922    **l•D**  $9.22 \times 10^3$     **g•P**  $9.22 \times 10^{-7}$   
 18. 0.0000000922    **y•N**  $9.22 \times 10^{-8}$     **d•W**  $9.22 \times 10^{-3}$

In Exercises 19-22, write the number in scientific notation.

19.  $16.6 \times 10^3$     **o•G**  $1.66 \times 10^5$     **p•N**  $1.66 \times 10^4$   
 20.  $0.166 \times 10^8$     **h•J**  $1.66 \times 10^7$     **g•Y**  $1.66 \times 10^{10}$   
 21.  $0.55 \times 10^{-4}$     **n•L**  $5.5 \times 10^{-11}$     **t•S**  $5.5 \times 10^{-6}$   
 22.  $55 \times 10^{-12}$     **l•V**  $5.5 \times 10^{-13}$     **v•R**  $5.5 \times 10^{-5}$

Challenge

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
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