

# What Is Special About a Radioactive Cat?

Choose the correct answer for each exercise and circle the letter pair next to it. Write the uppercase letter in the box containing the lowercase letter.



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

1. **r·Y**  $34.5 \times 10^5$     **m·E**  $3.45 \times 10^6$     **y·P**  $0.345 \times 10^7$   
 2. **b·G**  $0.77 \times 10^{-3}$     **i·R**  $7.7 + 10^{-4}$     **s·L**  $7.7 \times 10^{-4}$

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

3.  $94,000,000 = 9.4 \times 10^n$     **n·O** 8    **e·A** 7  
 4.  $555,500,000,000 = 5.555 \times 10^n$     **i·I** 11    **k·C** 10  
 5.  $0.00006 = 6 \times 10^n$     **w·S** -4    **j·G** -11  
 6.  $0.0000000000375 = 3.75 \times 10^n$     **f·U** -12    **y·E** -5

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

7.  $3.8 \times 10^5$     **r·A** 38,000,000    **p·R** 0.00038  
 8.  $3.8 \times 10^{-5}$     **d·L** 3,800,000    **w·I** 380,000  
 9.  $3.80 \times 10^7$     **b·T** 0.000038    **o·D** 38,000  
 10.  $6.25 \times 10^4$     **a·A** 0.000000625    **n·E** 62,500  
 11.  $6.25 \times 10^{-3}$     **v·M** 625,000    **k·H** 0.000000625  
 12.  $6.25 \times 10^{-8}$     **z·S** 0.00625    **h·L** 0.00062

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

13. 72,000    **q·F**  $7.2 \times 10^{10}$     **q·W**  $7.2 \times 10^5$   
 14. 7,200,000,000,000    **f·S**  $7.2 \times 10^{12}$     **o·N**  $7.2 \times 10^{-7}$   
 15. 0.00000072    **a·I**  $7.2 \times 10^4$     **t·D**  $7.2 \times 10^{-6}$   
 16. 41,900,000    **v·L**  $4.19 \times 10^{-3}$     **x·T**  $4.19 \times 10^{-5}$   
 17. 0.00419    **l·R**  $4.19 \times 10^{-10}$     **d·H**  $4.19 \times 10^7$   
 18. 0.0000000000419    **c·S**  $4.19 \times 10^6$     **h·E**  $4.19 \times 10^{-11}$

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

19.  $22.2 \times 10^3$     **p·O**  $2.22 \times 10^5$     **l·T**  $2.22 \times 10^7$   
 20.  $0.222 \times 10^8$     **t·F**  $2.22 \times 10^4$     **c·S**  $2.22 \times 10^9$   
 21.  $0.54 \times 10^{-4}$     **g·L**  $5.4 \times 10^{-6}$     **u·P**  $5.4 \times 10^{-16}$   
 22.  $54 \times 10^{-15}$     **q·H**  $5.4 \times 10^{-14}$     **x·V**  $5.4 \times 10^{-5}$

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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