

# 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
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---