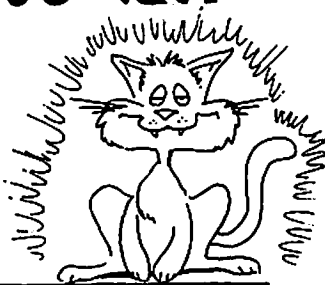# What Is Special About a Radioactive Cat?

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** 34.5×10^5 **m · E** 3.45×10^6 **y · P** 0.345×10^7

2. **b · G** 0.77×10^{-3} **i · R** $7.7 + 10^{-4}$ **s · L** 7.7×10^{-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. 3.8×10^5 **r · A** 38,000,000   **p · R** 0.00038

8. 3.8×10^{-5} **d · L** 3,800,000   **w · I** 380,000

9. 3.80×10^7 **b · T** 0.000038   **o · D** 38,000

10. 6.25×10^4 **a · A** 0.000000625   **n · E** 62,500

11. 6.25×10^{-3} **v · M** 625,000   **k · H** 0.0000000625

12. 6.25×10^{-8} **z · S** 0.00625   **h · L** 0.00062

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

13. 72,000   **q · F** 7.2×10^{10} **q · W** 7.2×10^5

14. 7,200,000,000,000   **f · S** 7.2×10^{12} **o · N** 7.2×10^{-7}

15. 0.00000072   **a · I** 7.2×10^4 **t · D** 7.2×10^{-6}

16. 41,900,000   **v · L** 4.19×10^{-3} **x · T** 4.19×10^{-5}

17. 0.00419   **l · R** 4.19×10^{-10} **d · H** 4.19×10^7

18. 0.0000000000419   **c · S** 4.19×10^6 **h · E** 4.19×10^{-11}

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

19. 22.2×10^3 **p · O** 2.22×10^5 **l · T** 2.22×10^7

20. 0.222×10^8 **t · F** 2.22×10^4 **c · S** 2.22×10^9

21. 0.54×10^{-4} **g · L** 5.4×10^{-6} **u · P** 5.4×10^{-16}

22. 54×10^{-15} **q · H** 5.4×10^{-14} **x · V** 5.4×10^{-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