Name: _____ Date: _____

1. What is 10^1?

2. $5.4 \times 100 =$ ___

3. $120 \div 100 =$ ___

4. 10^2 is 1 followed by how many zeros?

5. Write 100 as a power of 10.

2^{10} 10^1 10^2 10^3

6. 10^3 means:

10 × 10 × 10 | 10 × 3 | 10 × 10 × 10 × 10 | 3 × 3

7. 6.6 × 10 = ?

8. The chart shows 88, then 88 × 10. Multiplying by 10 shifts every digit one place to the ___.

Hundreds	Tens	Ones
	8	8
8	8	0

down | left | up | right

9. The place-value chart shows 71 shifted for × 10. What is 71 × 10?

Hundreds	Tens	Ones
	7	1
7	1	0

10. What is 10^2?

136 | 100 | 112 | 126

11. $3.7 \times 10 =$ ___

12. $770 \div 100 =$ ___

13. 10^4 is 1 followed by how many zeros?

14. Write 10000 as a power of 10.

10^3 10^5 10^4 4^{10}

15. 10^2 means:

2 × 2 10 × 2 10 × 10 10 × 10 × 10

16. 6.7 × 10 = ?

17. The chart shows 34, then 34 × 10. Multiplying by 10 shifts every digit one place to the ___.

Hundreds	Tens	Ones
	3	4
3	4	0

up down right left

18. The place-value chart shows 18 shifted for × 100. What is 18 × 100?

Thousands	Hundreds	Tens	Ones
		1	8
1	8	0	0

Answer Key

1. **10** 10^1 = 1 followed by 1 zeros = 10.

2. **540** Multiplying by 100 moves the decimal point right: 5.4 × 100 = 540.

3. **1.2** Dividing by 100 moves the decimal point left: 120 ÷ 100 = 1.2.

4. **2** 10^2 has 2 zeros.

5. 10^2 100 = 10^2.

6. **10 × 10 × 10** 10^3 = 10 × 10 × 10 = 1000.

7. **66** 6.6 × 10 = 66.

8. **left** × 10 makes each digit worth ten times more, so it moves one column left: 88 → 880.

9. **710** 71 × 10 = 710.

10. **100** 10^2 = 1 followed by 2 zeros = 100.

11. **37** Multiplying by 10 moves the decimal point right: 3.7 × 10 = 37.

12. **7.7** Dividing by 100 moves the decimal point left: 770 ÷ 100 = 7.7.

13. **4** 10^4 has 4 zeros.

14. 10^4 10000 = 10^4.

15. **10 × 10** 10^2 = 10 × 10 = 100.

16. **67** 6.7 × 10 = 67.

17. **left** × 10 makes each digit worth ten times more, so it moves one column left: 34 → 340.

18. **1800** 18 × 100 = 1800.