

Measurement - Units Advanced - Metric

1 What is the power of 10 for this prefix?

hecto

A 10^{-3}	B 10^{-1}
C 10^2	D 10^0
E 10^3	F 10^{-2}

2 What is the multiplication factor for this abbreviation?

m (ie mg, mm)

A 1,000	B 100	C 0.001
D 10	E 0.01	F 1

3 What is the prefix for this multiplication factor?

1,000

A (base)	B deca
C milli	D centi
E kilo	F deci

4 Which unit is larger

'h' (ie hg) or 'k' (ie kg)

A h	B k
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5 What is the abbreviation for this power of 10?

10^{-2}

A (base)	B h
C m	D d
E da	F c

6 Which prefix is larger

'deca' or '(base)'

A (base)	B deca
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7 Use the mnemonic 'Terribly Gigantic Monsters Killed One Million Men Napping Peacefully' to remember the missing prefix

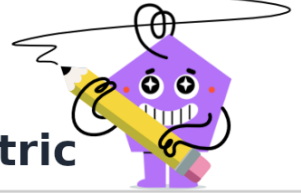
Terribly	tera	10^{12}
Gigantic	?	10^9
Monsters	mega	10^6
Killed	kilo	10^3
One	(base)	10^0
Million	milli	10^{-3}
Men	micro	10^{-6}
Napping	nano	10^{-9}
Peacefully	pico	10^{-12}

C mega	B (base)
D giga	micro
F tera	nano

8 What is the abbreviation for 'milli'?

(base)	10^0
milli	? 10^{-3}
micro	μ 10^{-6}
nano	n 10^{-9}
pico	p 10^{-12}

A p	B n
C m	D μ
E (base)	



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9 What is the prefix that is abbreviated 'm'?

(base) 10^0
 ? m 10^{-3}
 micro μ 10^{-6}
 nano n 10^{-9}
 pico p 10^{-12}

A milli	B pico
C nano	D (base)
E micro	

10 Each prefix in the mnemonic 'Terribly Gigantic Monsters Killed One Million Men Napping Peacefully' is 1000x smaller. What is the missing exponent?

Terribly tera 10^{12}
 Gigantic giga 10^9
 Monsters mega 10^6
 Killed kilo 10^3
 One (base) 10^0
 Million milli ?
 Men micro 10^{-6}
 Napping nano 10^{-9}
 Peacefully pico 10^{-12}

10^6	B 10^9
10^0	D 10^{-3}
E 10^3	F 10^{-12}

11 Which prefix is smaller

'deci' or 'centi'

A deci	B centi
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12 What is the exponent for '(base)'?

(base) ?
 milli m 10^{-3}
 micro μ 10^{-6}
 nano n 10^{-9}
 pico p 10^{-12}

A 10^{-3}	B 10^{-12}
C 10^{-9}	D 10^{-6}
E 10^0	

13 Which unit is smaller

'm' (ie mg) or 'c' (ie cg)

A m	B c
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14 What is the abbreviation for 'mega'?

tera T 10^{12}
 giga G 10^9
 mega ? 10^6
 kilo k 10^3
 (base) 10^0

A (base)	B T
C G	D k
E M	

15 What is the prefix that is abbreviated 'G'?

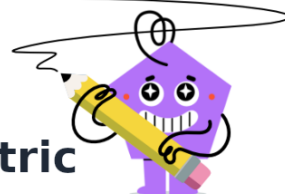
tera T 10^{12}
 ? G 10^9
 mega M 10^6
 kilo k 10^3
 (base) 10^0

A tera	B giga
C mega	D kilo
E (base)	

16 Which unit is smaller

'm' (ie mg) or ' μ ' (ie μ g)

A μ	B m
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17 What is the exponent for 'mega'?

tera	T	10^{12}
giga	G	10^9
mega	M	?
kilo	k	10^3
(base)		10^0

A 10^0	B 10^6	C 10^3
D 10^{12}	E 10^9	

18 Which prefix is smaller

'milli' or '(base)'

A (base)	B milli
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19 Which unit is larger

'(base)' (ie g) or 'k' (ie kg)

A (base)	B k
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20 Which prefix is larger

'mega' or 'giga'

A mega	B giga
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21 What is the multiplication factor for this prefix?

hecto

A 1,000	B 0.1	C 1
D 0.01	E 100	F 10

22 Each prefix in the mnemonic 'King Henry Died by Drinking Chocolate Milk' is 10x smaller. What is the missing exponent?

King	kilo	10^3
Henry	hecto	10^2
Died	deca	?
by	(base)	10^0
Drinking	deci	10^{-1}
Chocolate	centi	10^{-2}
Milk	milli	10^{-3}

A 10^0	B 10^1
C 10^3	D 10^{-2}
E 10^{-1}	F 10^{-3}

23 What is the prefix for this power of 10?

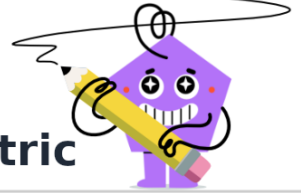
10^{-2}

A deci	B milli
C centi	D hecto
E kilo	F (base)

24 What is the multiplication factor for this power of 10?

10^{-1}

A 0.1	B 1,000	C 10
D 0.01	E 100	F 0.001

**Measurement - Units Advanced - Metric****25** What is the power of 10 for this abbreviation?**da (ie dag, dam)**

A	10^{-1}	B	10^0
C	10^2	D	10^{-3}
E	10^3	F	10^1

26 What is the power of 10 for this multiplication factor?**1**

A	10^0	B	10^{-3}
C	10^{-1}	D	10^1
E	10^2	F	10^{-2}

27 Multiply these numbers **1.1×100**

A	1,100	B	11,000
C	1.1	D	11
E	110		

28 Multiply these numbers **$1.1 \times 10,000$**

A	1,100,000	B	110,000
C	110	D	11,000
E	1,100		

29 Convert this scientific notation number to regular notation **8×10^3**

A	8,000	B	800,000
C	80,000	D	800

30 Convert this scientific notation number to regular notation **2×10^{-3}**

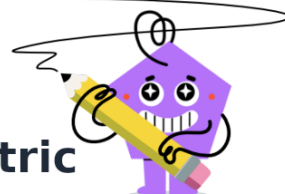
A	0.02	B	0.2
C	0.002	D	0.0002

31 Convert this scientific notation number to regular notation **3×10^4**

A	30,000	B	3,000
C	3,000,000	D	300,000

32 Convert this scientific notation number to regular notation **4×10^{-2}**

A	0.4	B	4
C	0.004	D	0.04

**Measurement - Units Advanced - Metric**

33 Convert this scientific notation number to regular notation

$$1 \times 10^{-4}$$

A	0.01	B	0.0001
C	0.00001	D	0.001

34 Convert this scientific notation number to regular notation

$$3 \times 10^4$$

A	3,000	B	3,000,000
C	30,000	D	300,000

35 Convert this scientific notation number to regular notation

$$2 \times 10^7$$

A	200,000,000
B	2,000,000,000
C	2,000,000
D	20,000,000

36 Convert this scientific notation number to regular notation

$$3 \times 10^{-7}$$

A	0.000003	B	0.00000003
C	0.0000003	D	0.00003

37 Convert this number to scientific notation

0.005

A	1×10^{-3}	B	5×10^{-3}
C	5×10^{-4}	D	5×10^{-2}
E	50×10^{-3}	F	5×10^{-1}

38 Convert this number to scientific notation

1,000

A	1×10^4	B	0×10^3
C	1×10^5	D	10×10^3
E	1×10^3	F	1×10^2

39 Convert this number to scientific notation

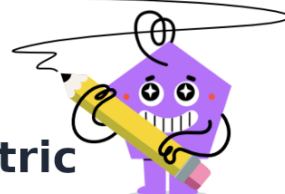
700

A	1×10^2	B	7×10^1
C	70×10^2	D	7×10^2
E	7×10^3		

40 Convert this number to scientific notation

0.00005

A	5×10^{-3}	B	50×10^{-5}
C	1×10^{-5}	D	5×10^{-6}
E	5×10^{-5}	F	5×10^{-4}

**Measurement - Units Advanced - Metric****41** Convert this number to scientific notation**700,000**

A	1×10^5	B	7×10^6
C	7×10^7	D	7×10^5
E	70×10^5	F	7×10^4

42 Convert this number to scientific notation**0.0003**

A	3×10^{-4}	B	30×10^{-4}
C	3×10^{-3}	D	0×10^{-4}
E	3×10^{-5}	F	3×10^{-2}

43 Convert this number to scientific notation**90,000,000**

A	9×10^6	B	90×10^7
C	9×10^7	D	1×10^7
E	9×10^9	F	9×10^8

44 Convert this number to scientific notation**0.00000004**

A	0×10^{-8}	B	4×10^{-9}
C	4×10^{-7}	D	4×10^{-6}
E	4×10^{-8}	F	40×10^{-8}

45 Convert this scientific notation number to regular notation 3.7×10^2

A	370	B	3,700
C	37	D	37,000

46 Convert this scientific notation number to regular notation 7.7×10^{-2}

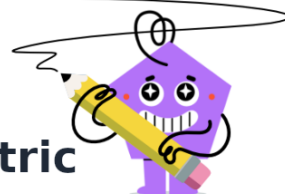
A	7.7	B	0.077
C	0.77	D	0.0077

47 Convert this scientific notation number to regular notation 5.0×10^{-4}

A	0.0005	B	0.00005
C	0.005	D	0.05

48 Convert this scientific notation number to regular notation 5.8×10^5

A	5,800,000	B	58,000
C	580,000	D	58,000,000

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- 49** Convert this scientific notation number to regular notation

$$8.1 \times 10^6$$

A	8,100,000	B	810,000
C	81,000,000	D	810,000,000

- 50** Convert this scientific notation number to regular notation

$$2.6 \times 10^{-4}$$

A	0.0026	B	0.000026
C	0.026	D	0.00026

- 51** Convert this scientific notation number to regular notation

$$1.0 \times 10^7$$

A	1,000,000,000
B	100,000,000
C	10,000,000
D	1,000,000

- 52** Convert this scientific notation number to regular notation

$$8.1 \times 10^{-8}$$

A	0.00000081
B	0.000000081
C	0.0000081
D	0.0000000081

- 53** Convert this number to scientific notation

0.0042

A	4.2×10^{-2}	B	4.2×10^{-1}
C	4.2×10^{-4}	D	4.2×10^{-3}
E	42.0×10^{-3}	F	0.4×10^{-3}

- 54** Convert this number to scientific notation

7.6

A	7.6×10^1	B	0.8×10^0
C	76.0×10^0	D	7.6×10^0
E	7.6×10^2	F	7.6×10^{-1}

- 55** Convert this number to scientific notation

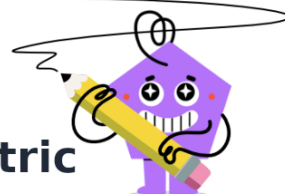
0.00099

A	9.9×10^{-5}	B	9.9×10^{-2}
C	9.9×10^{-4}	D	99.0×10^{-4}
E	1.0×10^{-4}	F	9.9×10^{-3}

- 56** Convert this number to scientific notation

6,600

A	6.6×10^2	B	0.7×10^3
C	6.6×10^5	D	66.0×10^3
E	6.6×10^3	F	6.6×10^4

**Measurement - Units Advanced - Metric****57** Convert this number to scientific notation**580,000**

A 5.8×10^5	B 58.0×10^5
C 5.8×10^4	D 5.8×10^7
E 0.6×10^5	F 5.8×10^6

58 Convert this number to scientific notation**0.0000033**

A 3.3×10^{-7}	B 3.3×10^{-5}
C 33.0×10^{-6}	D 3.3×10^{-6}
E 0.3×10^{-6}	F 3.3×10^{-4}

59 Convert this number to scientific notation**54,000,000**

A 5.4×10^6	B 5.4×10^8
C 54.0×10^7	D 5.4×10^7
E 5.4×10^9	F 0.5×10^7

60 Convert this number to scientific notation**0.00000099**

A 9.9×10^{-6}	B 1.0×10^{-7}
C 9.9×10^{-5}	D 99.0×10^{-7}
E 9.9×10^{-7}	F 9.9×10^{-8}

61 Convert this scientific notation number to regular notation 7.27×10^3

A 727	B 7,270
C 727,000	D 72,700

62 Convert this scientific notation number to regular notation 4.13×10^{-3}

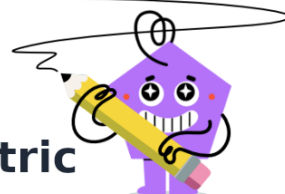
A 0.00413	B 0.0413
C 0.000413	D 0.413

63 Convert this scientific notation number to regular notation 9.77×10^{-4}

A 0.000977	B 0.0977
C 0.0000977	D 0.00977

64 Convert this scientific notation number to regular notation 7.27×10^3

A 7,270	B 727
C 727,000	D 72,700

**Measurement - Units Advanced - Metric**

- 65** Convert this scientific notation number to regular notation

$$9.65 \times 10^{-6}$$

- | | | | |
|---|-------------|---|------------|
| A | 0.0000965 | B | 0.00000965 |
| C | 0.000000965 | | |

- 66** Convert this scientific notation number to regular notation

$$2.75 \times 10^4$$

- | | | | |
|---|-----------|---|--------|
| A | 275,000 | B | 27,500 |
| C | 2,750,000 | D | 2,750 |

- 67** Convert this scientific notation number to regular notation

$$1.90 \times 10^{-8}$$

- | | |
|---|--------------|
| A | 0.000000019 |
| B | 0.0000000019 |
| C | 0.00000019 |
| D | 0.0000019 |

- 68** Convert this scientific notation number to regular notation

$$8.07 \times 10^7$$

- | | |
|---|---------------|
| A | 8,070,000,000 |
| B | 80,700,000 |
| C | 807,000,000 |
| D | 8,070,000 |

- 69** Convert this number to scientific notation

3,910

- | | | | |
|---|---------------------|---|--------------------|
| A | 3.91×10^3 | B | 0.39×10^3 |
| C | 39.10×10^3 | D | 3.91×10^4 |
| E | 3.91×10^2 | F | 3.91×10^5 |

- 70** Convert this number to scientific notation

0.00412

- | | | | |
|---|------------------------|---|-----------------------|
| A | 4.12×10^{-2} | B | 0.41×10^{-3} |
| C | 41.20×10^{-3} | D | 4.12×10^{-3} |
| E | 4.12×10^{-1} | F | 4.12×10^{-4} |

- 71** Convert this number to scientific notation

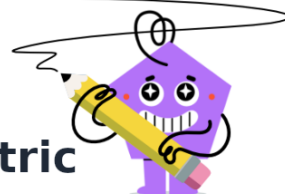
210

- | | | | |
|---|---------------------|---|--------------------|
| A | 2.10×10^3 | B | 2.10×10^4 |
| C | 2.10×10^2 | D | 0.21×10^2 |
| E | 21.00×10^2 | F | 2.10×10^1 |

- 72** Convert this number to scientific notation

0.00441

- | | | | |
|---|-----------------------|---|------------------------|
| A | 4.41×10^{-4} | B | 4.41×10^{-1} |
| C | 0.44×10^{-3} | D | 44.10×10^{-3} |
| E | 4.41×10^{-2} | F | 4.41×10^{-3} |

**Measurement - Units Advanced - Metric****73** Convert this number to scientific notation**0.00000332**

A 3.32×10^{-5}

B 3.32×10^{-7}

C 0.33×10^{-6}

D 33.20×10^{-6}

E 3.32×10^{-4}

F 3.32×10^{-6}

74 Convert this number to scientific notation**8,470,000**

A 8.47×10^5

B 8.47×10^7

C 0.85×10^6

D 84.70×10^6

E 8.47×10^6

F 8.47×10^8

75 Convert this number to scientific notation**0.000000665**

A 0.67×10^{-7}

B 6.65×10^{-7}

C 6.65×10^{-8}

D 66.50×10^{-7}

E 6.65×10^{-6}

76 Convert this number to scientific notation**33,700,000**

A 33.70×10^7

B 3.37×10^6

C 3.37×10^8

D 0.34×10^7

E 3.37×10^7

77 Convert this number in units to scientific notation**3 megameters**

A 3.00×10^9 meters

B 3.00×10^4 meters

C 3.00×10^6 meters

D 3.00×10^{11} meters

E 3.00×10^8 meters

F 3.00×10^7 meters

78 Convert this number in units to scientific notation**6 gigawatts**

A 6.00×10^7 watts

B 6.00×10^{12} watts

C 6.00×10^8 watts

D 6.00×10^3 watts

E 6.00×10^{11} watts

F 6.00×10^9 watts

79 Convert this number in units to scientific notation**3.75 centimeters**

A 3.75×10^{-5} meters

B 3.75×10^{-6} meters

C 3.75×10^{-1} meters

D 3.75×10^2 meters

E 3.75×10^{-8} meters

F 3.75×10^{-2} meters

80 Convert this number in units to scientific notation**9.89 gigacandelas**

A 9.89×10^3 candelas

B 9.89×10^9 candelas

C 9.89×10^4 candelas

D 9.89×10^{13} candelas

E 9.89×10^{12} candelas

F 9.89×10^6 candelas