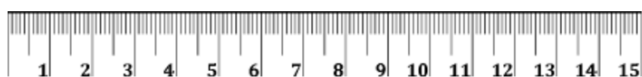


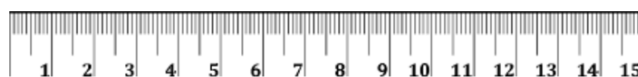
Measurement - Units Practice - Metric

- 1** Measure the length of the pencil using the centimeter ruler



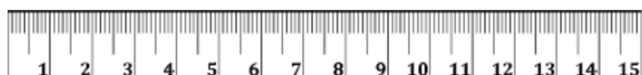
A	8.5 cm	B	6 cm	C	5 cm
D	9 cm	E	7 cm	F	5.5 cm

- 2** Measure the length of the crayon in millimeters using the centimeter ruler



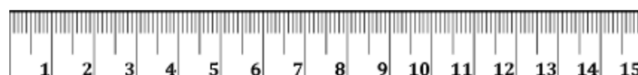
A	75 mm	B	40 mm	C	15 mm
D	25 mm	E	30 mm	F	45 mm

- 3** Measure the length of the crayon in millimeters using the centimeter ruler



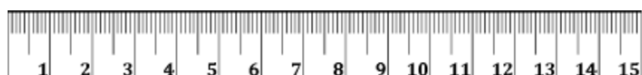
A	50 mm	B	65 mm	C	30 mm
D	75 mm	E	10 mm	F	90 mm

- 4** Measure the length of the crayon in millimeters using the centimeter ruler



A	30 mm	B	50 mm	C	15 mm
D	5 mm	E	20 mm	F	60 mm

- 5** Measure the length of the pencil in millimeters using the centimeter ruler



A	105 mm	B	20 mm	C	55 mm
D	70 mm	E	60 mm	F	110 mm

- 6** Use the mnemonic 'King Henry Died by Drinking Chocolate Milk' to remember the missing prefix

King	kilo	1000
Henry	?	100
Died	deca	10
by	(base)	1
Drinking	deci	0.1
Chocolate	centi	0.01
Milk	milli	0.001

A	B	C
kilo	milli	hecto
D	E	F
deca	centi	deci

- 7** Each prefix in the mnemonic 'King Henry Died by Drinking Chocolate Milk' is 10x smaller. What is the missing factor?

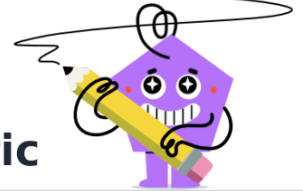
King	kilo	1000
Henry	hecto	100
Died	deca	10
by	(base)	?
Drinking	deci	0.1
Chocolate	centi	0.01
Milk	milli	0.001

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

- 8** What is the abbreviation for 'deci'?

kilo	k	1000	10^3
hecto	h	100	10^2
deca	da	10	10^1
(base)		1	10^0
deci	?	0.1	10^{-1}
centi	c	0.01	10^{-2}
milli	m	0.001	10^{-3}

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



Measurement - Units Practice - Metric

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

kilo	k	1000	10^3
hecto	h	100	10^2
deca	da	10	10^1
(base)		1	10^0
?	d	0.1	10^{-1}
centi	c	0.01	10^{-2}
milli	m	0.001	10^{-3}

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

10 What is the multiplication factor for 'deci'?

kilo	k	1000	10^3
hecto	h	100	10^2
deca	da	10	10^1
(base)		1	10^0
deci	d	?	10^{-1}
centi	c	0.01	10^{-2}
milli	m	0.001	10^{-3}

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

11 What is the abbreviation for this prefix?

(base)

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

12 What is the multiplication factor for this prefix?

kilo

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

13 What is the prefix for this abbreviation?

c (ie cg, cm)

A	centi	B	milli	C	kilo
D	deci	E	deca	F	hecto

14 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	10^1
by	(base)	10^0
Drinking	deci	10^{-1}
Chocolate	centi	10^{-2}
Milk	milli	?

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

15 What is the multiplication factor for this abbreviation?

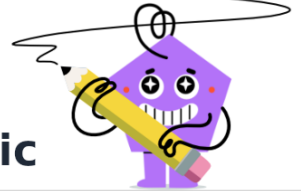
m (ie mg, mm)

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

16 What is the power of 10 for this prefix?

(base)

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

**Measurement - Units Practice - Metric****17** What is the abbreviation for this multiplication factor?**10**

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

18 Which unit is larger**'h' (ie hg) or 'k' (ie kg)**

A	k	B	h
---	---	---	---

19 What is the prefix for this multiplication factor?**0.001**

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

20 Which prefix is larger**'deca' or 'hecto'**

A	deca	B	hecto
---	------	---	-------

21 Which unit is smaller**'(base)' (ie g) or 'd' (ie dg)**

A	d	B	(base)
---	---	---	--------

22 Convert this value to meters**1 mm**

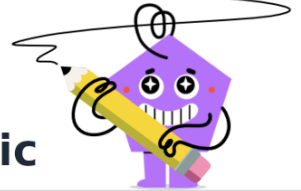
A	0.000001 m	B	0.01 m
C	0.001 m	D	1 m
E	0.1 m	F	0.00001 m

23 Convert this value to liters**1 dl**

A	10 l	B	0.1 l
C	0.0001 l	D	0.01 l
E	100 l	F	1 l

24 Which prefix is smaller**'milli' or 'centi'**

A	milli	B	centi
---	-------	---	-------

**Measurement - Units Practice - Metric****25** Convert this value to grams**1 kg**

A 100 g	B 100,000 g
C 10,000 g	D 1 g
E 1,000 g	F 1,000,000 g

26 Convert this value to decameters**10 m**

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

27 Convert this value to liters**1 kl**

A 1,000,000 l	B 100,000 l
C 10,000 l	D 1,000 l
E 10 l	F 1 l

28 Convert this value to grams**1 dag**

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

29 Convert this value to millimeters**1 hm**

A 10,000,000 mm	B 1,000,000 mm
C 100,000,000 mm	D 100,000 mm
E 100 mm	F 1,000 mm

30 Convert this value to milliliters**1 kl**

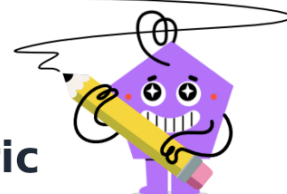
A 10,000,000 ml	B 1,000,000,000 ml
C 1,000,000 ml	D 1,000 ml
E 10,000 ml	F 100,000,000 ml

31 Convert this value to milligrams**1 kg**

A 1,000,000 mg	B 1,000,000,000 mg
C 100,000 mg	D 10,000 mg
E 1,000 mg	F 100,000,000 mg

32 Convert this value to decameters**1 mm**

A 0.0000001 dam	B 0.001 dam
C 0.000001 dam	D 0.00001 dam
E 0.0001 dam	F 0.1 dam

**Measurement - Units Practice - Metric****33** Convert this value to hectoliters**1 dl**

A	1 hl	B	0.0001 hl
C	0.01 hl	D	0.00001 hl
E	0.1 hl	F	0.001 hl

34 Convert this value to kilograms**1 cg**

A	0.001 kg	B	0.00000001 kg
C	0.00001 kg	D	0.000001 kg
E	0.01 kg	F	0.000000001 kg

35 Convert this value to centimeters**10 mm**

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

36 Convert this value to milliliters**1 hl**

A	1,000,000 ml	B	10,000 ml
C	10,000,000 ml	D	100 ml
E	100,000,000 ml	F	100,000 ml

37 Convert this value to hectograms**1 kg**

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

38 What is the power of 10 for this abbreviation?**c (ie cg, cm)**

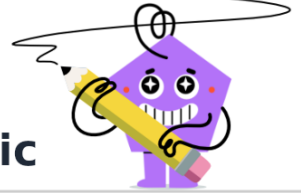
A	10^{-2}	B	10^0
C	10^2	D	10^{-1}
E	10^3	F	10^{-3}

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

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

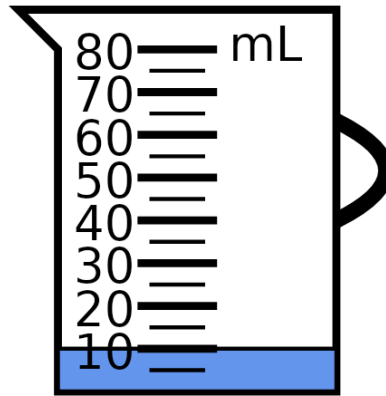
40 What is the abbreviation for this power of 10? 10^{-2}

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



Measurement - Units Practice - Metric

41 Measure the volume of water in the measuring cup



A 20 mL

B 10 mL

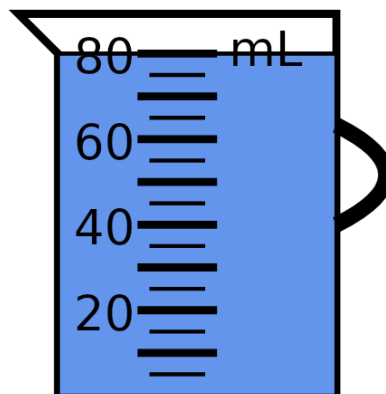
C 35 mL

D 0 mL

E 15 mL

F 25 mL

42 Measure the volume of water in the measuring cup



A 100 mL

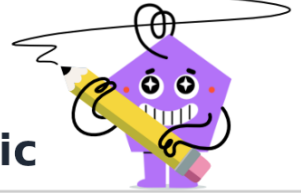
B 105 mL

C 80 mL

D 95 mL

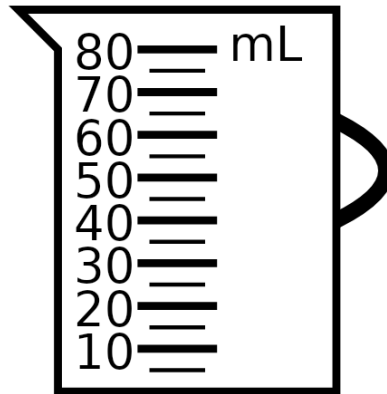
E 65 mL

F 50 mL



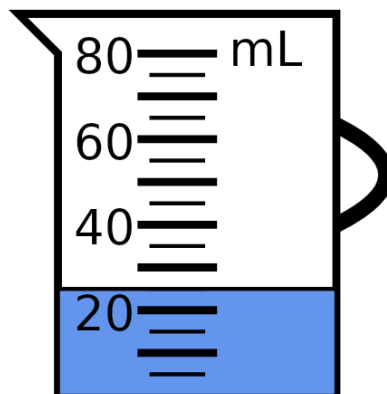
Measurement - Units Practice - Metric

43 Measure the volume of water in the measuring cup

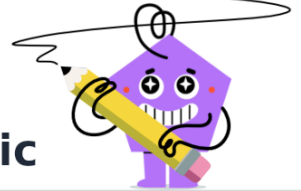


A	25 mL	B	15 mL
C	10 mL	D	20 mL
E	0 mL	F	5 mL

44 Measure the volume of water in the measuring cup



A	25 mL	B	15 mL
C	10 mL	D	0 mL
E	20 mL	F	45 mL



Measurement - Units Practice - Metric

45 What is the prefix for this power of 10?

$$10^{-2}$$

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

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

$$10^2$$

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

47 What is the abbreviation for 'pico'?

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

A	(base)	B	n
C	m	D	p
E	μ		

48 Use the mnemonic 'Terribly Gigantic Monsters Killed One Million Men Napping Peacefully' to remember the missing prefix

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

(base)	B giga
C nano	D milli
E mega	F tera

49 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	10^{-3}
Men	micro	10^{-6}
Napping	nano	?
Peacefully	pico	10^{-12}

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

50 What is the prefix that is abbreviated 'n'?

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

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

51 What is the abbreviation for 'giga'?

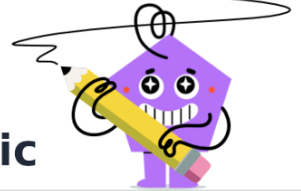
tera	T	10^{12}
giga	?	10^9
mega	M	10^6
kilo	k	10^3
(base)		10^0

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

52 What is the exponent for 'milli'?

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

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

**Measurement - Units Practice - Metric****53** Which unit is smaller**'n' (ie ng) or 'μ' (ie μg)**

A

 μ

B

n

54 What is the prefix that is abbreviated 'M'?

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

A

kilo

B

mega

C

giga

D

tera

E

(base)

55 Which prefix is smaller**'pico' or 'nano'**

A

pico

B

nano

56 What is the exponent for 'kilo'?

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

A

 10^0

B

 10^{12}

C

 10^6

D

 10^3

E

 10^9 **57** Which unit is larger**'M' (ie Mg) or 'k' (ie kg)**

A

M

B

k

58 Which prefix is larger**'tera' or 'giga'**

A

tera

B

giga

59 Multiply these numbers **1.1×10**

A

11

B

1,100

C

110

D

0.1

E

1.1

60 Multiply these numbers **1.1×100**

A

11

B

110

C

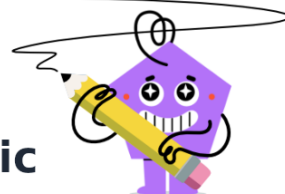
11,000

D

1.1

E

1,100

**Measurement - Units Practice - Metric**

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

$$8 \times 10^{-2}$$

A	8	B	0.08
C	0.008	D	0.8

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

$$4 \times 10^1$$

A	400	B	4,000
C	40	D	4

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

$$3 \times 10^5$$

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

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

$$1 \times 10^{-3}$$

A	0.1	B	0.0001
C	0.01	D	0.001

- 65** Convert this number to scientific notation

0.005

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

- 66** Convert this number to scientific notation

90

A	9×10^3	B	90×10^1
C	1×10^1	D	9×10^2
E	9×10^1	F	9×10^0

- 67** Convert this number to scientific notation

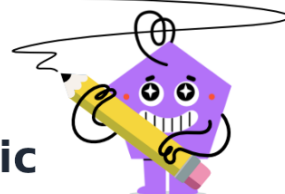
0.006

A	6×10^{-1}	B	6×10^{-2}
C	60×10^{-3}	D	6×10^{-3}
E	6×10^{-4}	F	1×10^{-3}

- 68** Convert this number to scientific notation

500

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

**Measurement - Units Practice - Metric**

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

$$7.7 \times 10^{-2}$$

A	0.0077	B	7.7
C	0.77	D	0.077

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

$$9.2 \times 10^1$$

A	9.2	B	920
C	92		

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

$$5.0 \times 10^{-4}$$

A	0.05	B	0.005
C	0.00005	D	0.0005

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

$$5.8 \times 10^5$$

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

- 73** Convert this number to scientific notation

64

A	6.4×10^3	B	0.6×10^1
C	6.4×10^1	D	64.0×10^1
E	6.4×10^0	F	6.4×10^2

- 74** Convert this number to scientific notation

0.074

A	7.4×10^0	B	7.4×10^{-1}
C	7.4×10^{-3}	D	7.4×10^{-2}
E	74.0×10^{-2}	F	0.7×10^{-2}

- 75** Convert this number to scientific notation

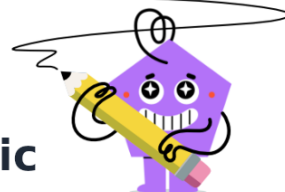
950,000

A	9.5×10^4	B	1.0×10^5
C	9.5×10^7	D	95.0×10^5
E	9.5×10^5	F	9.5×10^6

- 76** Convert this number to scientific notation

0.000096

A	9.6×10^{-3}	B	96.0×10^{-5}
C	1.0×10^{-5}	D	9.6×10^{-5}
E	9.6×10^{-6}		

**Measurement - Units Practice - Metric**

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

$$4.13 \times 10^{-3}$$

- | | |
|--------------|---------------|
| A
0.00413 | B
0.000413 |
| C
0.0413 | D
0.413 |

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

$$3.80 \times 10^3$$

- | | |
|--------------|------------|
| A
38,000 | B
3,800 |
| C
380,000 | D
380 |

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

$$9.33 \times 10^4$$

- | | |
|--------------|----------------|
| A
933,000 | B
9,330 |
| C
93,300 | D
9,330,000 |

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

$$3.09 \times 10^{-4}$$

- | | |
|----------------|---------------|
| A
0.0000309 | B
0.000309 |
| C
0.00309 | D
0.0309 |