



# Why Do We Count in Tens?

NAME: .....

CLASS: .....

DATE: .....



## Basic

### 1) Place Value Space Invaders

The digits in the number **81234.5796** are "aliens".

a) Enter the number into your calculator.

b) Try to exterminate each "alien" by subtracting each digit, one by one.

**Rule:** You must exterminate them one by one and in order.

Thus start with 1, then 2, and so on, until you have 0 on your display.

Write down the key presses required in the grid below.

Key Press	Display
	81234.5796
-1000	80234.5796 (1 down)

2) Find the factors of the following numbers:

a) 12

b) 10

c) 18

d) 24

e) 13

Which of the above numbers are prime?



# Why Do We Count in Tens?

## Basic

3) In the following list of numbers: 10, 4, 23, 18, 65, 33, 22, 21

a) Which are multiples of 2?

b) Which are multiples of 3?

4) Find the first four multiples of the following numbers:

a) 4

b) 5

c) 8

d) 15

e) 20

5) Work out these totals (you will have to convert some measurements first):

a)  $47.2\text{cm} + 13\text{cm}$

b)  $56.2\text{cm} + 3.7\text{cm}$

c)  $123\text{mm} + 12.3\text{cm}$



# Why Do We Count in Tens?

NAME: .....

CLASS: .....

DATE: .....



## Core

1) Find the factors of the following numbers:

a) 12

b) 10

c) 18

d) 24

e) 13

Which of the above numbers are prime?

2) In the following list of numbers: 10, 4, 23, 18, 65, 33, 22, 21

a) Which are multiples of 2?

b) Which are multiples of 3?

3) Find the first four multiples of the following numbers:

a) 4

b) 5

c) 8

d) 15

e) 20

4) Multiply the following by 10, 100 and 1000:

a) 1.7

b) 0.06

c) 124

d) 21.93

e) 25.64



# Why Do We Count in Tens?

## Core

5) Divide the following by 10 and 100:

a) 123

b) 23.8

c) 20

d) 23.45

e) 1234.234

6) Work out these totals (you will have to convert some measurements first):

a)  $47.2\text{cm} + 13\text{cm}$

b)  $56.2\text{cm} + 3.7\text{cm}$

c)  $123\text{mm} + 12.3\text{cm}$

d)  $4.1\text{cm} + 139\text{mm}$

e)  $23.5\text{cm} + 346\text{mm}$

f)  $347\text{mm} + 10\text{cm}$

7) Five friends measure their heights: John is 1.54m, Mark is 139cm, Gemma is 162cm, Kasim is 1.2m and Alex is 1.65m. What is their combined height?

8) A plank of wood is 2.4m long. A 126cm piece is cut off. What is the length of the remaining piece, in metres?

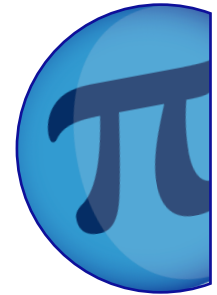


# Why Do We Count in Tens?

NAME: .....

CLASS: .....

DATE: .....



## Advanced

1) Find the factors of the following numbers:

a) 12

b) 10

c) 18

d) 24

e) 13

Which of the above numbers are prime?

2) Find the first four multiples of the following numbers

a) 4

b) 5

c) 8

d) 15

e) 20

3) Multiply the following by 10, 100 and 1000:

a) 1.7

b) 0.06

c) 124

d) 21.93

e) 25.64

4) Divide the following by 10 and 100:

a) 123

b) 23.8

c) 20

d) 23.45

e) 1234.234



# Why Do We Count in Tens?

## Advanced

5) Work out these totals (you will have to convert some measurements first):

a)  $47.2\text{cm} + 13\text{cm}$

b)  $56.2\text{cm} + 3.7\text{cm}$

c)  $123\text{mm} + 12.3\text{cm}$

d)  $4.1\text{cm} + 139\text{mm}$

e)  $23.5\text{cm} + 346\text{mm}$

f)  $347\text{mm} + 10\text{cm}$

6) Five friends measure their heights: John is 1.54m, Mark is 139cm, Gemma is 162cm, Kasim is 1.2m and Alex is 1.65m. What is their combined height?

7) A plank of wood is 2.4m long. A 126cm piece is cut off. What is the length of the remaining piece, in metres?

8) Complete the following table using base 60 as the base system.

Base 10 Number	3600s (60 x 60)	60s	Units
73		1	13
345			
1230			
6000			
5600			



# Why Do We Count in Tens?

## ANSWERS

### Basic

1)

Key Press	Display
	81234.5796
-1000	80234.5796 (1 down)
-200	80034.5796
-30	80004.5796
-4	80000.5796
-0.5	80000.0796
-0.0006	80000.079
-0.07	80000.009
-80000	0.009
-0.009	0

2) a) 1, 2, 3, 4, 6, 12  
d) 1, 2, 3, 4, 6, 8, 12, 24

b) 1, 2, 5, 10  
e) 1, 13 (prime)

c) 1, 2, 3, 6, 9, 18

3) a) 4, 10, 18, 22

b) 18, 21, 33

4) a) 4, 8, 12, 16  
d) 15, 30, 45, 60

b) 5, 10, 15, 20  
e) 20, 40, 60, 80

c) 8, 16, 24, 32

5) a) 60.2cm

b) 59.9cm

c) 24.6cm

### Core

1) a) 1, 2, 3, 4, 6, 12  
d) 1, 2, 3, 4, 6, 8, 12, 24

b) 1, 2, 5, 10  
e) 1, 13 (prime)

c) 1, 2, 3, 6, 9, 18

2) a) 4, 10, 18, 22

b) 18, 21, 33

3) a) 4, 8, 12, 16

b) 5, 10, 15, 20

c) 8, 16, 24, 32

d) 15, 30, 45, 60

e) 20, 40, 60, 80

4) a) 17; 170; 1700  
d) 219.3; 2193; 21,930

b) 0.6; 6; 60  
e) 256.4; 2564; 25,640

c) 1240; 12,400; 124,000

5) a) 12.3; 1.23

b) 2.38; 0.238

c) 2; 0.2

d) 2.345; 0.2345

e) 123.4234; 12.34234

6) a) 60.2cm

b) 59.9cm

c) 24.6cm

d) 18cm

e) 58.1cm

f) 44.7cm

7) 7.4m

8) 1.14m



# Why Do We Count in Tens?

## ANSWERS

### Advanced

1) a) 1, 2, 3, 4, 6, 12  
d) 1, 2, 3, 4, 6, 8, 12, 24

b) 1, 2, 5, 10  
e) 1, 13 (prime)

c) 1, 2, 3, 6, 9, 18

2) a) 4, 8, 12, 16  
d) 15, 30, 45, 60

b) 5, 10, 15, 20  
e) 20, 40, 60, 80

c) 8, 16, 24, 32

3) a) 17; 170; 1700  
d) 219.3; 2193; 21,930

b) 0.6; 6; 60  
e) 256.4; 2564; 25,640

c) 1240; 12,400; 124,000

4) a) 12.3; 1.23  
d) 2.345; 0.2345

b) 2.38; 0.238  
e) 123.4234; 12.34234

c) 2; 0.2

5) a) 60.2cm  
d) 18cm

b) 59.9cm  
e) 58.1cm

c) 24.6cm  
f) 44.7cm

6) 7.4m

7) 1.14m

8)

Base 10 Number	3600s (60 x 60)	60s	Units
73		1	13
345		5	45
1230		20	30
6000	1	40	0
5600	1	33	20