

# April 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30



## Calendar Conundrum

There is a problem with the classroom printer and it only prints some of the numbers on the April calendar. Can you help by filling in the missing numbers?

	12	

		8

	25	

16		

		19

	27	

4		

		15

13		

		29



# Calendar Conundrum

There is a problem with the classroom printer and it only prints some of the numbers on the April calendar. Can you help by filling in the missing numbers?













# Calendar Conundrum Solution

4	5	6
	12	

6		8
13	14	15

16		19
	24	25

2		4
9	10	11
16		18

10		12
17		19
	25	

12	13	14
19		
26	27	28

4		6
	12	
18		20

13		15
20		22
27	28	29

6	7	8
13		15
20		22

9			13		
	17		19		21
		25			29



Now try listing your own co-ordinates for '2016':

- There are four digits so you will need four colours.
- Decide how many squares you will need for letter height and width.
- Try it out with a pencil first.
- List your co-ordinates in the table below.
- Give it to a friend to colour for you.
- Compare the results with your instructions. Did it work out? Why / Why not?

7																	
6																	
5																	
4																	
3																	
2																	
1																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		

Colour in _____:	Colour in _____:	Colour in _____:	Colour in _____:
▪	▪	▪	▪
▪	▪	▪	▪
▪	▪	▪	▪
▪	▪	▪	▪
▪		▪	▪

# April 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				<b>Start</b>	<b>1</b>	<b>2</b>
<b>3</b>	<b>4</b> <small>Back to School!</small>	<b>5</b>	<b>6</b> ▲	<b>7</b>	<b>8</b>	<b>9</b>
<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b> ★
<b>17</b> ★	<b>18</b>	<b>19</b> ▲	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>
<small>Census Date</small> <b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b> ▲
<b>Finish</b>						

# Census Board Game

## Game 1

Game: 2 players

You will need: Census game-board, one six-sided die, counters of two different colours

### How to play:

1. Decide who will start by allowing each player to throw a die. The player with the highest number begins.
2. To start play, Player 1 rolls the die and moves that number of spaces e.g. roll a six - move six spaces.
3. If a player lands on a space with a star, this player takes another turn.
4. If a player lands on a space with a triangle, this player misses a turn.
5. The first player to reach the finish line or to land exactly on CENSUS DATE i.e. 24<sup>rd</sup> April is the winner.

### Challenge:

Encourage children to invent their own rules for the Census Game.



# Census Board Game

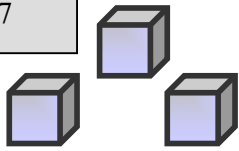
## Game 2

Game: 2 players

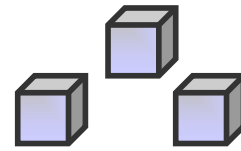
You will need: Census game-board, one six-sided die, counters of two different colours

### How to play:

1. Decide who will start by allowing each player to throw a die. The player with the highest number begins.
2. To start play, Player 1 rolls the die and moves that number of spaces e.g. roll a six - move six spaces.
3. Player 1 checks if the number in the space he/she has landed on is odd or even.
4. Player 1 rolls the die again. If the number in the space is odd and the player has rolled an odd number, he/she can move that number of spaces. If the number in the space is even and the player has rolled an even number, he/she can move that number of spaces. If the roll of the die and the number in the space do not match, the die is given to Player 2.
5. Player 2 takes a turn.
6. The first player to reach the finish line or to land exactly on CENSUS DATE i.e. 24<sup>rd</sup> April is the winner.

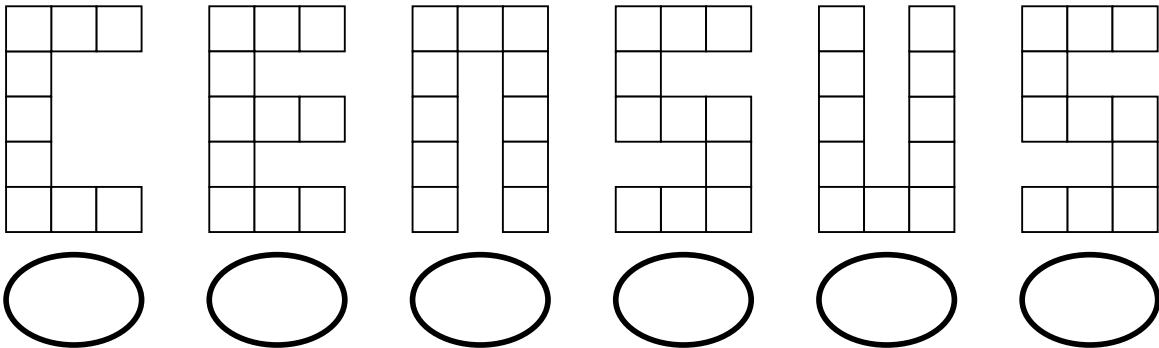


# Census Cubes



*A group of children used interlocking cubes to make the word **Census**.*

Can you figure out how many cubes were used to make each letter?  
This number is its volume.



The number of faces that can be seen and counted from the outside of each letter is its surface area.

Look at the letter C. How many faces can you see? \_\_\_\_\_

Use interlocking cubes if you need help.

The answer is 31.

See if you can work out the surface area of the following letters:

**E** :

**N** :

**S** :

**U** :

What is the total volume of the word 'Census'?

What is the total surface area of the word 'Census'?

## Brain Strain

How many more cubes would you need to make each letter a cuboid?

**C** :

**E** :

**N** :

**S** :

**U** :

## Draw and Construct

Look at the letter E.

Draw what you would see:

- \* if you looked down on the letter
- \* looked from the side
- \* looked from the back

Use interlocking cubes to construct the census month April.

Can you find the volume / surface area of each letter?

The census of population will be held on Sunday, 24<sup>th</sup> April 2016.

## Let's investigate the Magic Number 24.



- \* Is 24 an odd or an even number? \_\_\_\_\_
- \* How many digits in the number 24? \_\_\_\_\_
- \* List the factors of 24: \_\_\_\_\_
- \* How many addition facts can you list giving a total of 24?


- \* What months have 24 days? \_\_\_\_\_
- \* What do you know about the number 24? \_\_\_\_\_
- \* Can you count in 24's? \_\_\_\_\_
- \* What is half of 24? \_\_\_\_\_ Double 24? \_\_\_\_\_ Quarter of 24? \_\_\_\_\_
- \* How many people in the class have birthdays on the 24<sup>th</sup>? \_\_\_\_\_
- \* Let's try a number trick. Write the number 24 on a piece of paper. This is number one.
- \* Reverse the number 24. This is number two.
- \* Now add number one and two together. What is your total? \_\_\_\_\_
- \* Take the number 24 again. Add the digits of 24. What did you get? \_\_\_\_\_
- \* Multiply this answer by 24. The answer was \_\_\_\_\_.
- \* Compare the first and second answer. What do you notice?
- \* Try this with some more two-digit numbers.

# Census Puzzle

Read the number sentence in each box below.  
Colour only the boxes with an answer of 24.



$14+10$	$30-6$	$15+9$	$24+5$	$5+14+5$	$43-20$	$16+9$	$15+4$
$9+9$	$3+7$	$9+15$	$20-7$	$31-7$	$8+8$	$0+24$	$23-7$
$34-10$	$2+19+3$	$28-4$	$16+2$	$19+5$	$12+12$	$20+4$	$30-6$
$17+7$	$24-6$	$12-9$	$42+1$	$16-15$	$9-6$	$18+6$	$15+4$
$6+12+6$	$29-5$	$14+6+4$	$24+0$	$21+2$	$2+19+2$	$27-3$	$20+9$

What do you notice about the colour pattern you have made?

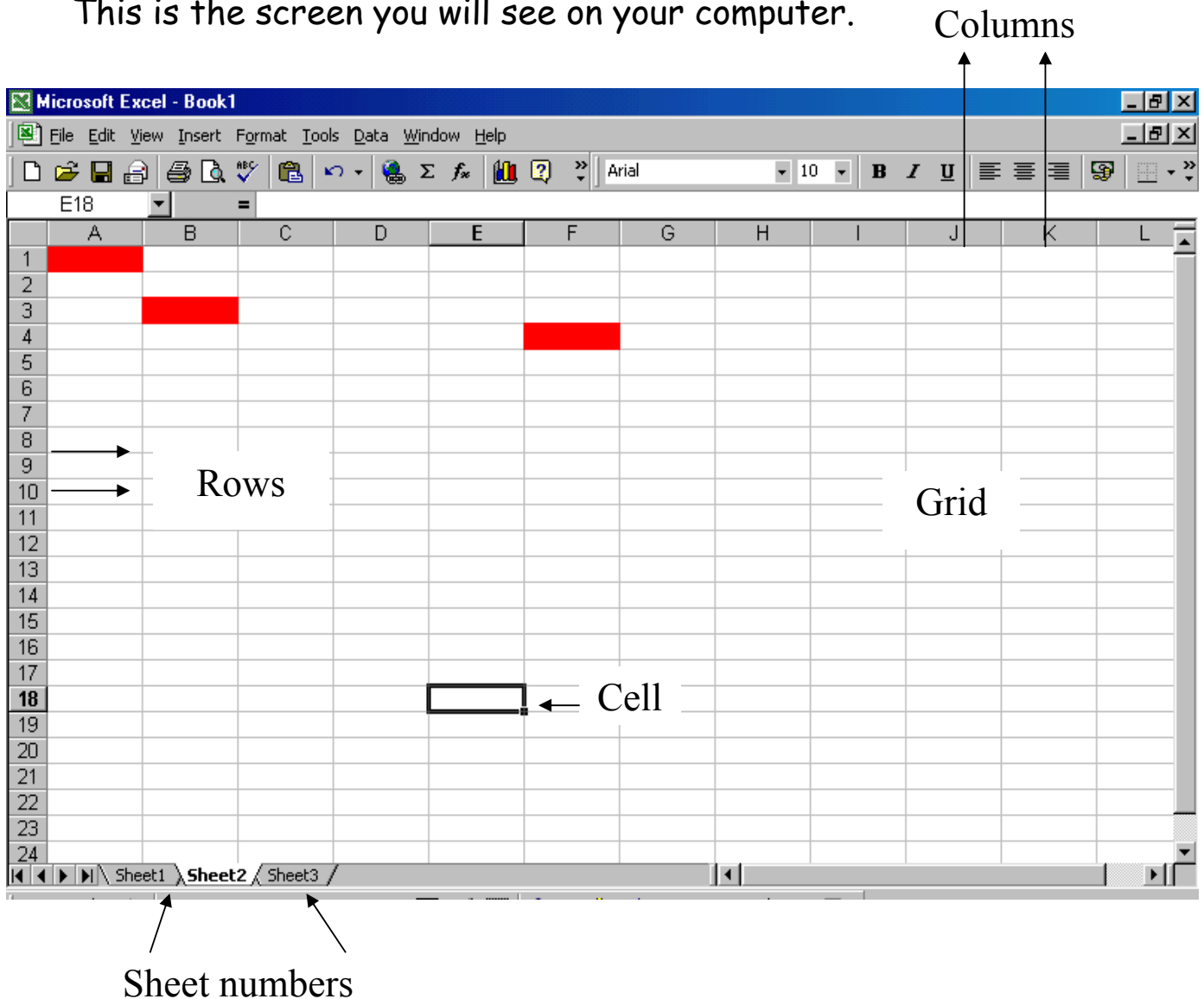
The answer is 24 but what is the question? Make some new number sentences of your own to make this magic number:

# Creating Graphs on the Computer

Use a program called Microsoft Excel

- 📁 Click on Start
- 📁 Click on Programs
- 📁 Click on Microsoft Excel ... wait for the program to open...

This is the screen you will see on your computer.



Take some time to explore this screen:

- 📁 Can you find the rows / columns?
- 📁 The entire sheet looks like a table / grid and each little box is called a cell.

Let's create a graph using some of the data collected in the Classroom Census e.g.

*Do you have a computer at home?*



The number of people who have a computer is \_\_\_\_\_

The number of people who do not have a computer is \_\_\_\_\_

To create a graph

✚ Click into Cell A1 on the spreadsheet and type the word 'Computer'

✚ Click into Cell B1 and type in the number of children in the class that have a computer

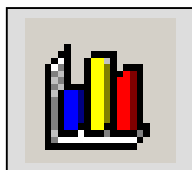
✚ Click in to Cell A2 on the spreadsheet and type the words 'No Computer'

✚ Click into Cell B2 and type in the number of children in the class that have a computer

Now that you have all the data entered into the computer, it is time to create the graph

✚ Highlight the data you want to use for the graph.

Click on the 'Chart Wizard' button at the top of the screen.



This wizard will guide you through all the steps you will need to make a graph on the computer

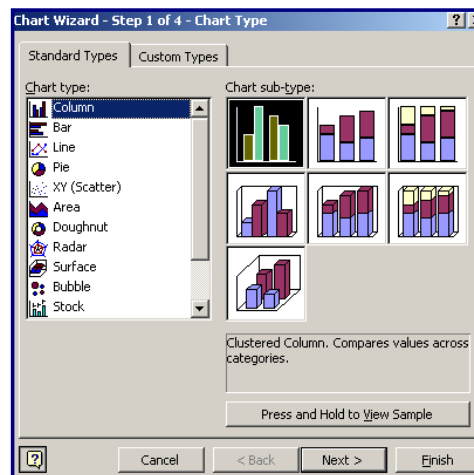


## Step 1:

✚ Choose the type of graph you want the computer to create e.g. column graph, bar chart, pie-chart...

✚ Use the 'Press and Hold to View Sample' button to see the graph drawn

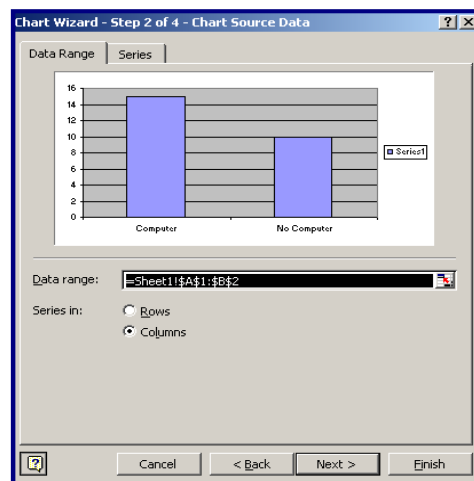
✚ Then click on **Next**



## Step 2:

✚ You will see the data you have chosen for you graph represented here

✚ Click on **Next**



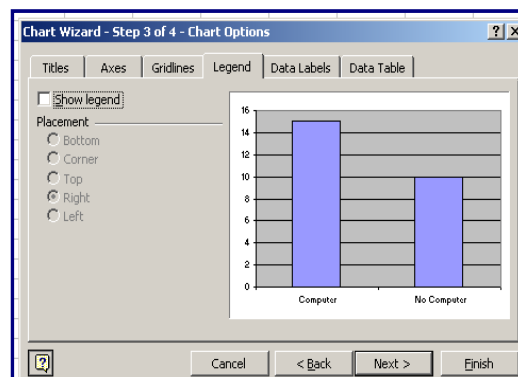
## Step 3:

✚ This step provides you with Chart Options

✚ Click on **Titles** if you would like to put a title on the graph

✚ Click on the **Legend** tab and make sure the Show **Legend** box is empty

✚ Click on **Next**

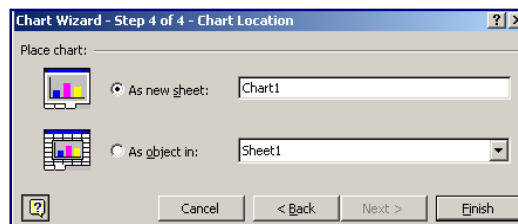


## Step 4:

✚ This step shows where the chart will be located

✚ Click on **As New Sheet**

✚ Click on **Finish**



# Fractured Fractions

1. Middle $\frac{3}{5}$ of <b>OTHER</b>	2. First $\frac{3}{5}$ of <b>KNOCK</b>
3. Last $\frac{1}{6}$ of <b>WINDOW</b>	4. First $\frac{2}{9}$ of <b>LETTERBOX</b>
5. First $\frac{2}{8}$ of <b>DATA</b>	6. Last $\frac{1}{8}$ of <b>DWELLING</b>
7. First $\frac{1}{10}$ of <b>ENUMERATOR</b>	8. First $\frac{1}{4}$ of <b>TOGETHER</b>
9. First $\frac{1}{2}$ of <b>BUSY</b>	10. Last $\frac{3}{5}$ of <b>CHILD</b>
11. First $\frac{6}{10}$ of <b>YOUTH</b>	12. First $\frac{1}{7}$ of <b>RESPOND</b>
13. First $\frac{2}{10}$ of <b>FORMS</b>	14. Second $\frac{1}{6}$ of <b>SURVEY</b>
15. Middle $\frac{1}{3}$ of <b>RETURN</b>	16. First $\frac{5}{10}$ of <b>READ</b>

*Decode the Message!*

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## **Fractured Fractions – Solution**

*The Knowledge to Build your Future*

Middle  $\frac{3}{5}$  of OTHER = T H E

First  $\frac{3}{5}$  of KNOCK = K N O

Last  $\frac{1}{6}$  of WINDOW = W

First  $\frac{2}{9}$  of LETTERBOX = L E

First  $\frac{2}{8}$  of DATA = D

Last  $\frac{1}{8}$  of DWELLING = G

First  $\frac{1}{10}$  of ENUMERATOR = E

First  $\frac{1}{4}$  of TOGETHER = T O

First  $\frac{1}{2}$  of BUSY = B U

Last  $\frac{3}{5}$  of CHILD = I L D

First  $\frac{6}{10}$  of YOUTH = Y O U

First  $\frac{1}{7}$  of RESPOND = T

First  $\frac{2}{10}$  of FORMS = F

Second  $\frac{1}{6}$  of SURVEY = U

Middle  $\frac{1}{3}$  of RETURN = T U

First  $\frac{5}{10}$  of READ = R E



# Words of Wonder



F	O	R	M	E	L	B	R	A	I	L	L	E	O	F
C	R	O	T	A	R	E	M	U	N	E	L	R	E	F
I	P	O	P	U	L	A	T	I	O	N	A	N	D	I
I	N	D	U	S	T	R	Y	Y	R	T	I	A	U	C
T	A	F	B	S	D	I	E	C	E	I	T	C	C	E
N	T	U	O	A	U	V	T	G	S	R	N	S	A	N
E	I	N	T	R	R	S	A	S	O	E	E	C	T	A
M	O	A	E	U	M	U	N	G	U	L	D	I	I	S
N	N	C	S	M	G	A	N	E	R	A	I	T	O	U
R	A	R	O	N	Y	I	T	A	C	N	F	S	N	O
E	L	N	A	U	L	O	T	I	E	D	N	I	L	H
V	M	L	E	L	N	S	L	S	O	A	O	T	I	T
O	T	R	E	N	D	T	T	P	P	N	C	A	R	O
G	R	W	C	E	C	O	N	O	M	Y	I	T	P	W
A	D	S	N	T	R	A	L	I	R	E	L	S	A	T

Can you find and shade the following words in different colours using colouring pencils?

- |            |            |            |             |              |
|------------|------------|------------|-------------|--------------|
| Rate       | National   | Braille    | Count       | Data         |
| Scan       | Government | Trend      | Education   | Language     |
| April      | Census     | Economy    | Information | Confidential |
| Dwelling   | Survey     | Statistics | Industry    | Enumerator   |
| Population | Resource   | Employment | Form        | Ireland      |

Put the above words in alphabetical order.


**You must now find the magic number.**

The following code must be used:

'A' words = 1

'B' words = 2

'C' words = 3 .....

## Challenge!



- Count the number of A words, B words, C words.... that are on your list.
- If you have 5 A-words then you must write the number sentence  $5 \times 1 = 5$
- If you have 3 B-words, then you must write the number sentence  $3 \times 2 = 6$

When you have finished all your number sentences, add the totals to find the magic number!

# Solution

## Alphabetical order

April	Data	Enumerator	Ireland	Resource
Braille	Dwelling	Form	Language	Scan
Census	Economy	Government	National	Statistics
Confidential	Education	Industry	Population	Survey
Count	Employment	Information	Rate	Trend

## Magic Number

Number of Words	Number Sentence	Total
1 A word	$1 \times 1 = 1$	1
1 B word	$1 \times 2 = 2$	2
3 C words	$3 \times 3 = 9$	9
2 D words	$2 \times 4 = 8$	8
4 E words	$4 \times 5 = 20$	20
1 F word	$1 \times 6 = 6$	6
3 I words	$3 \times 8 = 24$	24
1 L word	$1 \times 12 = 12$	12
1 N word	$1 \times 14 = 14$	14
1 P word	$1 \times 16 = 16$	16
2 R words	$2 \times 18 = 36$	36
3 S words	$3 \times 19 = 57$	57
1 T word	$1 \times 20 = 20$	20
Magic Number = 225		

## Word Search

F	O	R	M	E	L	B	R	A	I	L	L	E	O	F
C	R	O	T	A	R	E	M	U	N	E	L	R	E	F
I	P	O	P	U	L	A	T	I	O	N	A	N	D	I
I	N	D	U	S	T	R	Y	Y	R	T	I	A	U	C
T	A	F	B	S	D	I	E	C	E	I	T	C	C	E
N	T	U	O	A	U	V	T	G	S	R	N	S	A	N
E	I	N	T	R	R	S	A	S	O	E	E	C	T	A
M	O	A	E	U	M	U	N	G	U	L	D	I	I	S
N	N	C	S	M	G	A	N	E	R	A	I	T	O	U
R	A	R	O	N	Y	I	T	A	C	N	F	S	N	O
E	L	N	A	U	L	O	T	I	E	D	N	I	L	H
V	M	L	E	L	N	S	L	S	O	A	O	T	I	T
O	T	R	E	N	D	T	T	P	P	N	C	A	R	O
G	R	W	C	E	C	O	N	O	M	Y	I	T	P	W
A	D	S	N	T	R	A	L	I	R	E	L	S	A	T