

## Lesson One

### Theme

Census

### Key Messages

- The census is a very important source of information on our country.
- Facts and figures provided by the census are essential for planning for the future

### Objectives

That the child will be enabled to understand:

- what the census is and why the census is conducted
- how the census is conducted
- what information is collected
- how census data can be used

### Follow-Up Activities

- Words of Wonder
- Brain Teasers

### Integration/Linkage

- **Maths:** Number –Problem Solving
- **English:** Oral Language / Vocabulary Development

## Teacher's Notes

### Talk and Discussion

- Ask the children if they can explain the meaning of the word 'data'. Explain to the children that data is information (facts and figures) that can be used to solve a problem. It may be data that one has collected (primary data) or it may be information that one is given by another (secondary data) e.g. list of dates of birth of children in the school, list of Mathematics test results.... Data handling and statistics are usually presented in graphical, diagrammatic and pictorial form.
- Discuss with the children the data that is collected in the classroom use e.g. attendance, test results, library record updates, collection of money for tours etc..
- Talk to the children about the roll of attendance. Ask the children what information/data is entered in the roll book – name of pupil, date of birth, address, identification or enrolment number, attendance ... In the past the occupation of the father was also entered and this can give a lot of information about industries, farming etc. in the area. Have you any old roll books in your school that the children could look at?
- Elicit from the children how this data may be of use – for the class teacher/principal to keep track of attendance, to show pupil's progress through primary school, to plan for staff – class teachers/classroom assistants, for examination by Department of Education inspectors and School Attendance Officers, to provide enrolment figures for second level schools /records for historical interest...

- Explain to the children that in the same way as the teacher calls the roll each morning, the government also holds an official count of the population of a country. Ask the children if they know what this count is called and how often it is held (Census / Every five years).
- Give the children the opportunity to share their knowledge and experience of the census with the class.

*The following information on the Census could then be shared with the children:*

### What is a Census?

A census is an official count of the population of a country. This kind of census is called a population census and has been taken since ancient times.

The word 'Census' comes from the Latin word ***censere***, meaning "to assess or tax".

This is because government officials made a register of people and their property. A value was then placed on the property so that taxes could be collected.

These government officials were known as censors.

Another reason for collecting detailed information of the population was to identify persons for the military service.

The Romans took the most complete censuses in the ancient world (beginning in the 500's BC).

As well as a census of population, other censuses are often conducted by the government of a country - census of agriculture, census of industry, census of trade...

### Why is a Census conducted?

A census is designed to provide facts and figures (statistics) that are needed by the government to study the economic and social conditions of the country.

Nowadays, almost every country takes an official population census once every five or ten years. These censuses are scientifically designed to provide the statistics that are needed to study economic and social conditions. The census is the greatest source of information about a country.

It provides the basis for good government as it reveals demographic trends:

- Population growth
- Alterations in age and sex structure
- Urbanization
- Number of people in primary/secondary/third level education
- Changes in occupational and industrial composition
- Employment trends
- Standard of living

## How is Census data used?

In the same way as the school principal collects information within the school, the government also collects information to help estimate future trends at different levels - national, local, public, private. These statistics are essential for planning:

- Future military and economic manpower potentials
- Consumer needs
- School and education requirements
- Growth in urban areas
- Cost of social security measures
- Requirements for motorways, utilities, parks, water / energy / health services

## Who conducts the Census?

Many countries have special agencies (organisations) that are responsible for conducting the census. The organisation that conducts the census in Ireland is the Central Statistics Office (CSO). The CSO is the Government statistical office and has been collecting and publishing a wide range of social, economic and demographic information on Ireland since it was established in 1949.

The Statistics Act, 1993 constituted the CSO as a statutory body in the Civil Service. This act also ensures that the data collected by the CSO is strictly confidential and can only be used for statistical purposes.

Approximately 4,400 temporary field staff have been recruited and trained by the CSO to carry out the census:

- 5 Liaison Officers
- 35 Regional Supervisors
- 350 Field Supervisors
- 4,000 Census Enumerators (The role of enumerators will be to deliver and collect the census forms and to provide assistance for the public. All enumerators will carry an ID card).

## Language Development

In the talk and discussion session, it will be important to develop vocabulary on the Census theme. The following list may be helpful:

* Census	* Data	* Statistics	* Government
* Information	* Trend	* Survey	* Education
* Population	* Economy	* Industry	* Population
* Employment	* Military	* Social	* Trade
* Urbanization	* Consumer	* Enumerator	* Confidential

Distribute one of the Follow-Up Activities to the children.

# 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:

## Challenge!

'A' words = 1

'B' words = 2

'C' words = 3 .....

- 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
1 G word	$1 \times 7 = 7$	7
3 I words	$3 \times 9 = 27$	27
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 = 235		

## 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

# Brain Teasers

Eric the Enumerator had one very difficult day collecting data for Census 1996. Some of the respondents had very strange answers for him.

Poor Eric is still trying to work out some of the answers.

*Perhaps you can help him!*

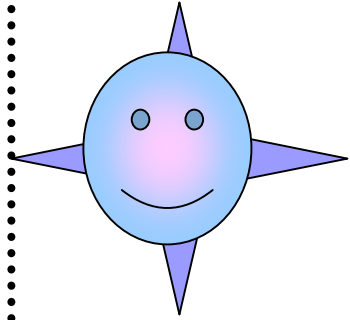
## How young are you?

Grumpy Mrs Geraghty wasn't happy when Eric arrived at her door to collect the census form. As she had left some blank spaces, Eric decided to ask her the questions again. He asked her how old she was. Mrs Geraghty was horrified at being asked such a personal question by a young whippersnapper and she refused to answer.

Eric then reminded her that she was legally obliged to respond. She decided to be awkward and her answer was very cryptic:

On 1st January 1980, I was twice the age of my nephew Simon. On 1st January 1990, I was 20 years older than Simon.

*Guess how old I was on 1st January 2000.*

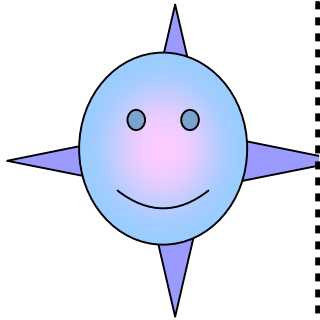


## Don't ask me!

Some time later, Eric knocked on another door. To his dismay, only twins Alice and Andrew were at home. Once again, there was an unanswered question on the census form.

Eric asked the children how many were in the family. "I'm not sure", replied Alice "but I know I have 6 brothers". "Yeah, and I've got as many brothers as sisters", shouted Andrew before he shut the door.

*How many members in this family?*



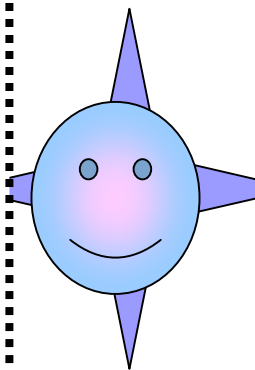
## Prove it!

Detective Dimbles was a suspicious man. He wasn't sure if Eric was who he said he was as he had forgotten his identification card. He decided to give cryptic responses and believed if Eric was a well trained enumerator, he would be well able to find the answer.

When asked how many children he had, Detective Dimbles replied "Three". Eric then asked how old the children were.

"The sum of their ages is 8", answered Detective Dimbles. "I'm afraid that's not enough information", cried Eric impatiently. "Alright. The product of their ages is twice the sum. Now, work that out!" laughed Dimbles as he slammed the door.

*What are the ages of the three children?*



# Brain Teasers Solution

How young are you?

*Guess how old I was on 1st January 2000?*

**Answer:**

On 1<sup>st</sup> January 1980, Simon was 20 years old and Mrs Geraghty was 40 years old.

On 1<sup>st</sup> January 1990, Simon was 30 years old and Mrs Geraghty was 50 years old.

On 1<sup>st</sup> January 2000, Simon was 40 years old and Mrs Geraghty was 60 years old.

Don't ask me!

*How many members in this family?*

**Answer:**

Alice has 6 brothers so there are 6 boys in the family.

Eric has as many brothers as sisters. As he is one of the boys, he will only have 5 brothers. Therefore, he has 5 sisters.

There then must be 11 children in the family.

Prove it!

*What are the ages of the three children?*

**Answer:**

2, 2, and 4 years old