

### Lesson Two ~ Census 2006

#### Theme

What is a Census?

#### Objectives

That the child will be enabled to:

- explain what the census is and why the census is conducted
- describe how the census is conducted
- list some of the information which is collected
- discuss how census data can be used.

#### Integration and Linkage

**Maths** Number – Sorting, Combining and Comparing sets, Counting

Data: Representation and Interpretation

**English** Oral Language Development

#### Tasks

- Revision of key messages from Lesson One
- Whole class activity – Census sorting cards
- Creating the steps in the census cycle
  - Activity 1 – Census drama
  - Activity 2 – Census wordsearch
  - Activity 3 – Census poster
  - Activity 4 – Census Puzzle
  - Activity 5 – 23<sup>rd</sup> April 2006

#### You will need

- Key questions M 2.1
- A4 sheets – steps in Census cycle M 2.2
- Census poster template M 2.3
- Census word search M 2.4
- Census puzzle M 2.5
- Census worksheet – 23<sup>rd</sup> April 2006 M 2.6

#### Home/School links

Ask the children to bring home a set of the census sorting cards and discuss them with those at home. (They could be reduced and printed 4 to a sheet)

#### 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

#### Language

*Census, collect, information, data, ask, pose, question, list, form, ask, Sunday, April, information, age, address, education, tax, count, country, estimate, government, gender, employment*

The above language can provide a very rich source of material for discussion and also for written word work.

#### Assessment

The children will

- orally recall the key messages from Lesson One
- begin to use the language associated with the Census 2006 process in context
- correctly sequence the steps in the census process by sorting illustrative cards and discussing the process
- correctly use the vocabulary of the census in context
- identify some of the information that is collected during a census and predict how it might be used to help the country.

#### Teacher Observation Tips

Note children who are really interested in the census process and encourage them to research the census on the CSO website.

Take particular note of children who are having problems with sequencing information and revisit sequencing with them in other curricular areas.

# Teacher's Notes - Lesson 2

Revision of key messages from Lesson One – what do we remember?

- There is a sequence to the data collection process
- Data can be used to show the opinions or characteristics of a group of people
- Collecting and interpreting data can help to solve everyday problems
- Data can be represented in different ways.

## Brainstorm

- Discuss with the children the data that is collected within the classroom on a daily basis.
- 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 ...
- 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.
- Give the children the opportunity to share their knowledge and experience of the census with the class.

**Has anyone ever heard of a census? What do you think it might be? Why would it be needed?**

**How often do you think it might be held? How do you think a population count might be carried out?**

**Explore the children's ideas and relate these back to the data collection process.**

Introduce the children to the word CENSUS and its definition i.e. an official count of the number of people (population) of a country.

- Ask the children to consider what questions may be asked on Census form 2006. Make a list of these on a flipchart / blackboard.
- Refer to the rationale for the census and encourage children to relate the data that is needed to the question being posed e.g. if it is important to establish the most common method of transport being used by people travelling to work, a likely question on the census form will be:
- 'How do you travel to work?'
- Use the list of key questions for Census 2006 (M 2.1) for this guided discussion.
- Ask the children what information a government might need to find out from a census and why.
- From their brainstorm encourage the children to orally explore some of the areas below:
  - How rich or poor is our country?
  - Are more people living here than the last census?
  - Are there more old or young people?
  - Are there more males than females?
  - Where do most people live? Country? Towns/Cities?
  - How many people are at school?
  - How many people have jobs?
  - What kinds of jobs do people have?
  - How do people get to work or school?

The following information on the Census could then be shared with the children. Avoid 'learning off' of definitions by eliciting as much of the information as possible from the children themselves.

### 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.

### Why would people need to know this information?

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.

### Why do governments need to tax people? What do you think they do with the money? Could a country manage without taxes?

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

### Do people have to join the army in this country? Why did leaders need to have big armies in the olden times?

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

### 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 count once every five or ten years.

The census is very important as it gives a very detailed picture of a country and is the greatest source of information about a country.

The information provided by the census is very valuable as it provides the basis for good government.

### What kind of things does a government need to know about its citizens? Try to encourage the children to come up with broad headings such as jobs, how much people earn, where people live...

The government can tell:

- how the country is doing economically
- whether the population is increasing/decreasing
- alterations in age and gender balance
- number of people living in rural/urban areas (country/town)
- number of people in primary/secondary/third level education
- changes in occupation and number of people in employment
- methods of transport being used...

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

## Language Development

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

- |               |               |              |                 |
|---------------|---------------|--------------|-----------------|
| * Census      | * Tax         | * Trade      | * Employment    |
| * Information | * Data        | * Survey     | * Education     |
| * Population  | * Government  | * Statistics | * Gender        |
| * Register    | * Agriculture | * Social     | * Occupation    |
| * Property    | * Industry    | * Economy    | * Rural / Urban |
| * Estimate    | * National    | * Trend      | * Data          |

## Whole class activity

Talk to the children about the census and explain how the census is carried out using the cue cards **M 2.2** as a basis for discussion. Children can be encouraged to speculate what the next step will be and the cards can be put in order along the blackboard sill.

Step 1: The census forms are delivered to homes about a month before the Census.

Step 2: On the night of the census, people all over the country read the questions on the census form and write the answers on the form.

Step 3: The census forms are collected from our homes.

Step 4: The census forms are checked and scanned into a computer in a central office.

Step 5: The answers / information are put on graphs or written down in lists.

Step 6: People read these graphs or lists and write a report.

Step 7: The people who run our country (government) make plans for our country so that it will be a better place in which to live.

After discussion individual children can be given the cards and they can stand in sequence – ask the children why things have to be done in a particular order. The focus should be on sequencing the activities of the census cycle and discussing its parts.

Highlight the upcoming Census date – April 23<sup>rd</sup> 2006

## Plenary

Discussion on what we learned today.

*Who can remember what a census is?*

*Why is it important?*

*How often is it taken?*

*Pretend you are explaining the census cycle to your partner – can you tell him/her the sequence in which the cycle happens?*

*As a whole class activity hide the cards from the census cycle and ask the children to give you the first step, second step etc., as each is identified give the relevant card to the child and ask him/her to stand in order at the top of the room.*

## Extension work:

### Activity 1 - drama

A fun activity that will help children to remember the steps in the process can be the dramatisation of the census cycle or data collection process. Groups can role-play the families and a number of people can be the Enumerators.

- 1: The Enumerator delivering the census form to the home.
- 2: The head of the family completing the census form with the family.
- 3: The Enumerator collecting the census form from the home and answering any questions the family might have.

The children can then relate the initial stages to what will happen next in the sequence:

The census forms are checked and scanned into the computer.

Graphs are drawn and lists made showing the information from the forms.

The census people read the graphs/lists and write reports. They also appear on TV and radio to tell us about the results.

The leaders of the country make plans to make the country a better place to live in.

Children can use the large A4 cards to highlight each stage of the process. These labels can then be displayed in the classroom.

The following activities are intended to provide a forum for discussion and use of the language associated with the census.

### Activity 2- Census Sample Poster M 2.3

Design a Census Poster to highlight the upcoming Census date i.e. April 23<sup>rd</sup> 2006 using a variety of textural techniques from the Visual Arts Curriculum. A sample poster **M 2.3** is supplied as a stimulus.

### Activity 3 - Census WordSearch M 2.4 and solution

As well as teaching the children the words as part of their oral language activity they can be displayed on flash cards and used as a stimulus to some simple written work and as an activity for early finishers or more able children.

### Activity 4 - Census Puzzle M 2.5 and solution

This supplementary activity highlights the upcoming Census date i.e. 23<sup>rd</sup> April 2006 using mathematical problem solving tasks.

### Activity 5 - 23<sup>rd</sup> April 2006 M 2.6

This Census worksheet presents the child with fun questions, tasks and activities based on Census date 23<sup>rd</sup> April 2006.



## Census 2006 ~ Key Questions



### Persons Present on Census Night

- + Name
- + Gender
- + Date of Birth
- + Place of Birth
- + Nationality
- + Place of residence on census date
- + Marital status
- + Religion
- + Irish language
- + Means of travel to work, school or college
- + Distance travelled
- + Time taken
- + Education
- + Voluntary activities
- + Occupation

### Household Characteristics

- + Type of accommodation
- + Year house was built
- + Rent paid
- + Number of rooms
- + Central heating
- + Water supply
- + Sewerage facilities
- + Number of cars and vans
- + PC Ownership
- + Internet connectivity

Census forms  
are  
delivered  
to our  
homes

Census forms  
are  
completed  
on  
Census day

Census forms  
are  
collected  
after  
Census day

Census forms  
are  
checked  
and  
scanned

Information  
is put on  
graphs  
or  
lists

People read  
the graphs  
and  
write  
reports

Plans are made  
to make  
the  
country  
better

C ount

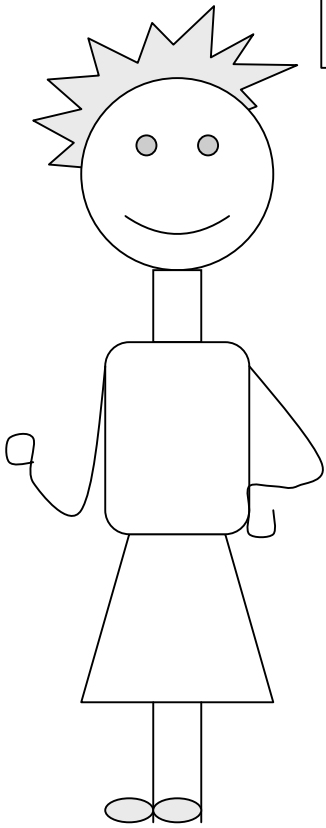
e verybody on the

n ight of

S unday April 23rd for

U seful

S tatistics



# Census Word Search

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

Can you find these Census words?

census  
information  
sunday  
tax  
estimate  
gender

collect  
form  
april  
count  
government  
age

question  
ask  
population  
education  
data  
country

# Census Word Search ~ Solution

	C	E	N	S	U	S	A		T
S	U	N	D	A	Y		P		A
E		D	A	T	A	G	R		X
D			C	I		O	I	Q	
U	E	P	O	N		V	L	U	A
C	S	O	L	F		E		E	S
A	T	P	L	O		R		S	K
T	I	U	E	R		N		T	
I	M	L	C	M		M		I	
O	A	A	T	A	G	E	E	O	
N	T	T		T		N		N	
	E	I		I		T			
		O	C	O	U	N	T	R	Y
		N		N					
G	E	N	D	E	R	F	O	R	M

Can you find these Census words?



census  
information  
sunday  
tax  
estimate  
gender

collect  
form  
april  
count  
government  
age

question  
ask  
population  
education  
data  
country

# Census Puzzle

Read the number sentence in each box below.

Colour only the boxes with an answer of 23.

$3 \times 4 + 11$	$9 \times 7 - 40$	$2 \times 8 + 7$	$8 + 19 + 8$	$5 \times 8 - 17$	$2 \times 13 - 3$	$3 \times 11 - 10$
$3 \times 3 + 20$	$5 \times 4 + 4$	$4 \times 9 - 13$	$9 + 9 + 9$	$7 \times 8 - 30$	$96 \div 4$	$2 \times 23 \div 2$
$15 \times 2 - 7$	$2 \times 12 - 1$	$69 \div 3$	$4 \times 8 + 7$	$30 \div 3 + 13$	$24 \div 2 + 11$	$3 \times 15 - 22$
$2 \times 3 + 17$	$39 \div 3$	$30 \div 2 + 13$	$8 + 8 + 8$	$40 \div 2 + 13$	$99 \div 3$	$92 \div 4$
$5 \times 6 - 7$	$30 \div 2 + 8$	$18 \div 3 + 17$	$10 + 19 + 10$	$2 \times 9 + 5$	$2 \times 9 + 5$	$7 + 9 + 7$

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

Write some number sentences that have an answer of 23 in the boxes below:

# Census Puzzle - Solution

Read the number sentence in each box below.

Colour only the boxes with an answer of 23.

$3 \times 4 + 11$	$9 \times 7 - 40$	$2 \times 8 + 7$	$8 + 19 + 8$	$5 \times 8 - 17$	$2 \times 13 - 3$	$3 \times 11 - 10$
$3 \times 3 + 20$	$5 \times 4 + 4$	$4 \times 9 - 13$	$9 + 9 + 9$	$7 \times 8 - 30$	$96 \div 4$	$2 \times 23 \div 2$
$15 \times 2 - 7$	$2 \times 12 - 1$	$69 \div 3$	$4 \times 8 + 7$	$30 \div 3 + 13$	$24 \div 2 + 11$	$3 \times 15 - 22$
$2 \times 3 + 17$	$39 \div 3$	$30 \div 2 + 13$	$8 + 8 + 8$	$40 \div 2 + 13$	$99 \div 3$	$92 \div 4$
$5 \times 6 - 7$	$30 \div 2 + 8$	$18 \div 3 + 17$	$10 + 19 + 10$	$2 \times 9 + 5$	$2 \times 9 + 5$	$7 + 9 + 7$

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

Write some number sentences that have an answer of 23 in the boxes below:

# 23rd April 2006

The census of population will be held on Sunday, 23rd April 2006.



Let's investigate the Magic Number 23.

- \* Is 23 an odd or an even number? \_\_\_\_\_
- \* How many digits in the number 23? \_\_\_\_\_
- \* Does the number 23 have factors? What is this type of number called?
- \* How many number facts can you list giving a total of 23?


- \* What months of the year have 23 days? \_\_\_\_\_
- \* List the prime numbers that come before 23? \_\_\_\_\_
- \* How many people in the class have birthdays on the 23rd? \_\_\_\_\_
- \* What star sign is associated with 23<sup>rd</sup> April? \_\_\_\_\_
- \* Let's try a number trick. Write the number 23 on a piece of paper. This is number A.
- \* Reverse the number 23. This is number B.
- \* Now add number A and B together. What is your total? \_\_\_\_\_
- \* Take the number 23 again. Add the digits of 23. What did you get? \_\_\_\_\_
- \* Multiply this answer by 11. The answer was \_\_\_\_\_.
- \* Compare the first and second answer. What do you notice?
- \* Try this with some more two-digit numbers