Census 2006

Lesson Two ~ Census 2006

Theme
What is a Census?

Objectives
The child will be enabled to:
- describe what the census is
- explain why the census is conducted
- outline in sequence how the census is conducted
- list some of the information that is collected
- discover how census data can be used.

Integration and Linkage
See Census 2006 Activities for full list of integration opportunities.

Tasks
- Whole class activity – Census sorting cards
- Creating the steps in the census cycle
  - Activity 1 – Background to the census
  - Activity 2 – Words of Wonder Census word search and solution
  - Activity 3 – Lollipop Logic
  - Activity 4 – Census puzzle
  - Activity 5 – 23rd April 2006

You will need
- A4 cards – steps in Census cycle S 2.1
- Playing-card versions of above S 2.2
- Main point cards S 2.3
- Words of Wonder Census word search and solution S 2.4
- Lollipop logic S 2.5
- Census puzzle and solution S 2.6
- Census worksheet based on the number 23 S 2.7

Home/School links
Copy the playing card version of the census cycle and ask the children to bring them home to discuss what those at home know about the census. Remember that some families may be new to Ireland and may not be familiar with the census process. The children can provide a vital source of information and support for such families.

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, statistics, government, trend, survey, list, form, information, population, gender, dwelling, education, language, economy, consumer, industry, employment, military, urbanisation, enumerator, resource, confidential…

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

Assessment
The children will
- use the language associated with the Census 2006 process in discussion of how the census is experienced by Irish families
- correctly sequence the steps in the census process orally
- list some of the information gathered during a census and discuss why it is needed
- debate how census data can be used and become aware of the concept of 'sensitive' information.

Teacher observation Tips
Note any children who are from families not familiar with the census and pay particular attention to explicitly outlining the process – this can be done through pair work or as whole-class activities.

As the language surrounding the census process is often complex, pay particular attention to the needs of international children and those who may have language difficulties.

Note children who are finding the activity too easy and use resource S 4.8 to encourage them to use ICT in the development of graphs. This would also enable them to branch out into use of charts in a written report (English – writing and reading in different genres).

Teacher's Notes – Lesson 2

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

- Many everyday problems can be solved or prevented by collecting data from others and by using this data to make changes for the better.

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… (Schools often have old roll books and these can be a great source of interesting information).
- 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.

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.

Some of the children may remember Census 2002 and may have worked on the lessons provided to schools by the Central Statistics Office (CSO). Others may remember the census form arriving at home and being completed by their parents/guardians. Discuss the children's experiences of the census if they remember it.

Activity 1 – Background to the census – discussion and debate

The following information on the census could then be shared with the children during the discussion. Avoid 'learning off' of definitions by eliciting as much of the information as possible from the children themselves and by including them in debate about why a census is needed. Use the Main Point Cards **S 2.3** as a reminder, especially if you have a Census Display board.

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 in the past 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? Perhaps there are children in the class who come from countries where young people have to do military service.

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 see how things are going in our 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 information do you think the government needs to know?

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 work out trends at different levels – national, local, public, private. These statistics are essential for planning things like

- How many new schools will we need?
- Have we enough hospitals?
- How much money do we need to put aside for old age pensions?
- Where do we need new roads?

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.

What does confidential mean? Why is it important to keep the information confidential?

Approximately 5,000 temporary field staff have been recruited and trained by the CSO to carry out the census. Did you know that over **4,400 Census Enumerators** will be delivering the census forms before April 23rd and collecting them on a particular date after census night. They will also help people to complete the form if they are stuck on a question and provide information.

All enumerators will carry an ID card.

Why would they have to carry ID?

Language Development

In the brainstorming session, it will be important to develop an oral 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 (**S 2.1**) 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 is 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 to live in.

The focus should be on sequencing the activities of the census cycle and discussing its sequence. This can be done either in pairs using the **S 2.2** playing cards or as a class using the A4 versions **S 2.1**.

Highlight the upcoming Census date – April 23rd 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 someone from another country – can you tell him/her the sequence in which the cycle happens?
Revisit the Main Point Cards (**S 2.3**) and display on a notice board with the children's work on the census.

Extension work:

Activity 2 – Census Word Search

As well as teaching the children vocabulary as part of their oral language activity the words 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 3 – Census Puzzle ~ 'Lollipop Logic'

A fun extension activity using lollipop sticks to create census key words.

Activity 4 – Census Maths Puzzle

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

Activity 5 – 23rd April 2006

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

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

Steps in Census Cycle

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

A census is an official count of the population of a country

The word census means 'to assess or tax'
Latin: censere

A census provides facts and figures (statistics) for the government

A census is usually held every five or ten years

The Central
Statistics Office
CSO
does all the work

Over 4400
enumerators deliver
and collect census
forms

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 x 1 = 5
- If you have 3 B-words, then you must write the number sentence 3 x 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 x 1 = 1	1
1 B word	1 x 2 = 2	2
3 C words	3 x 3 = 9	9
2 D words	2 x 4 = 8	8
4 E words	4 x 5 = 20	20
1 F word	1 x 6 = 6	6
1 G word	1 x 7 = 7	7
3 I words	3 x 9 = 27	27
1 L word	1 x 12 = 12	12
1 N word	1 x 14 = 14	14
1 P word	1 x 16 = 16	16
2 R words	2 x 18 = 36	36
3 S words	3 x 19 = 57	57
1 T word	1 x 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

Lollipop Logic

You can use lollipop sticks for all kinds of puzzles, tricks and games.
Start collecting some now – not only are you recycling and helping our environment,
but you can also have lots of fun!

Set out 19 lollipop sticks as follows:

| | | | | | | | | | | | | | | | | | | |

Take the above 19 lollipop sticks. Without removing any, can you sort them out so
they make the number 2006? This is the next census year.

For your next challenge, take 11 lollipop sticks and once again, try to make the magic
census year 2006.
A clue lies in this anagram:

NROMA MELANUR

And there's more!
Set out 10 sticks and make the number 23 – the census date!
You can overlap/cross sticks to make this magic number.

Now it's time to be creative!
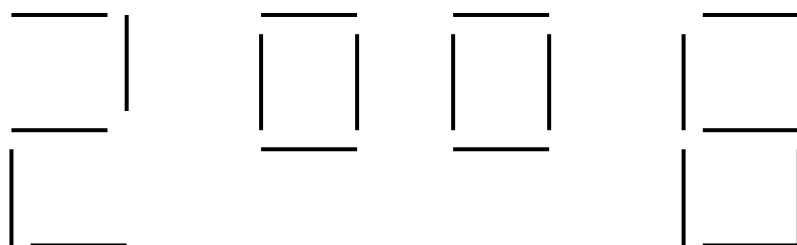Let's see if you can make some words using lollipop sticks.
Firstly estimate how many sticks you will need, make the word and check if you were
right.
Try the first two and then add some more of your own 'census' words

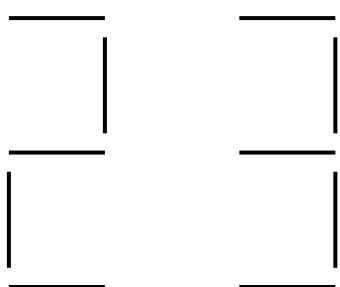| Word	Estimated number of sticks	Number of sticks used
Census		
April		

Lollipop Logic Solution

1.

2006

2.

ROMAN NUMERAL

MMVI

3.

23

Census Puzzle

Read the number sentence in each box below.

Colour only the boxes with an answer of 23.

3x5 +8	9x3-4	2x8+7	8+19+8	5x8-17	2x13-3	4x8-9
3x3+20	5x4+4	4x9-13	9+9+9	7x8-30	96 ÷ 4	2x23÷2
15x2-7	2x12-1	69 ÷ 3	4x8+7	30÷3+13	24÷2+11	3x15-22
2x3+17	39 ÷ 3	30÷2+13	8+8+8	40÷2+13	99 ÷ 3	92 ÷ 4
5x6-7	30÷2+8	18÷3+17	10+19+10	2x9+5	2x9+5	7+9+7

Census Puzzle Solution

Read the number sentence in each box below.

Colour only the boxes with an answer of 23.

3x5+8	9x3-4	2x8+7	8+19+8	5x8-17	2x13-3	4x8-9
3x3+20	5x4+4	4x9-13	9+9+9	7x8-30	96 ÷ 4	2x23÷2
15x2-7	2x12-1	69 ÷ 3	4x8+7	30÷3+13	24÷2+11	3x15-22
2x3+17	39 ÷ 3	30÷2+13	8+8+8	40÷2+13	99 ÷ 3	92 ÷ 4
5x6-7	30÷2+8	18÷3+17	10+19+10	2x9+5	2x9+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:

Twenty-Three

23

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? _____

* Is 23 a square, rectangular or triangular number? _____

* Does the number 23 have factors? What is this type of number called?

* How many number sentences 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 23rd 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