

Lesson Three ~ Census 2006

Theme

Classroom Census 2006

Objectives

That the child will be enabled to:

- talk about the upcoming national census 2006 and its purpose at their own level of understanding
- describe the process involved in data collection
- discuss how data can be used to help solve real life problems and plan for the future
- identify facts, figures and statistics which would be useful for future planning and explore the questions that need to be posed
- engage in the census process at class level
- represent and interpret class data using a variety of methods

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 Lessons One and Two
- Whole class activity – Designing the form
Activity 1: Filling in the form
Activity 2: Checking your sample pop
Activity 3: Compiling the data
Activity 4: Completing a census tally

You will need

- Census sorting cards M 3.1
- Chart of Census Cycle M 3.2
- Key questions from Census form 2006 M 3.3
- Sample census forms M 3.4 a b
- Census Tally sheet M 3.5
- Census Brain Teasers M 3.6 a b c

Home/School links

When the classroom census is complete, copy the results and send it home for discussion.

If possible photocopy the census sorting cards for each child and they can bring them home to demonstrate the census cycle to those at home.

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.
- A classroom census is a rich source of information and can be designed to provide facts and figures (statistics) to help planning within the school.
- Each step of the data collection process is important for a successful outcome.
- Data can be represented in graphical, diagrammatic or pictorial form as well as in report form.

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 Lessons One and Two
- begin to use the language associated with Census 2006 to describe how the census is experienced by Irish families
- explain orally what the census is and why/how the census is conducted
- correctly sequence the steps in the census process by sorting illustrative cards
- engage in the data collection process at classroom level by producing a class census

Teacher Observation Tips

Note children who find the class census activity easy and challenge them by giving them multiple sets of data to gather, analyse and compare.

Make sure weaker children have particular jobs to do when collating and tallying data so that they do not miss out on the higher-level skill development.

Teacher's Notes - Lesson 3

This lesson is really a series of activities that could be done over a month, as each of the activities would probably encompass a whole class period. It is important to note that in completing these activities, you are covering whole areas of;

- English, for example writing for a particular purpose (genres), reading and interpreting graphs and tables
- SESE: Science Sorting and classifying information
- SPHE: Citizenship
- Maths Data

See Census 2006 Activities for details of linkages.

Brainstorm

Discuss the Census with a view to assessing the children's understanding of it.

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

Revision of key messages from Lessons One and Two

- 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
- 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

Use flashcards with key words relating to the census (many of these words were used in the Census Word Search in Lesson Two)

Revise the steps of the Census Cycle i.e. the steps of the census data collection process using the cue cards provided with Lesson Two. This can be a whole-class or pair/group activity in which small cards are used (see **M 3.1**)

Use an enlarged copy of the A4 Census Cycle poster provided in this lesson to summarize the data collection process (**M 3.2**)

Whole Class Activity

- Following the discussion on the national census introduce the idea of a class census to the children
- Talk about what preparation might be needed in planning for a census i.e.
 - ✓ Organising a census committee
 - ✓ Deciding on a census date
 - ✓ Advertising the census date
 - ✓ Designing the census form
 - ✓ Deciding what questions need to be asked
 - ✓ Providing information for the research group
 - ✓ Finding enumerators to distribute the forms, to provide information and to collect the completed forms
 - ✓ Considering how the data will be organised and represented (as a report, using graphs or using tables of numbers)

- ✓ Deciding on how results/findings will be reported to the population (class in this case)
- Discuss each of the above points in turn with the children:
 - ✓ The class of children will be the census committee with each group being given a specific role in the census cycle.
 - ✓ Decide on a suitable census date with the children.
 - ✓ Encourage the children to design posters, bookmarks etc... to highlight/advertise the census date. This could be carried out at home with the help and support of parents and family.
- Talk to the children about the type of data/information that is being sought about the class. This data could be linked to the data required from Census 2006.
- Ask the children to work in pairs to consider what questions could be put on the form e.g. name, place of birth, date of birth, age, means of transport to school, distance from home to school ... These headings could be put up on a white/blackboard and agreed by the class. This could then be used as a basis for gathering the relevant information about their own class.
- Children can then design a Census form in pairs or groups using **M 3.4 a**. Alternatively the sample census form **M 3.4 b** could be used.
- The forms can be distributed to the children as a role-play with a Census Enumerator delivering the census forms to the children and helping to answer any questions the children may have. The Enumerator will also inform the children of the Classroom Census date.
- The children then examine the forms in pairs to consider how they will go about completing them and how the questions will be answered correctly.

Activity 1 - Filling in the form

- On the date of the Classroom Census, the children will be given the opportunity to complete the forms throughout the day. This factual writing exercise could be completed at a designated writing corner/area that has been set up for the census. The area could be decorated with the children's census posters and information cards about the census. Pens, pencils, erasers, paper, additional census forms and envelopes could also be provided at the Census writing table.
- When children have successfully completed their census forms, they are kept in a safe place until collected by the Census Enumerator/collector on an agreed day.
- The teacher can then discuss with the children how the set of data that has been collected from the Classroom Census could be recorded and used.

Activity 2 - Checking your sample population

- As the national census is an official count of the population of the country, the first task of the Classroom Census is to establish how many people are present at school/absent from school on Census day i.e. an official count of the classroom population.
- The teacher can then use the census forms to establish who is present/absent. The number of those present/absent is recorded on the blackboard/chart.

Activity 3 - Compiling the data (information) - the children as computers

- The forms can be given back to the children and they now become the computer compiling the data
- Each question can be dealt with separately and the overall data collected. The children can be the data sets. Representatives from the census committee can record the results on the blackboard/flipchart e.g.
 - **Question 1: Are you male or female?**
(All males stand up and are counted, then all females). Data recorded on 'master' sheet on board or chart.
 - **Question 2: In what month were you born?**
Have list of months laid out on blackboard and fill in as children stand up for their month. How many in January, February ...
 - **Question 3: How old are you?**
Children can discuss what span of ages they would need to collect the data. Would we need to include 1, 2, 3, 4, 5...? Would we need to go over 10?
 - **Question 4: In what country were you born?**
Make a list of the relevant countries and tally as children provide information.
 - **Question 5: Where do you live?**
This will raise questions of where the town ends and the country begins and will show the need for accurate descriptors.
 - **Question 6: How do you travel to school?**
Call out the categories and let the children be the data sets and stand up when their category comes up. What do you do if you walk sometimes and get a lift when it rains?
 - **Question 7: What is the distance from your house to the school?**
Will this information be provided in kilometres? What is the shortest/longest distance that is travelled by children?
 - **Question 8: How long does it take you to travel to school?**
Will this information be provided in hours/minutes? What is the shortest/longest time that is travelled by children?
 - **Question 9: What type of accommodation do you live in?**
Discuss types of accommodation and housing with the children. This can be integrated with the geography curriculum.
 - **Question 10: Do you own a P.C.?**
What is a P.C.? Does this include children's computers / laptops...?
 - **Question 11: Do you have Internet access at home?**
Discuss 'Internet access' with the children...What is Internet access? How do you know if you have Internet access? How many children/adults use the Internet at home? How can the Internet be used?

Activity 4 - Completing a Census Tally

Children can complete an individual or group census tally sheet using the information collected from the class (See M 3.5)

Plenary

- Discuss the key messages from the lesson and ask the children to describe and report on how the Classroom Census was conducted. Discuss difficulties that were experienced and how these barriers/challenges could be prevented in a future census/data collection exercise.

- Consider how the data that has been collected may now be represented. How should this data be presented to the school/home community e.g. displayed in school hall, census booklet?

Extension work

- Using the data collected from the class census keep the chart on the wall and activities can be written on the black/whiteboard a couple of times a week for early finishers or to extend more-able students. Working in small groups children can also try to devise ways of recording data. These suggestions can later be examined and tried out by the class. This is an essential skill (listening to and discussing both own and other children's mathematical work).
- A number of fun census brainteasers have been provided with this lesson (See Resource Sheets **M 3.6 a b c**). These can be used by early finishers or as fun tasks on rainy day break-times, at home, or as general time-fillers. As well as solving these census teasers, children can be encouraged to write their own brainteasers with a census theme.

Home/School links

Children bring home their completed forms and discuss them with their parents.

Steps in Census Cycle

Census forms
are
delivered
to our
homes



Census forms
are
completed
on
Census day



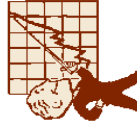
Census forms
are
collected
after
Census day



Census forms
are
checked
and
scanned



Information
is put on
graphs
or
lists



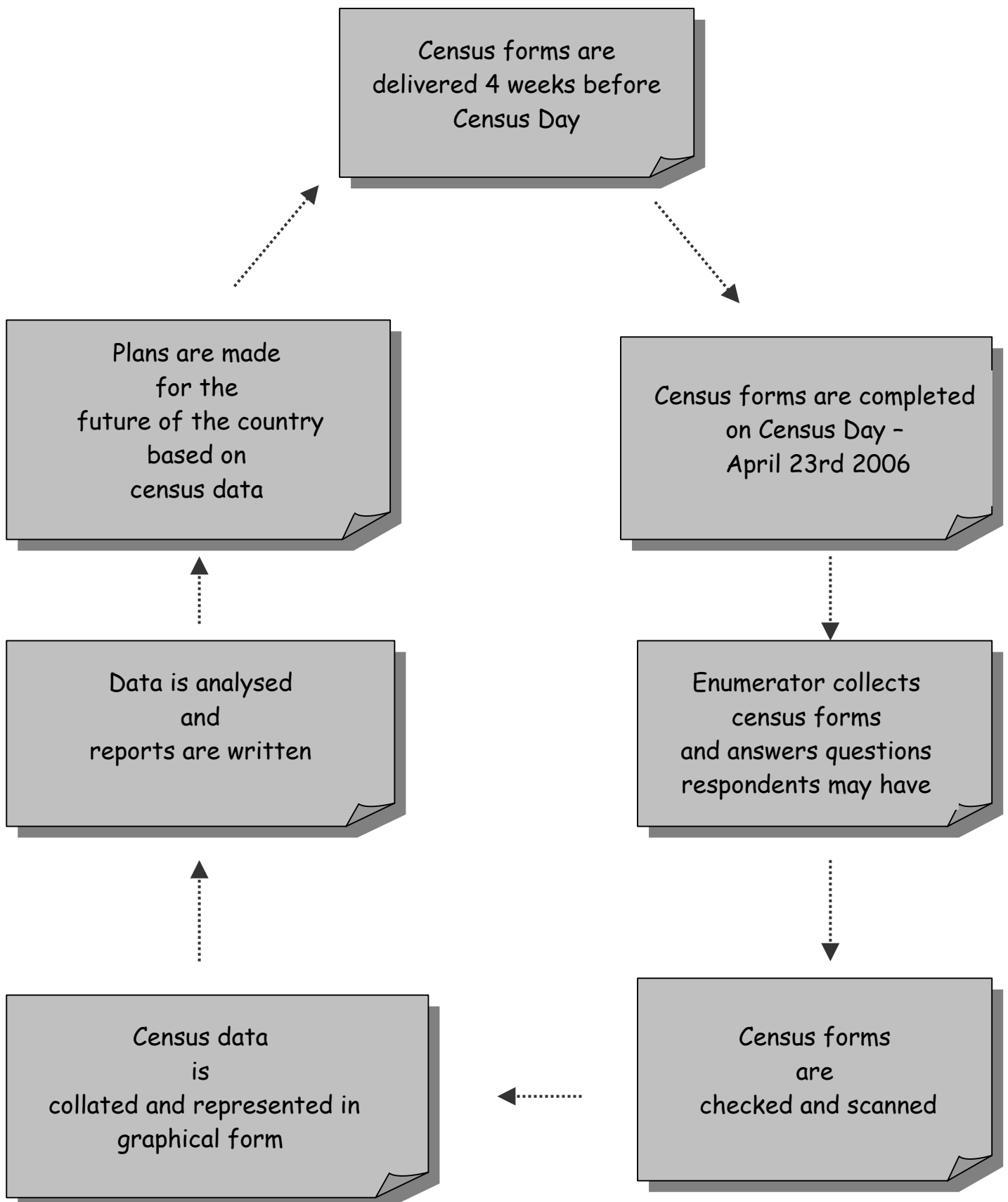
People read
the graphs
and
write
reports



Plans are made
to make
the
country
better



The Census Cycle





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

M 3.4 a



Classroom Census Form





Classroom Census Form



Name:

Are you male or female?

In what month were you born?

How old are you?

In what country were you born?

Where do you live?

In the town ☐

In the country ☐

How do you travel to school?

Walk ☐ Cycle ☐ Bus ☐ Car ☐

What distance is your home from the school?

How long does it take you to travel to school?

What type of accommodation do you live in?

In what year was your house/flat built?

Do you have a computer at home?

Do you have Internet access at home?



Classroom Census Tally

Let's Count



How many people in the class?

How many boys in the class?

How many girls in the class?

How many people were born in:

January	February	March	April	May	June
July	August	September	October	November	December

In what country were you born?

Ireland	U.K.	U.S.A.	France	Spain	Germany
Poland	Nigeria				

How many people were born in:

Town		Country	

How many people travel to school by:

Walking	Cycling	Bus	Car	Other

What distance do you travel to school?

< 5 km	5-10 km	10-15 km	15-20 km	Other

How long does it take you to travel to school?

< 10 min.	10-20 min.	20-30 min.	30-40 min.	Other

What type of accommodation do you live in?

Detached	Semi-detached	Terraced	Flat/Apartment	Other

How many have a P.C. at home?

How many have access to the Internet at home?

Census Brain Teaser

How old am I?

Nellie Kelly was always playing silly tricks on her dear friend Minnie Mannion. One day, Nellie dressed up as a Census Enumerator, got a clipboard and some paper and went to ask Minnie a few questions.

Minnie, however, was a very crafty lady and she spotted Nellie coming. She decided to play along with the trick. She opened the door to Nellie and agreed to answer her questions.

When asked how old she was, Minnie replied:

*"My age this year is a multiple of 9.
Next year it will be a multiple of 8.
I am older than 40 and am not yet 70.
Can you say how old I am?"*

Nellie turned and left. As she closed the garden gate, Minnie shouted " I'll meet you as usual at the bridge club". They burst out laughing.

Can you say how old Nellie is?

Census Brain Teaser

House Numbers

Eddie the Enumerator drove into Willow Place to deliver the census forms. He was horrified to discover that there were no house numbers on the houses.

As he wanted to keep a record of the form serial numbers he delivered to each house, he knew he had to do something. He decided to paint the numbers on the houses.

If there were one hundred houses in the estate, how many times did Eddie have to paint the number 9?

Census Brain Teaser

Prove It!

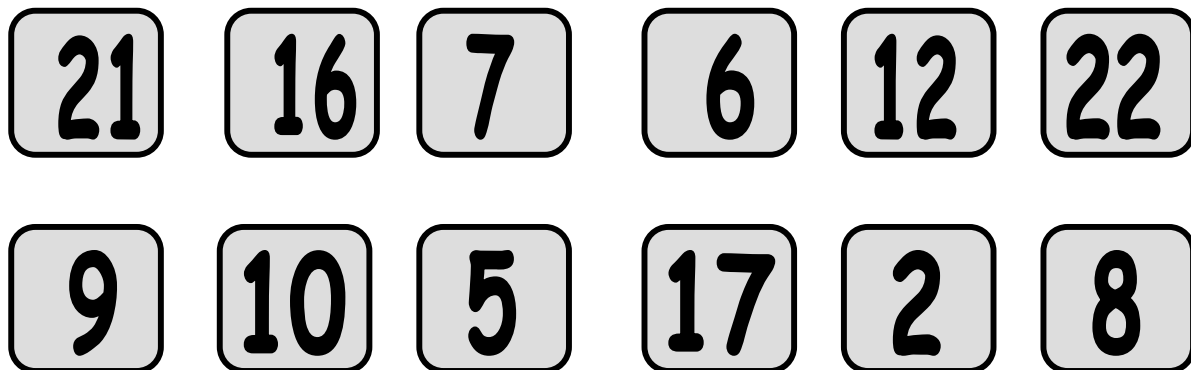
Eddie the Enumerator returned to the Census office and posted his census forms into different boxes.

Each census form had a serial number written on the top corner.

The total of the serial numbers on the forms was written on each box.

Which numbers go in each box?

Serial Numbers:



Census Boxes:

