

### Lesson One ~ Class Census

#### Theme

Classroom Census

#### Objectives

That the child will be enabled to:

- count the number of objects in a set
- sort and classify according to two criteria (present/absent) and compare and discuss the resultant sets
- understand the value of counting in keeping track of objects and people
- represent and interpret real data in rows and columns using real objects, models and pictures

#### Tasks

- Rolla discussion – brainstorm
- Sort and classify by present/absent using materials and discuss the result
  - Activity 1 – Sorting hoops
  - Activity 2 – Pictograms

#### You will need

- A selection of cubes or learning links
- A large label for each child with his/her name
- Blank labels / Marker
- Two PE mats or hula hoops
- Card for children to draw themselves or photos of the children on card
- Copy of Resource J 1.1 Pictogram template

#### Home/School links

For homework the children can ask their parents/guardians how they use counting in their daily lives, at work, at home and draw pictures which they can bring to school for discussion.

#### Key Messages

- Counting is an important activity in the real world
- Counting and keeping records helps us to organise and plan for the future
- Pictograms and bar charts can be used to show information in an easily understood way

#### Integration and Linkage

##### Linkage within maths:

Number – Counting and numeration, comparing and ordering

Data - Representing and Interpreting data

##### Language

*Rolla, present/absent, anseo/as láthair, count, sort, row, column, graph (pictogram, bar chart), Language of comparison: taller/shorter, more/less, most/least etc.*

#### Assessment

The children will

- identify orally some reasons why the Rolla is a necessary part of their school life and why it is important to gather and record information
- sort and classify their own class (and/or other classes) by present/absent using concrete materials and discuss the result (a lot more present than absent, more children absent on Tuesday...)
- represent the data collected by creating a Class Pictogram and will show their understanding of the results by reading and interpreting the results.

#### Teacher Observation Tips

Record in a notebook any significant events you notice such as a child having difficulty with the backward count, different start or finish or any child who seems to be finding this exercise easy.

# Teacher's Notes - Lesson 1



## Oral/mental starter

Practise counting skills with rhythm counting, clap / tap counting... Children count forwards, backwards, from different starting points to different stopping points e.g. count forwards from 12 to 21; count back from 28 to 16...

## *Talk and Discussion - The Rolla*

### **What do I (the teacher) do with the Rolla every day?**

*(Call out names, tick each one, total those present and send to the office...)*

### **Why do you think I have to do that?**

*For safety reasons, to help plan – number of photocopies of worksheets, milk cartons, books required for the day ...*

### **Can you think of any other ways we could keep track of the children in the class using counting?**

List the suggestions that come from the children on the blackboard, e.g. *line up and count; count each row of children; count the group of children sitting at each table and calculate the total, each child takes a lollipop stick from a full class set and those left indicate the absentees...* Explore some of the methods suggested by the children and discuss which method is the most practical or efficient for gathering information.

*Why do we need to count things or people?*

*What would happen if we had no numbers – could we still sort out how many cartons of milk we needed? ...*

### **What other information do you think is kept in the Rolla?**

List the suggestions and compare with the actual Rolla.

### **Who needs this information and why?**

Encourage the children to come up with a list of reasons why we might need the information and note on the blackboard *(to register the children attending the school; to provide contact details; to place children at the appropriate class level; to keep account of the number of days that the child attends school each year...)*

## Whole class activity

Use concrete materials as a tally while counting the children in the class. For example, give each child a cube/learning link and, as each child is counted, the cube/link is added to the cube-tower/learning-link chain. Also make a tower to indicate those who are not present.

**This can be done by groups and then the cubes/links joined together to provide a visual record for the whole class.**

- Compare the towers/chains and match the set of children present at school with the correct numeral/digit card e.g.



children at school today

- Discuss the ways we could show this information using the language of graphs (row, column)
- Represent the data collected in sorting hoops or as a pictogram.

## Plenary session

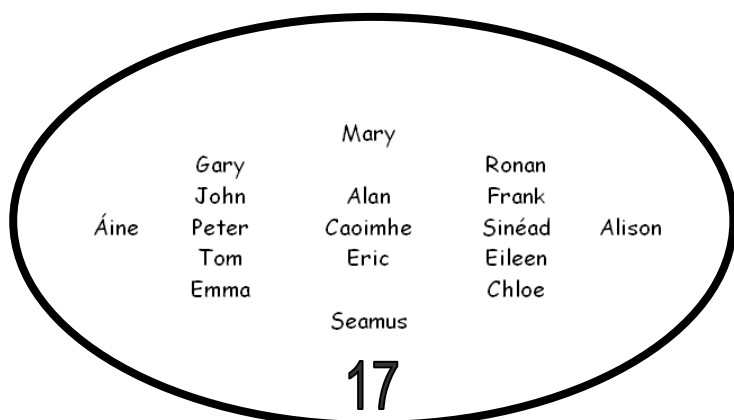
Children come together to:

- Discuss what they found out in their groups – how many absent/present (ar scoil/as láthair), more absent/present in one group than another etc. Group 1 has four out of five people present today – how many people are absent?
- Discuss the resulting sorted hoops or pictogram and discuss which is best in showing the information. What does the graph tell us? Can we tell at a glance whether there are lots more children absent? What if we just use numbers?

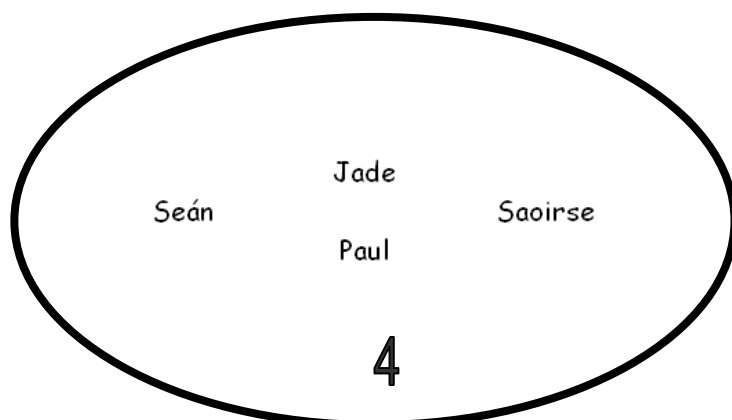
### Activity 1 - using sorting hoops

- In an open space such as the PE Hall or yard, distribute name cards/labels to the children. Using two mats or hula hoops place the names of those present in one mat/hoop and then ask the children for suggestions as to how we will show those who are absent today.
- Discuss the results

#### Ar Scoil

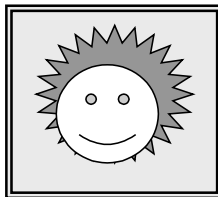
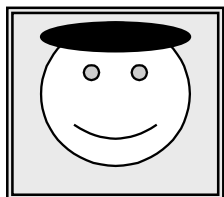


#### As láthair



### Activity 2 - Pictograms

- The data collected for Activity 2 can also be represented in the form of a pictogram. Resource sheet J 1.1
- The pictogram could be created on a magnetic board or whiteboard by using either photographs of the children or simple picture cards drawn by the children themselves.



These sets can then be compared through guided questioning by the teacher:

- Which tower is taller? Which tower is shorter? Which set has most? Which set has least? Are there more children present or absent? How many children are at school? How many children

- at home? How many more children are there at school than at home? What is the difference between the sets? How many children altogether?

### *Extension work*

- Collect data over a number of days and compare the results
- Create a weekly graph/pictogram
- Collect data from the other classes within the school and see how many children are absent on one day (or over a week)

### *Home/school links*

If the children have completed the pictogram activity on a sheet or in their copy they can bring it home and discuss with their parents what they did today in maths.

How do your parents/guardians use counting in their daily lives? Draw five pictures of how someone in your home uses counting at work, during the day...

# Pictogram

At School	Not at School
Ar scoil	As láthair