

Education:

Key Stages: 1, 2, & Early Years

Supports the following QCA schemes of work:

- 1E Representing information graphically: pictograms, Program of study reference KS1 2a, 3a, 3b

Scottish Pre 5 and levels A - C

Pictogram is ideal for meeting the skill requirements of units 1E and 2E of the QCA document for Key Stage 1 and is also useful in Foundation, Early Years, units Pre 5 and 5 - 14 level A in the Scottish National Curriculum.

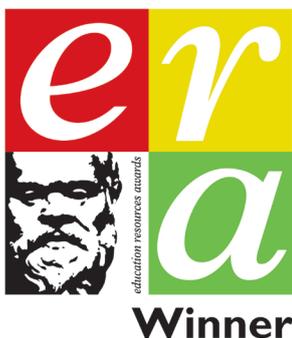
Quotes:

"Pictogram introduces graphs in a simple and easy to understand way."

-Interactive

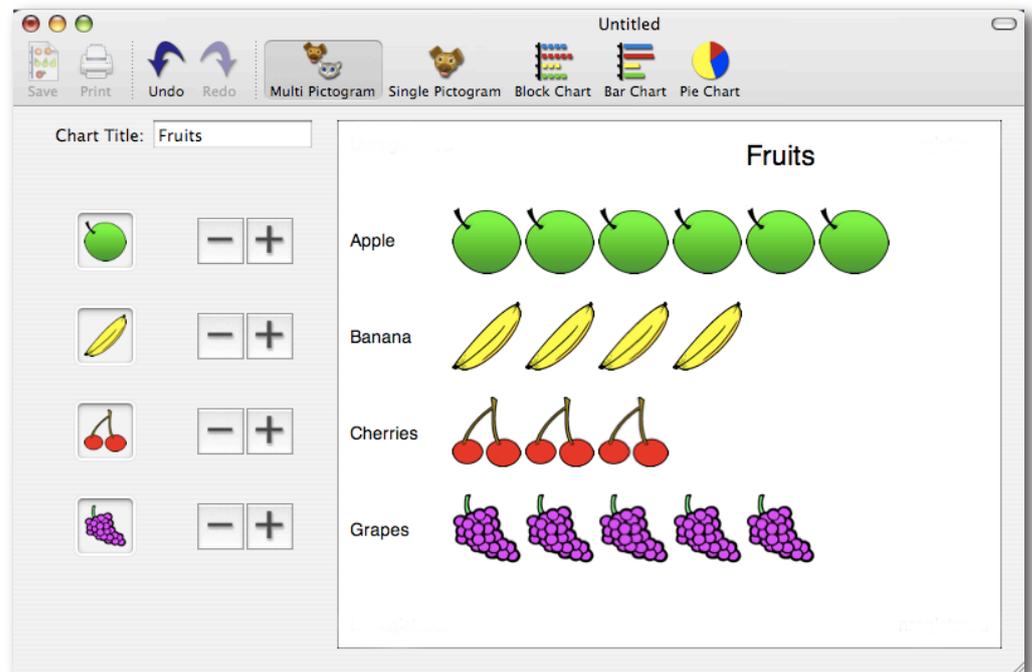
Awards:

Pictogram was the winner of the prestigious ERA (Education Resources Award) in the category ICT Primary. It was selected as best in its category from over two hundred other entrants.



First Steps in Data Handling

- Pictogram can produce block charts, bar charts, and pie charts.
- Pictogram has an extensive library of user-friendly pictures to use.
- When choosing a picture set the dialogue box displays the pictures that are contained in each set, so children do not need to be able to read the name of the picture set they wish to use.
- New picture sets can be easily added to Pictogram's picture library.
- One picture can represent a quantity greater than one. When one picture represents a quantity of two, half pictures are used to represent one.



- Pictogram recognises when colours are used as labels and will colour the graph appropriately.
- The main Pictogram window maximises to fill the screen regardless of screen size.
- Dual platform (Windows, Mac OS).

Objectives:

- To use ICT to classify information and present findings
- To sort objects using one criterion
- To use a graphing package to produce a pictogram of the data
- To be aware of the types of homes in their area and how many people live there

Resources:

- Kudlian Soft's Pictogram 3 software. This has a range of ready prepared picture files to use, saving teacher preparation time.
- Use a data projector or an interactive whiteboard to present clearly to the whole group and allow for interaction during the demonstration.
- There is a PDF file; **House Pictures for Sorting**, that can be used as data collection cards in this example. This file is available to download. Visit <http://www.kudlian.net> and navigate to the **Resources** section. Click on the **Pictogram** graphic.
- For the success of this Y1 activity organise the groups so that there are no more than 28 children with the same number of people in their home.

Preparation:

- Open Pictogram. It opens into the multi-picture pictogram mode, and from the **Load Picture Set** dialogue box (Mac: Picture Groups) scroll down and select the **To School** group. Click on **OK** (Mac: Add)
- Remind the children how to add a picture to a row by dragging carefully into the correct adjacent row. They can also click on the "+" & "-" buttons to add, or remove, pictures from the pictogram. Show how to take an image off by dragging it to the side of the screen
- Change from horizontal presentation using **Graph > Vertical** (Mac: Chart > Vertical)
- Print the graph, either by clicking on the **Print** icon, or from the **File** menu, in this case as soon as it is completed, before any discussion time, so that groups of children have a copy when answering the questions.
- Save a picture of the graph to use in a word-processing or presentation package by using **File > Export Graph1** (Mac: Chart > Copy Chart to Clipboard, then paste into an open document)
- Save each graph to an easily accessible area of the hard drive. e.g. Desktop or My Documents using the children's names or initials through **File > Save As**.
- Retrieve the files through **File > Open**.

In the Classroom:

- This begins as a whole class activity.
- Talk about the different types of buildings, and especially, homes in the area.
- Show pictures of different types of homes (use the names on the icons on the pictogram).
- Tell the children that they are going to make a

Task:

When working on the character of the local area children talk about the type of house they live in and how many people live there. A class pictogram is completed about their homes and then in small groups they use other information collected to make their own pictogram of how many people live in each home. They discuss what they have found.

...picture chart (pictogram) to show the type of homes they live in and find out which is the most common home in this area.

- Open Pictogram and load the **Houses** picture set.
- Rename the pictogram to **Our Homes**.
- As each child enters data they receive a picture of that home (from the **House Pictures for Sorting** PDF) to write on later.
- Ask children to talk about what the pictogram shows such as "*The most common home in our class is...*", "*...children live in flats.*"
- Talk about how many people live in their house. "*Do we all have the same number of people in a house?*", "*Do all buildings have the same number of people in?*"
- If using an interactive whiteboard allow the children to write numbers on the chart and cross off the images as they count.
- Stress it is the number of people who are part of a family. Be sensitive to those who may have difficult circumstances.
- Tell children they are going to collect information by writing down how many people live in their house, on the picture they have been given, and that information will be used by them in groups to create a pictogram to find some answers.
- When all the house data cards are complete, give them to each group in turn to sort through and enter the information about number of people and create a pictogram.
- Show the **Family** picture set to be used.
- Encourage children to check that they have entered data correctly and provide support when they are making corrections.
- As a class, look at the pictograms and ask each group to say something about theirs.

Outcomes:

- Most children will sort the information for one criterion, select the appropriate icon and enter data to create a pictogram, and be able to make statements about the sorted information.
- Some children will sort information for one criterion, enter data to create a pictogram with help, and with prompting, will answer simple questions.
- Some children will sort the information for one criterion, select the appropriate icon and enter data to create a pictogram; talk about more complicated answers such as comparisons e.g. "*Are there more homes with five people in than three people? , How many more?*"