

## DATA LEVEL A

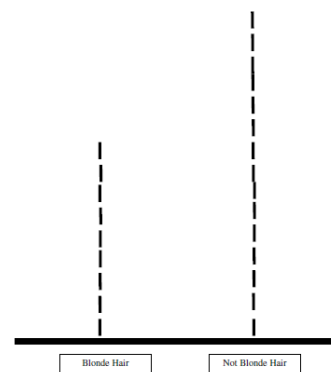
### Further Development

Pupils can progress to drawing pictorial representations of the above sorting activity once ample experience of sorting with concrete representations has been provided.

### Where Should I Put My Lollipop Stick?<sup>33</sup>

This activity provides pupils with an opportunity to represent data in columns and rows using real objects and pictures.

1. Clear a large floor area and put a metre stick on the floor to make the base line for a chart. (The pupils will later use their lollipop sticks to build columns on this base line.)
2. Provide each pupil with a lollipop stick.
3. Place the 2 labels which describe the sorting criteria, underneath the base line, to mark out where the 2 columns will be i.e. the label 'Blonde Hair' marks out the first column and the label 'Not Blonde Hair' marks out the second column.
4. Each pupil must decide which category he/she belongs and then place his/her lollipop stick above the appropriate label, building up a column of single lollipop sticks.
5. Once all pupils have recorded their hair colour, elicit the key features of the graph from pupils.
6. The activity can then be repeated to include a focus on **rows** instead of columns.
7. Rearrange the metre stick so that it lies in a vertical line on the floor. This will form the base line for the new chart.
8. Using the same criteria, pupils use their lollipop stick to represent their hair colour.
9. Elicit from pupils the difference between the two modes of representation.

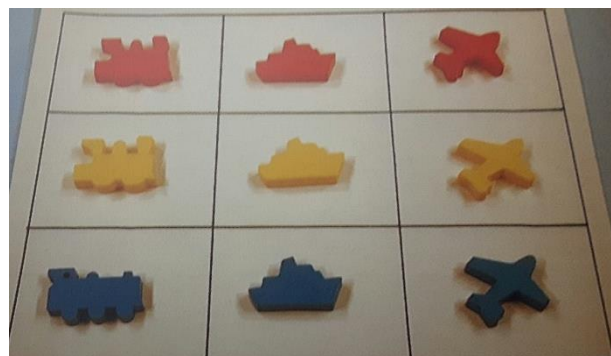


### CONSOLIDATION ACTIVITY

#### The Missing Piece<sup>34</sup>

This activity provides pupils with an opportunity to interpret concrete data arranged in rows and columns.

1. Provide pairs of pupils with a simple structured two – property collection on a grid as illustrated in the image below. In the image below the rows are determined by colour and the columns are determined by type of vehicle for example row 1 contains a red train, a red boat and a red plane.



<sup>33</sup> <https://www.scoilnet.ie/uploads/resources/13141/12778.pdf>

<sup>34</sup> Pitt, E. (2000, p.32).

## DATA LEVEL A

2. Pupils take turns to close their eyes while the other pupil removes one piece. The first pupil then opens his eyes and describes the missing piece. The missing piece is then replaced on the grid.
3. Encourage pupils to use the language of rows and columns as they describe where the missing piece should be located.



*Mary, what do you notice about the collection? Is there anything missing? Let's examine the rows and columns. Where do you think the missing piece should go?*

### **Further Development:**

The size of the grid can be increased to provide pupils with a greater level of challenge for example extend grid to a 3 x 4 arrangement.