



Raspberry Pi

## Year 1 – Grouping data

### Unit introduction

This unit introduces learners to data and information. Labelling, grouping, and searching are important aspects of data and information. Searching is a common operation in many applications, and requires an understanding that to search data, it must have labels. This unit of work focuses on assigning data (images) with different labels in order to demonstrate how computers are able to group and present data.

During this unit, learners will be logging on to the computers, opening their documents, and saving their documents.

### Overview of lessons

Lesson	Brief overview	Learning objectives
1 Label and match	Learners will begin to understand that objects have many different labels that can be used to put them into groups. They will name different objects and begin to experiment with placing them into different groups. Learners will also label a group of objects, and begin to understand that an object can fit into more than one group depending on the context.	To label objects <ul style="list-style-type: none"><li>• I can describe objects using labels</li><li>• I can match objects to groups</li><li>• I can identify the label for a group of objects</li></ul>

2 Group and count	Learners will begin to think about grouping objects based on what the objects are. They will demonstrate the ability to count a small number of objects before they group them, and will then begin to show that they can count groups of objects with the same label. Learners will also begin to learn that computers are not intelligent, and require input from humans to perform tasks.	To identify that objects can be counted <ul style="list-style-type: none"> <li>• I can count objects</li> <li>• I can group objects</li> <li>• I can count a group of objects</li> </ul>
3 Describe an object	Learners will begin to understand that objects can be described in many different ways. They will identify the properties of objects and begin to understand that properties can be used to group objects; for example, objects can be grouped by colour or size. Finally, learners will demonstrate their ability to find objects with similar properties and begin to understand the reason that we need to give labels to images on a computer.	To describe objects in different ways <ul style="list-style-type: none"> <li>• I can describe an object</li> <li>• I can describe a property of an object</li> <li>• I can find objects with similar properties</li> </ul>
4 Making different groups	Learners will classify objects based on their properties. They will group objects that have similar properties, and will be able to explain how they have grouped these. Learners will begin to group a number of the same objects in different ways, and will demonstrate their ability to count these different groups.	To count objects with the same properties <ul style="list-style-type: none"> <li>• I can group similar objects</li> <li>• I can group objects in more than one way</li> <li>• I can count how many objects share a property</li> </ul>
5 Comparing groups	Learners will choose how they want to group different objects by properties. They will begin to compare and describe groups of objects, then they will record the number of objects in each group.	To compare groups of objects <ul style="list-style-type: none"> <li>• I can choose how to group objects</li> <li>• I can describe groups of objects</li> <li>• I can record how many objects are in a group</li> </ul>

6 Answering questions	Learners will decide how to group objects to answer questions. They will compare their groups by thinking about how they are similar or different, and they will record what they find. They will then share what they have found with their peers.	To answer questions about groups of objects <ul style="list-style-type: none"> <li>• I can decide how to group objects to answer a question</li> <li>• I can compare groups of objects</li> <li>• I can record and share what I have found</li> </ul>
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## Progression

This unit will introduce learners to data and information. It will introduce learners to the concept of labelling and grouping objects based on their properties. Learners will develop their understanding that objects can be given labels, which is fundamental to their future learning concerning databases and spreadsheets. In addition, learners will begin to improve their ability to use dragging and dropping skills on a device. Following this unit, in year 2, learners will present data graphically in pictograms.

## Curriculum links

### National curriculum links

- Use technology purposefully to create, organise, store, manipulate, and retrieve digital content
- Use technology safely and respectfully

### Education for a Connected World links

#### **Copyright and ownership**

- I know that work I create belongs to me (Y1)
- I can name my work so that others know it belongs to me (Y1)

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