

Seamer and Irton CP School – Computing (H.Griffiths)

Topic – Grouping Data

Year 1
Spring 2

Strand – Data and Information

Prior Learning

As this is a Year 1 unit, no prior knowledge is assumed.

Key Knowledge I need to understand

I need to understand that:

Data can be numbers, words or pictures.

Information is what we can understand from looking at data.

Objects can be labelled using either their names or describing their properties.

Labels can be used to place objects into groups. This helps us to count and compare data easily, through looking at similarities and differences.

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.

How I will show what I have learned

To label objects	<ul style="list-style-type: none"> - I can describe objects using labels - I can match objects to groups - I can identify the label for a group of objects
To identify that objects can be counted	<ul style="list-style-type: none"> - I can count objects - I can group objects - I can count a group of objects
To describe objects in different ways	<ul style="list-style-type: none"> - I can describe an object - I can describe a property of an object - I can find objects with similar properties
To count objects with the same properties	<ul style="list-style-type: none"> - I can group similar objects - I can group objects in more than one way - I can count how many objects share a property
To compare groups of objects	<ul style="list-style-type: none"> - I can choose how to group objects - I can describe groups of objects - I can record how many objects are in a group
To answer questions about groups of objects	<ul style="list-style-type: none"> - I can decide how to group objects to answer a question - I can compare groups of objects - I can record and share what I have found

What vocabulary I need to know

Object, label, group, search, image, property, label, colour, size, shape, value, data set, more, less, most, fewest, the same

The following Glossary may be useful

<https://icompute-uk.com/ewExternalFiles/iCompute-Glossary.pdf>

What's next

In **Year 2 – Spring 2 - Pictograms**, learners will begin to understand what data means and how this can be collected in the form of a tally chart. They will learn the term 'attribute' and use this to help them organise data. They will then progress onto presenting data in the form of pictograms and finally block diagrams. Learners will use the data presented to answer questions.

Please access resources at Teach Computing Curriculum - <https://teachcomputing.org/curriculum>

Assessment

National Curriculum Computing links

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

Assessment

Formative assessment opportunities will be provided throughout each lesson. The learning objective and success criteria will be introduced at the beginning of each lesson and then reviewed at the end. Learners should assess how well they feel they have met the learning objective using the teacher's chosen method.

Summative assessment completed on ScholarPack on teacher judgement alongside evidence from each session.

Online Safety

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)

Teacher Subject Knowledge

You will need to be aware that the term 'object' is used to describe anything that can be labelled with properties, eg animals, pencils, or trees. When talking about objects, they are named to make it easier for humans to know what other humans are talking about, e.g. 'tree'. The name may change depending on context (sometimes 'tree' is enough, but sometimes 'oak tree' may be required), but it is always a property that an object can be labelled with. A label is a property used to describe an object, e.g. 'green'. This is the data that is collected about the object.

You will need an understanding that computers are not intelligent. Although they may seem like they are able to complete tasks autonomously, they are using input from humans, for example, searching for images that have been labelled by a person, or 'counting' data that has been grouped by people.

Through the unit, teachers will need to be aware that:

- Computers can be used to group data for analysis. The analysis in this unit is limited to a simple count of the objects in a group. Grouping is revisited throughout the data and information units.
- The term 'property' to describe objects. A label is a property used to describe an object, eg 'green'. This is the data that is collected about the object.
- 'Data set' is a term used to describe a collection of related data.
- The link between grouping objects in the real world and grouping objects on a computer. To strengthen this link, the language of 'is...' and 'is not...' should be used wherever possible.
- Objects can be grouped by different properties, so there are multiple ways of grouping the same objects.