

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

Topic – Pictograms	Year 2 Spring 2	Strand – Data and Information
<b>Prior Learning</b>	<b>Key Knowledge I need to understand</b>	
<p>In <b>Year 1 – Spring 2 - Grouping Data</b> learners were introduced 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 focused on assigning data (images) with different labels in order to demonstrate how computers are able to group and present data. Learners logged on to the computers, opening their documents, and saving their documents into their individual folders.</p>	<p><b>I need to understand that:</b></p> <p><b>Data can be numbers, words or figures. Information is what we can understand from looking at data.</b></p> <p><b>Objects can be organised into groups, based on what they are or their properties (features).</b></p> <p><b>Data about different groups can be recorded and presented by using pictograms, tally charts and block charts.</b></p> <p><b>This data can answer questions and solve problems.</b></p> <p>Learners will begin to understand what the term data means and how data 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.</p>	

### How I will show what I have learned

To recognise that we can count and compare objects using tally charts	<ul style="list-style-type: none"> <li>- I can record data in a tally chart</li> <li>- I can represent a tally count as a total</li> <li>- I can compare totals in a tally chart</li> </ul>
To recognise that objects can be represented as pictures	<ul style="list-style-type: none"> <li>- I can enter data onto a computer</li> <li>- I can use a computer to view data in a different format</li> <li>- I can use pictograms to answer simple questions about objects</li> </ul>
To create a pictogram	<ul style="list-style-type: none"> <li>- I can organise data in a tally chart</li> <li>- I can use a tally chart to create a pictogram</li> <li>- I can explain what the pictogram shows</li> </ul>
To select objects by attribute and make comparisons	<ul style="list-style-type: none"> <li>- I can tally objects using a common attribute</li> <li>- I can create a pictogram to arrange objects by an attribute</li> <li>- I can answer ‘more than’/‘less than’ and ‘most/least’ questions about an attribute</li> </ul>
To recognise that people can be described by attributes	<ul style="list-style-type: none"> <li>- I can choose a suitable attribute to compare people</li> <li>- I can collect the data I need</li> <li>- I can create a pictogram and draw conclusions from it</li> </ul>
To explain that we can present information using a computer	<ul style="list-style-type: none"> <li>- I can use a computer program to present information in different ways</li> <li>- I can share what I have found out using a computer</li> <li>- I can give simple examples of why information should not be shared</li> </ul>

### What vocabulary I need to know

More than, less than, most, least, organise, data, object, tally chart, votes, total, pictogram, enter, compare, count, explain, more, less, more common, least common, attribute, group, same, different, most popular, least popular, conclusion, block diagram, sharing

### What’s next

In **Year 3 – Spring 2 - Branching Databases**, learners will gain understanding of what a branching database is and create one. They will gain an understanding of what attributes are and how to use them to sort groups of objects by using yes/no questions. They will create physical and on-screen branching databases and they will evaluate the effectiveness of branching databases and decide what types of data should be presented as a branching database.

## Assessment

### National Curriculum Computing links

- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

### Cross Curricular Links

#### Maths

Building on Year 1 number and place value:

- Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: 'equal to', 'more than', 'less than' ('fewer'), 'most', 'least'

Year 2

- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity
- ask and answer questions about totalling and comparing categorical data

### 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

#### Education for a Connected World links

##### Self-image and identity

- I can recognise that I can say 'no'/'please stop'/'I'll tell'/'I'll ask' to somebody who asks me to do something that makes me feel sad, embarrassed or upset
- I can explain how this could be either in real life or online
- If something happens that makes me feel sad, worried, uncomfortable, or frightened I can give examples of when and how to speak to an adult I can trust

##### Health, wellbeing, and lifestyle

- I can identify rules that help keep us safe and healthy in and beyond the home when using technology
- I can give some simple examples

##### Privacy and security

- I can identify some simple examples of my personal information (e.g., name, address, birthday, age, location)
- I can describe the people I can trust and can share this with; I can explain why I can trust them
- I can recognise more detailed examples of information that is personal to me (e.g., where I live, my family's names, where I go to school)

##### Teacher Subject Knowledge

During this unit of work learners will use [j2e pictogram](#) tool which can be accessed online using a desktop, laptop or tablet computer (printed evidence). However, you may also choose to teach it using PurpleMash 2 count (evidence saved online)

Teachers should understand how tally charts and pictograms are created, and the benefits of organising data in those formats. These different formats allow data to be presented in different ways and will suit different purposes. Teachers will need to understand how people, animals and objects can be described using different attributes.

Teachers will need to be able to use and demonstrate either j2e pictogram OR PurpleMash 2 count