purple mash

Computing Scheme of Work

Unit 1.3 – Pictograms

Contents

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Introduction

This unit is an introduction to pictograms and looking at how they can be used to represent data. As with all units, you may want to adapt the content to suit topics being studied in the classroom.

Medium-term Plan

Lesson	Title	Success Criteria
[1](#)	Data in Pictures	• Children can discuss and illustrate the transport used to travel to school. • Children can contribute to the collection of class data. • Children have used these illustrations to create a simple pictogram.
[2](#)	Class Pictogram	• Children can contribute to a class pictogram. • Children can discuss what the pictogram shows.
[3](#)	Recording Results	• Children can collect data from rolling a die 20 times and recording the results. • Children can represent the results as a pictogram.

Lesson 1 – Data in Pictures

Aims

- To understand that data can be represented in picture format.

Success Criteria

- Children can discuss and illustrate the transport used to travel to school.
- Children can contribute to the collection of class data.
- Children have used these illustrations to create a simple pictogram.

Resources

Unless otherwise stated, all resources can be found on the main unit 1.3 page. From here, click on the icon to set a resource as a 2do for your class. Use the links below to preview the resources; right-click on the link and 'open in new tab' so you do not lose this page.

- 2Connect tool within Purple Mash.
- Lesson 1 – Worksheet; each sheet should be cut up making enough cards for six children' data.

Activities

Introduction	Display **slide 2** and outline the lesson aims. Display **slide 3** and outline the success criteria.
Methods of Transport	Using **slide 4**, ask the children to thought shower as many methods of transport as they can think of and think about when they might be used.
Travel to School	Introduce and explain the advantages of a pictogram using **slide 5**.
Activity 1: Creating a Physical Pictogram	Use **slide 6** to create a physical pictogram on the board/flipchart, sticking the like pictures in columns. (See link on lesson plan for cards).

Activity 2: Interrogating the Data	Use the suggested questions **slide 7** to interrogate the data produced.
Review Success Criteria	Display **slide 8**. Review the success criteria from **slide 3.** Children could rate how well they achieved this using a show of hands.

Lesson 2 – Class Pictogram

Aims

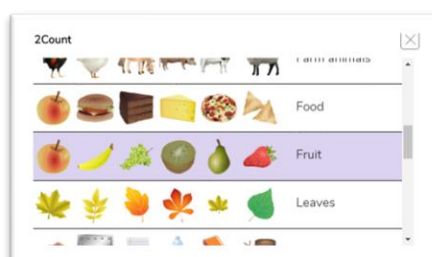- To contribute to a class pictogram.

Success Criteria

- Children can contribute to a class pictogram.
- Children can discuss what the pictogram shows.

Resources

Unless otherwise stated, all resources can be found on the main unit 1.3 page. From here, click on the icon to set a resource as a 2do for your class. Use the links below to preview the resources; right-click on the link and 'open in new tab' so you do not lose this page.

- 2Count Pictogram – Favourite Fruits. To open this, open the 2Count tool then select the 'Fruit' file from the list of options:

    You can change the fruit pictures from the default values by clicking on the fruit images at the bottom of the pictogram. Use alternatives from the clipart gallery or draw using the paint tools.
- Pictures of fruit – Lesson 2 – Worksheet (optional – these pictures are also displayed on the slideshow)
- Extension: Set the Green Class Pictogram as a 2do for children.

Activities

Introduction	Display **slide 2** and outline the lesson aims.
	Display **slide 3** and outline the success criteria.

Recap	Using **slide 4**, recap the learning from the last session and introduce today's main activity.
Fruits	Discuss with the children the different fruits on **slide 5** and which they like and don't like.
Activity 1: Class Pictogram	Use **slide 6** to introduce 2Count and demonstrate how it can be used to create a class pictogram. You will need to set the pictogram up with your desired fruits. Explain to children that they need to think of one fruit which is their favourite.
Activity 2: Interrogating the Data	On **slide 7**, add a title to the pictogram and ask the children questions tailored to interrogate the chart you have produced.
Activity 3: Optional Extension	On **slide 8**, introduce the optional extension activity. This can be set as a 2Do in advance.
Review Success Criteria	Display **slide 9**. Review the success criteria from **slide 3.** Children could rate how well they achieved this using a show of hands.

Lesson 3 – Recording Results

Aim

- To use a pictogram to record the results of an experiment.

Success Criteria

- Children can collect data from rolling a die 20 times and recording the results.
- Children can represent the results as a pictogram.

Resources

Unless otherwise stated, all resources can be found on the main unit 1.3 page. From here, click on the icon to set a resource as a 2do for your class. Use the links below to preview the resources; right-click on the link and 'open in new tab' so you do not lose this page.

- 2Count – Dice file; this is opened in the same way as the fruit file in the last lesson. This can be set as a 2do for children by saving it in your work folder and then clicking on the Share button (the globe symbol) to set as a 2do.
- Lesson 3 – Worksheet – Dice numbers rolled.
- Dice (1 per child/pair).

Activities

Introduction	Display **slide 2** and outline the lesson aims.
	Display **slide 3** and outline the success criteria.
Recap	Using **slide 4**, recap the learning from the last session and introduce today's main activity.
Activity 1: Rolling a Dice	Use **slide 5** to introduce the investigation. The worksheet can be found in the resource list. Children can work individually or in pairs.
Activity 2: Rolling a Dice Pictogram	Using **slide 6**, explain how the children can create their own pictograms with their data.

Activity 3: Interrogating the data	On **slide 7**, ask the children questions to interrogate the pictograms they have produced.
Activity 4: Optional Extension	On **slide 8**, introduce the optional extension activity.
Review Success Criteria	Display **slide 9**. Review the success criteria from **slide 3.** Children could rate how well they achieved this using a show of hands.

How I Travel to School

Name: _____

How I Travel to School

Name: _____

How I Travel to School

Name: _____

How I Travel to School

Name: _____

How I Travel to School

Name: _____

How I Travel to School

Name: _____

orange	pear	kiwi	other
apple	banana	strawberry	grapes

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blackberries	blueberries	cherries	pineapple
melon	lemon		

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Name _____

Roll a die 20 times and then record the numbers thrown.

Assessment Guidance

The unit overview for Year 1 contains details of national curricula mapped to the Purple Mash Units. The following information is an exemplar of what a child at an expected level would be able to demonstrate when completing this unit with additional exemplars to demonstrate how this would vary for a child with emerging or exceeding achievements.

Assessment Guidance	
Emerging	With support, children can organise a limited set of data into a physical pictogram (Unit 1.3 Lesson 1) and a virtual pictogram (Unit 1.3 Lesson 2). With support, children use this data to answer given questions. Working as a group, children can create, store, retrieve and share their pictograms (Unit 1.3 Lesson 3).
Expected	Children can collate and organise class data into a physical pictogram (Unit 1.3 Lesson 1) and a virtual pictogram (Unit 1.3 Lesson 2) Children can then interrogate this data to answer given questions. Children can create, store, retrieve and share their own pictograms (Unit 1.3 Lesson 3). Most children will be able to save their pictograms, using a memorable file name, to their own personal space on Purple Mash and understand that this can be retrieved later (Unit 1.3 Lesson 3.) Children can represent simple collected data in an appropriate pictogram by using 2Count (Unit 1.3. Lesson 3). Most children can collate data from rolling a die and record the results within 2Count. They demonstrate that they can use 2Count to group collated data into pictorial representations (Pictograms) Unit 1.3. Lesson 3).
Exceeding	Children can collate and organise class data into a physical pictogram (Unit 1.3 Lesson 1) and a virtual pictogram (Unit 1.3 Lesson 2) Children can then interrogate this data to present statements about the data e.g. 'The second most popular form of transport was…'. Independently, children can create, store, retrieve and share their own pictograms (Unit 1.3 Lesson 3).