

**purple
mash**

CRASH COURSE

Computing Scheme of Work Year 3 Spreadsheets Crash Course

For classes in Year 3 who have not used 2Calculate previously



Contents

Introduction	3
Differentiation	3
Medium-Term Plan	4
Lesson 1 – Introduction to Spreadsheets	5
Aims	5
Success criteria	5
Resources	5
Activities	5
Lesson 2 – Using Tools to Calculate Totals.....	7
Aims	7
Success criteria	7
Resources	7
Activities	7
Lesson 3 – Creating Pie Charts and Bar Graphs	8
Aim	8
Success criteria	8
Resources.....	8
Activities	8
Lesson 4 – Advanced Mode and Cell Addresses	10
Aims	10
Success Criteria	10
Resources	10
Activities	10

Need more support? Contact us:

Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: [@2simplesoftware](https://twitter.com/2simplesoftware)





Introduction

These spreadsheet lessons have been designed to be used on a range of devices including tablets. We advise when you are dealing with larger spreadsheet data sets then laptops or desktops are the preferred devices because they are easier for children to use for this purpose.

The Purple Mash spreadsheet tool is 2Calculate. A user guide to can be found at [2Calculate User Guide](#).

The crash courses have been designed to help classes who haven't completed the spreadsheet units in previous year groups to catch up the essential skills so that they can proceed with the non-crash course in the next year group. For example, a class who did not do the spreadsheet units in years 1 and 2, would do the crash course unit in year 3 and not the standard unit. In year 4, they would do the standard unit. In order to catch up, children will not learn about every tool within 2Calculate but will focus on the core spreadsheet skills that can be applied to other spreadsheets that they will encounter in future learning.

The lessons assume that children are logged onto Purple Mash with their own individual usernames and passwords so their work will be saved in their own folders automatically and can be easily reviewed and assessed by the class teacher.

If you are currently using a single login per class or group and would like to set up individual logins yourself, then please see our guide to doing so at [Create and Mange Users](#). Alternatively, please contact support at support@2simple.com or 0208 203 1781.

Note: To force links within this document to open in a new tab, right-click on the link then select 'Open link in new tab'.

Differentiation

The use of spreadsheets has a strong link to mathematics. Some children might have difficulty with the mathematical concepts in some lessons and might need guidance with this aspect. For example, in lessons where spreadsheets are being used to add up prices, children who are not familiar with converting pence (45p) to pounds (£0.45) might need this aspect explained in more detail; in lessons dealing with percentages and fractions some children might need extra support for the mathematical concepts.

Where appropriate, guidance has been given on how to simplify tasks within lessons or challenge those who are ready for more stretching tasks.

Need more support? Contact us:

Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: @2simplesoftware



Medium-Term Plan

Lesson	Title	Success Criteria
<u>1</u>	Introduction to Spreadsheets	<ul style="list-style-type: none">• Children can navigate around a spreadsheet.• Children can explain what rows and columns are.• Children can enter data into cells.• Children can create a table of data on a spreadsheet.
<u>2</u>	Using Tools to Calculate Totals	<ul style="list-style-type: none">• Children can use tools in a spreadsheet to automatically total rows and columns.• Children can use calculations to answer questions about data.• Children can collect some simple data and use a spreadsheet to interpret it (extension).
<u>3</u>	Creating Pie Charts and Bar Graphs	<ul style="list-style-type: none">• Children can create a table of data on a spreadsheet.• Children can use a spreadsheet program to automatically create charts and graphs from data.
<u>4</u>	Advanced Mode and Cell Addresses	<ul style="list-style-type: none">• Children can describe a cell location in a spreadsheet using the notation of a letter for the column followed by a number for the row.• Children can find specified locations in a spreadsheet.

Need more support? Contact us:

Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: [@2simplesoftware](https://twitter.com/2simplesoftware)





Lesson 1 – Introduction to Spreadsheets

Aims

- To understand what a spreadsheet looks like.
- To be able to navigate around a spreadsheet and enter data.
- To learn new vocabulary related to spreadsheets.

Success criteria

- Children can navigate around a spreadsheet.
- Children can explain what rows and columns are.
- Children can enter data into cells.
- Children can create a table of data on a spreadsheet.

Resources

Unless otherwise stated, all resources can be found on the [unit main page](#). From here, they can be set as 2Dos by clicking on the icon. To preview resources linked to here, right-click and 'open in new tab' so you do not navigate away from this page.

- [2Calculate tool in Purple Mash](#).
- [Toy Data Spreadsheet](#): set this as a 2Do for children.

Activities

Introduction	Display slide 2 and outline the lesson aims. Display slide 3 and outline the success criteria.
Background – What are Spreadsheets?	Display slide 4 clicking through it to reveal what spreadsheets are. Display slide 5 . Share screenshot of party spreadsheet. Ask the class - What could also be included on a spreadsheet for a party?
Getting to know 2Calculate	Use slide 6 . Show children how to open 2Calculate from the Tools area in Purple Mash or click on the icon on the slide. Use the prompts on the slide to help children familiarise themselves with 2Calculate when it is opened.
Key Vocabulary	Use slide 7 in conjunction with 2Calculate to show children the environment and go through key vocabulary (Click advanced mode on 2Calculate when demonstrating).

Need more support? Contact us:

Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: [@2simplesoftware](https://twitter.com/2simplesoftware)



Activity 1: Writing Numbers & Name	Use slide 8 . Show children how to launch 2Calculate from the tools area in Purple Mash. Use the slide to direct the activity. Ensure that children can save.
Activity 2: Colouring Cells	Use slide 9 to explain how to colour cells in 2Calculate. Click the hints if necessary. When children save, encourage them to use the same file name, read the warning message together and discuss why this is okay because they are simply saving the latest version of their file.
Activity 3: Toy Data	Use slide 10 . Children might need help in interpreting the table of data. The icon on the slide is a link to the example for demonstration. Click to show children how to add calculations. Children should open the example from their 2Dos to complete and save.
Activity 4: Extension	Slide 11 . Challenge children to explore the calculations that a spreadsheet can do.
Review Success Criteria	Use slide 12 to evaluate success of meeting success criteria and how well they felt they were able to achieve the 3 activities. A show of hands could be used.



Lesson 2 – Using Tools to Calculate Totals

Aims

- To use the totalling tools.
- To use a spreadsheet to answer questions about data.
- To collect and use data (extension).

Success criteria

- Children can use tools in a spreadsheet to automatically total rows and columns.
- Children can use calculations to answer questions about data.
- Children can collect some simple data and use a spreadsheet to interpret it (extension).

Resources

Unless otherwise stated, all resources can be found on the [unit main page](#). From here, they can be set as 2Dos by clicking on the icon. To preview resources linked to here, right-click and 'open in new tab' so you do not navigate away from this page.

- [2Calculate tool in Purple Mash](#).
- [Ferret Walking example file](#): set this as a 2Do for the class

Activities

Introduction	Display slide 2 and outline the lesson aims. Display slide 3 and outline the success criteria.
Vocabulary	Display slide 5 . Click the ? To reveal the words. Children will not have heard the term 'toolbox' yet. Alternatively, demonstrate by clicking the icon to open 2Calculate and review the same vocabulary.
Calculating Totals	Use slides 5-7 Talk about where children think the + and = symbols should go. Either use the slide or open the example from the icon. Do not fix it though. Talk through the slides and demonstrate.
Activity 1: Calculating Totals	Use slide 8 to direct the activity. Children might need help with the second stage where they add in daily totals. Stop the class and demonstrate if this is the case. Remind children to save.
Activity 2: Extension	Use slide 9 to direct the activity. Children could work in small groups to complete this.
Review Success Criteria	Use slide 10 to evaluate success of meeting success criteria. Children could rate how well they achieved this using a show of hands.

Need more support? Contact us:

Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: [@2simplesoftware](https://twitter.com/2simplesoftware)





Lesson 3 – Creating Pie Charts and Bar Graphs

Aim

- To add and edit data in a table layout.
- To find out how spreadsheet programs can automatically create graphs from data.

Success criteria

- Children can create a table of data on a spreadsheet.
- Children can use a spreadsheet program to automatically create charts and graphs from data.

Resources

Unless otherwise stated, all resources can be found on the [main unit 3.3 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 don't lose this page.

***You need to have collected data already or decide what data to use with the class and how you organise data collection.**

- [Bird Data file \(challenge activity 1\)](#).
- [Cars Data files \(challenge activity 2\)](#).

Activities

Introduction	Display slide 2 and outline the lesson aims. Display slide 3 and outline the success criteria.
Vocabulary	Use slide 4 to introduce key vocabulary for the session. Click to reveal the information.
Using Spreadsheets to create charts and Graphs	Use slide 5 , click for further information.
Activity 1: Collecting Data into a Table	Use slide 6 to guide children in entering the data for the theme you have decided upon into a 2-column table on their devices.
Activity 2: Creating Charts	Display slide 7 . Demonstrate creating a chart. Children should create their own charts and answer questions revealed on the slide through clicking.
Activity 3: Changing Data	Display slide 8 . Go through the questions as they are revealed, prompting the children to observe what happens to the chart when data in the table is changed and increasing chart range by adding further rows.

Need more support? Contact us:

Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: [@2simplesoftware](#)



Activity 4: Extension	Display slide 9 . Children should turn the given tables into charts and make observations on the data. *Clicking the icons will launch the files to demonstrate. Children should have these set as a 2Do.
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 4 – Advanced Mode and Cell Addresses

Aims

- To introduce the Advanced mode of 2Calculate.
- To learn about describing cells using their addresses.

Success Criteria

- Children can describe a cell location in a spreadsheet using the notation of a letter for the column followed by a number for the row.
- Children can find specified locations in a spreadsheet.

Resources

For these activities we recommend using a desktop / laptop machine where possible to achieve maximum performance.

Unless otherwise stated, all resources can be found on the [main unit 3.3 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 don't lose this page.

- [Advanced Mode example 1.](#)
- [Advanced Mode example 2.](#); you will need to save this as a 2Do for your class.
- [Advanced Mode example2 Completed](#)
- [Advanced Mode example 3.](#) Set this as a 2Do for the class.
- Set up a class Display Board – see the [Display Boards User Guide](#) if you need guidance with this.

Activities

Introduction	Display slide 2 and outline the lesson aims. Display slide 3 and outline the success criteria.
Advanced Mode	Use slide 4 . Use the icon to launch 2Calculate to demonstrate. Ask children to describe a few cells using their cell address.
Activity 1: Creating a Picture	Use slide 5 . Launch Example 1 from the icon. As a class, create a picture from cell addresses given on sheet. Children should then complete Example 2 on their own. Explain to children how to save their own examples to the class Display Board, approve these so that children can try each other's.

Need more support? Contact us:

Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: @2simplesoftware



Activity 2: Treasure Maps	Display slide 6 . Children should open and complete example 3 from their 2Dos.
Activity 3: Extension	Use slide 7 to display an extension activity. Explain to children how to save their own examples to the class Display Board, approve these so that children can try each other's. *Note it is possible to copy and paste on iPad by holding finger on cell until copy and paste option appears.
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.

Need more support? Contact us:

Tel: +44(0)208 203 1781 | Email: support@2simple.com | Twitter: @2simplesoftware

