



Purple Mash Computing Scheme

Spreadsheets

Contents

Overview

- Key Learning
- Knowledge Organiser and Learning Mat
- Concept Map and Quiz

Lesson 1: Exploring Advanced Mode

- Aim
- Success Criteria
- Resources
- Preparation

Lesson 2: Arrows Toolbar (Totalling Tools)

- Aim
- Success Criteria
- Resources
- Preparation

Lesson 3: Using Formulae (Simple Wizard)

- Aim
- Success Criteria
- Resources
- Preparation

Lesson 4: Using Formulae (Advanced Wizard)

- Aim
- Success Criteria
- Resources
- Preparation
- Teaching Notes

Lesson 5: Solving Real-Life Problems With Spreadsheets

- Aim
- Success Criteria
- Resources
- Preparation
- Teaching Notes

Need more support? Contact us:

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

Lesson 6: Theme Park Project

Aim

Success Criteria

Resources

Preparation

Teaching Notes

Assessment

Overview

This unit introduces children to using 2Calculate in Advanced Mode, helping them move beyond basic data entry to explore how spreadsheets can calculate and solve problems. Children learn to use formulae and functions to organise and analyse data effectively, and by the end of the unit, children apply their knowledge independently to create and use spreadsheets that model real-life scenarios and answer practical questions.

Key Learning

- To understand the layout and features of 2Calculate in Advanced Mode.
- To use the arrows toolbar to be able to automatically total rows and columns.
- To use simple formulae in a spreadsheet by using the formula wizard.
- To use advanced formulae in a spreadsheet to calculate totals, averages and to find the highest and lowest values.
- To apply spreadsheet skills to solve real-world problems.
- To design and use a spreadsheet to answer a series of questions.

Knowledge Organiser and Learning Mat

These resources can be used to support learning across the unit.

- [Knowledge Organiser](#)
- [Learning Mat](#)

Concept Map and Quiz

Use these resources to gauge children's understanding before or after the unit has been taught.

- [Concept Map](#)
- [Quiz](#)

Lesson 1: Exploring Advanced Mode

Aim

- To understand the layout and features of 2Calculate in Advanced Mode.

Success Criteria

- I can add, rename, and organise sheets.
- I can insert and delete rows and columns at specific points within a spreadsheet.
- I understand how to merge cells, and I know why this is useful.

Preparation

- Set **Pet Survey** as a 2Do.
- Print enough copies of the **Pet Survey - Activity Sheet** for the class.

Please find all lesson resources below.

Resources

- [Slideshow - Lesson 1](#)
- [Pet Survey](#)
- [Pet Survey - Activity Sheet](#)

Lesson 2: Arrows Toolbar (Totalling Tools)

Aim

- To use the arrows toolbar to be able to automatically total rows and columns.

Success Criteria

- I understand that the 'copy tools' copy data across rows, columns, and diagonals.
- I can use the 'total tool' to calculate totals quickly in different directions.
- I can explain how this makes spreadsheets more efficient.

Preparation

- Set **Using Arrows** as a 2Do.
- Print enough copies of the **Using Arrows - Activity Sheet** for the class.
- Print a copy of the **Magic Squares - Answers** document if necessary.

Please find all lesson resources below.

Resources

- [Slideshow - Lesson 2](#)
- [Using Arrows](#)
- [Using Arrows - Activity Sheet](#)
- [Magic Squares - Answers](#)

Lesson 3: Using Formulae (Simple Wizard)

Aim

- To use simple formulae in a spreadsheet by using the formula wizard.

Success Criteria

- I can use the simple mode of the formula wizard.
- I can select a function from within the formula wizard (add, subtract, multiply, divide).
- I can apply this formula to a range of cells.

Preparation

- Set **Formula Wizard** as a 2Do.

Please find all lesson resources below.

Resources

- [Slideshow - Lesson 3](#)
- [Formula Wizard](#)

Lesson 4: Using Formulae (Advanced Wizard)

Aim

- To use advanced formulae in a spreadsheet to calculate totals, averages and to find the highest and lowest values.

Success Criteria

- I can open the formula wizard in advanced mode.
- I can use SUM, AVERAGE, MIN, and MAX functions.
- I can apply these functions to sets of data in a spreadsheet.

Preparation

- Set **Advanced Formula Wizard** as a 2Do.

Please find all lesson resources and additional teaching notes below.

Resources

- [Slideshow - Lesson 4](#)
- [Advanced Formula Wizard](#)

Teaching Notes

Please note that in this lesson, the term 'average' is defined as 'a function that works out the 'middle' value of a set of numbers. This is to avoid having to give Year 3 children the definition for the 'mean', which they will likely encounter in Year 5.

Lesson 5: Solving Real-Life Problems With Spreadsheets

Aim

- To apply spreadsheet skills to solve real-world problems.

Success Criteria

- I can use spreadsheet tools to answer questions about real-life scenarios.
- I can choose appropriate formulae or functions to solve problems.
- I can explain how a spreadsheet makes problem-solving easier.

Preparation

- Please note that the **Doggy Daycare - Example** has been included for those teachers who may wish to explore this in more detail.
- Set **Seaside Adventure** as a 2Do.

Please find all lesson resources and additional teaching notes below.

Resources

- [Slideshow - Lesson 5](#)
- [Doggy Daycare - Example](#)
- [Seaside Adventure](#)

Teaching Notes

Please note that at this stage of the unit, the focus of the lesson shifts from being able to use spreadsheet functions and operations, to being able to solve mathematical problems. Because of this, there is an expectation that children use some maths skills to aid them in this lesson. It may be appropriate to provide additional support to those children who particularly struggle with mathematical concepts to aid their learning and understanding within this lesson.

Lesson 6: Theme Park Project

Aim

- To design and use a spreadsheet to answer a series of questions.

Success Criteria

- I can organise and enter data into a spreadsheet.
- I can select and apply appropriate tools, formulae and functions to solve problems.
- I can present a spreadsheet clearly and explain how I reached an answer.

Preparation

- Set **Sundown Valley Theme Park** or **Sundown Valley Theme Park - Scaffolded** as a 2Do depending on the ability of the children in your class. Use the scaffolded version of this 2Do for those children who may need additional support.
- Print enough copies of the **Sundown Valley - Information Pack** for children to have one each.
- (Optional Extension) Print enough copies of the **Sundown Valley - Extension** for the children within your class.
- View online or print a copy of the **Sundown Valley - Answers** to aid in marking or peer assessment.

Please find all lesson resources and additional teaching notes below.

Resources

- [Slideshow - Lesson 6](#)
- [Sundown Valley](#)
- [Sundown Valley - Scaffolded](#)
- [Sundown Valley - Information Pack](#)
- [Sundown Valley - Extension](#)
- [Sundown Valley - Answers](#)

Teaching Notes

As mentioned above, teachers should view both the **Sundown Valley Theme Park** and the **Sundown Valley Theme Park - Scaffolded** applications before the lesson. From here, decide whether you would like all children to attempt creating a spreadsheet from a blank file, or whether certain children or groups of children would benefit from using the scaffolded version to answer the questions within the information pack.

For those children who use the scaffolded version, their focus will mainly be on changing the '**quantity**' column within the application to help them answer the questions.

Teachers may also benefit from printing the Sundown Valley - Information Pack on both sides of a piece of paper, to reduce printing.

Assessment

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.

Emerging

- Children can add, rename, and organise sheets, and they can enter and edit data within cells. They are beginning to use tools such as 'copy' and 'total' but may need guidance to apply them correctly. With support, they can use the simple mode of the formula wizard to carry out one-step calculations. They may need reminders to use functions appropriately or to interpret results. Their spreadsheets are functional but may lack organisation or efficiency.

Expected

- Children can confidently create and organise spreadsheets with appropriate headings and formatting. They can use the arrows and total tools to calculate sums efficiently across rows and columns. They can use both the simple and advanced modes of the formula wizard to apply functions such as SUM, AVERAGE, MIN, and MAX. Children can apply these skills to solve real-life problems and can explain how their spreadsheet helps to find answers clearly and efficiently.

Exceeding

- Children can independently design spreadsheets with clear structure, layout, and purpose. They can select and apply appropriate formulae and functions to explore data and solve a range of practical, multi-step problems. They can adjust or extend their work creatively, introducing new data or refining formulae to improve accuracy. Their spreadsheets are clear, well presented, and are used effectively to model and explain their reasoning. Children can articulate the advantages of using spreadsheets for real-world applications.