













Quick View

There are 3 parts to this lesson:

1	Introduction: Financial terms	 
2	Spreadsheet - modelling materials costs and break-even	    
3	Creating the business financial model	    
	Homework: Describing financial terms for the final report	

Delivery

1. Introduction: Financial terms

Before starting the modelling spreadsheet it is important that pupils understand the financial terms that they will use.

Show the **presentation4a** - financial terms, **notes4a** and **handout4** accompany it.

Group activity

Show **presentation4a** - financial terms

Individual

Pupils view their own version in **activity 4 / start**

Develop this activity by asking:

- Where have you heard of these terms being used before?
- Why does a business need to know the break-even point?

Show pupils the language cards **language4** for this lesson.

2. Spreadsheet - modelling materials costs and break-even

This part of the activity is important as it shows pupils how to use a spreadsheet to model materials costs and then to use this information for analysing break-even points.

Show pupils the **example4b** of Troy's Toys. This workbook contains 3 sheets. The first gives instructions on how to use the spreadsheet. The next one requires pupils to enter a maze length (assuming that all mazes are cut from 100mm materials), the number of mazes required and the number of ball bearing that each maze uses.

The next sheet then works out the various costs depending upon materials choice. The spreadsheet use ROUNDUP and ROUNDDOWN functions. Pupils will learn about this in the next part of the activity.

Group activity

Show **example4b** - spreadsheet

Individual

Pupils view their own version in **activity 4 / task**

Develop this by asking:

- Why are ball bearings offered in packets of different amount?
- Why is it important that Troy's Toys looked at different materials?

Distribute the **worksheet4b** - this explains the spreadsheet and asks pupils to investigate.

3. Creating the business financial model

During this section pupils may wish to compare ideas for the spreadsheet, perhaps using criteria. Explain that using criteria can help select answers that are 'fit for purpose'

Pupils are now asked to plan a similar spreadsheet. During the next activity they will gather data to enter into it and then use it to financial model some mazes. (*A sheet of prices for materials is available in Activity 5 both online and in printed form although pupils may wish to research their own prices*).

Some pupils may benefit from using a partly prepared spreadsheet.

Homework:

Using **homework4** pupils are asked to prepare a slide for their final report that explains financial terms and how this relates to their business.

You may feel it appropriate to provide the homework sheet in electronic format for those pupils with computer access at home. Consideration should then be given to:

- How they would return the work and the style - electronic or printed
- Virus protection
- Authenticity of the work

Objectives

Finding Information, Developing Ideas, Communicating & Evaluating

Pupils should be able to:

- Save files in appropriate formats and create a hierarchical folder structure.
- Recognise that the rules contained within a model determine its output, and make more complex predictions based on several variables.
- Amend existing simple models by changing variables and formulae.
- Identify whether a model has an appropriate set of variables to make it suitable for a particular purpose, and assess its accuracy by comparing its outcomes with those from other sources.
- Use digital communications for the sharing and collaborative development of ideas for a variety of purposes.
- Work in a safe and responsible way when communicating with others.
- Gather and use feedback to inform future work.

Pupils should be taught to:

- Understand financial terms.
- Input information into a spreadsheet and analyse the results, selecting best choices.
- Make decisions regarding quantities and break-even points.
- Design a spreadsheet for themselves based on an example model.

Preparation

Have you:

- Identified the key elements of this lesson
- Understood the school ICT policy in the areas that may affect this lesson
- Thought about the seating arrangements for any large group demonstration
- Checked that the whiteboard or large screen has been set up
- Prepared any extra work to be used for differentiation
- Prepared any work that teaching assistants may require
- Looked at the example spreadsheet and tested various models
- Practised the skills required that need demonstrating
- Prepared any key word displays

Required IT skills for this lesson:

Using a large screen / whiteboard

Using and developing spreadsheets

Differentiation & Extension

Consider the following for some pupils:

- Wall chart showing financial terms
- Paired work to complete the spreadsheet and worksheet
- Partly completed planning of a new spreadsheet
- Revision of early spreadsheet units

The following resources are available to pupils. Printable versions can be accessed in the 'all resources' within each lesson and are useful for reinforcement, extension or general support.

- 2 Wordsets with audio support
- 2 Wordsearch activities
- 2 Interactive crosswords

Homework & Language

Homework:

Using **homework4** pupils are asked to prepare a slide for their final report that explains financial terms and how this relates to their business.

You may feel it appropriate to provide the homework sheet in electronic format for those pupils with computer access at home. Consideration should then be given to:

- How they would return the work and the style - electronic or printed
- Virus protection
- Authenticity of the work

Language for learning:

finance
test

accounts
goal-seek

design
break-even

Resources

For this lesson:

You will need

- Large screen display or whiteboard
- Access for pupils to **Unit 8.5 > Activity 4**
- Suitable spreadsheet software, e.g. Microsoft Excel

Teacher Resources:

These are accessed by opening the **Teacher Resources File** on the CD (or network).

Resource Description	Filename	Format
Language Cards	language4	Word PDF
Presentation on Financial terms	presentation4a	PowerPoint
Notes on presentation	notes4a	Word PDF
Handout on Financial Terms	handout4a	Word PDF
Example spreadsheet	example4b	Excel
Worksheet investigating spreadsheet	worksheet4b	Word PDF
Handout on Goal Seek & Functions	handout4b	Word PDF
Activity Sheet	task4	Word PDF
Summary sheet	summary4	Word PDF
Homework sheet	homework4	Word PDF
Activity answer sheet	act4answers	Word PDF

Pupil Resources:

These are accessed by opening the **Pupil Resources File** on the CD (or network).

Resource Description	Filename	Format
Handout on Financial Terms	handout4a	Word PDF
Example spreadsheet	example4b	Excel
Worksheet investigating spreadsheet	worksheet4b	Word PDF
Handout on Goal Seek & Functions	handout4b	Word PDF
Activity Sheet	task4	Word PDF
Summary sheet	summary4	Word PDF
Homework sheet	homework4	Word PDF