

Consequences in ICT

Very few actions are neutral. Most actions create impact or change that then has to be dealt with.

Knowledge Harvest:

Students to work in small groups and write down what they already know about spreadsheets, formatting and formulas.

Discussion prompts to include how to make a spreadsheet look more attractive, why it would be useful to use formulas, and how a spreadsheet can be used to look at the consequences of changing information within the spreadsheet.

Pupils to work together to come up with, and develop their ideas. This will form part of one lesson.



Resilient learner

I am always focused on what I need to do and for what reason.

I can deal with problems very well when they happen and come up with solutions.

I always try my hardest and never give up even when I am under pressure.

I have a can-do attitude and have self-belief in whatever I do.

1. Key Question:

How can you format a spreadsheet effectively?

Skill Development: By the end of the project students will be able to demonstrate they are resilient learners by entering data, changing data types and using a range of formatting features.

Project Outline: Students to practice creating spreadsheets from scratch, applying a range of formatting features and exploring how a spreadsheet can hold different data types.

Suggested duration: 2 lessons

2. Key Question:

How to use formulas and functions?

Skill Development: By the end of the project students will be able to use basic arithmetical formulas to carry out simple calculations and will be able to identify where to use simple functions such as SUM, MIN, MAX and AVERAGE. This will require them to be analytical thinkers and resilient learners.

Project Outline: Students to practice using basic arithmetical formulas and simple functions to carry out calculations on their spreadsheet.

Suggested duration: 2 lessons

3. Key Question:

What is the consequence of changing values within a spreadsheet?

Skill Development: By the end of the project students will be able to analyse the effects of changing values within a spreadsheet to model simple outcomes.

Project Outline: Students to predict and test the outcome of changing variables within a spreadsheet. Students to use modelling to explain the consequences and what happens if one value is altered.

Project exit point: Self and Peer assessment of Spreadsheet task

Suggested duration: 2 lesson

Key Skills Development

Literacy

Developed when students complete tasks and peer and self-assessments

Keywords

Spreadsheet, modelling, formula, function, values, variables, outcomes, formatting

Numeracy

Using spreadsheets to perform calculations

ICT

Use of excel

Soft skills

Team working, problem-solving, communication



Analytical thinker

I confidently ask questions to deepen my understanding and challenge assumptions.

I can independently explore issues, events or problems from lots of different viewpoints in detail.

I can gather and understand information independently to solve complex problems and make decisions.

I can independently analyse information critically and judge how valuable or relevant it is.

Exit

Point:

An Excelling ICT LEARNER can...

- **Modify** values within a spreadsheet to model 'what if...' scenarios.
- **Design** an appropriate graph to represent the data.
- **Combine** relevant data to use in a graph.