

# Year 9 Llanidloes Cinema Project

This project will require about 24 lessons to complete

## Learning Objectives

To gain competency in the use of Word Processing software (WP), Desktop Publishing software (DTP), Modelling software (Spreadsheet) and Data handling software (Databases)

To learn to use ICT and Online Tools and features to enhance learning across differing curriculum subjects, with a focus on the software tools and features relevant to each subject area.

To learn about Data handling software and the concept of Big Data.

BBC Bitesize database revision - <https://www.bbc.co.uk/bitesize/guides/zswnb9q/revision/1>

BBC Bitesize Big Data revision (Page 1 only) - <https://www.bbc.co.uk/bitesize/guides/zsfky4j/revision/6>

**BRIEF:** Llanidloes Business Group want to build a new Cinema in Llanidloes. The cinema will run on green energy, recycle all waste, and provide energy for an electric vehicles in the car park. They have created a competition for local school children. There are three categories:

1. Create a presentation document to showcase the cinema and forthcoming movies
2. Create a modelling spreadsheet to income and outgoings
3. Create a test database of forthcoming movies

## Research and analysis of the problem

A good way into this theme is to research cinema websites and posters, movie posters, the Internet Movie Database (IMDB), and profit and loss sheets

Pupils could collaborate on this project and they can share their ideas, planning, designs, and track progress using **Microsoft Teams**. Separate Teams could be made for each group, or **Breakout Rooms** used when meeting to conference.

The **presentation** should be minimum three slides with a master page and house style, a home button, transitions and an animation. There must be text and image combined on each slide. The higher levels may be achieved by designing a location map to place on a contact slide. This could be done in an image editing program. Research other leaflets and

websites to get ideas. Email a first draft to your friend and ask for design help. Reply to them with thanks. Explain in your email how you ensured you didn't infringe copyright laws (Sourcing from creative commons etc.)

The **spreadsheet** model should include incomes from ticket sales - including different ticket types such as Adult, Child, OAP and Concession - programmes, food and drink. There should also be a separate means of applying a discount on special viewing days or if group/family tickets are bought (a **variable**). Outgoings that the owners will have to pay out on might include: staff salary, food and drink sales, film rental, insurance, maintenance of site, services such as electricity, water and sewerage. The table data should also be represented in a chart/ graph, with Title and named axes. Pupils should create two different sorts of chart/ graph and explain which one best displays the data.

The **database** should be a trial database that will include at least twelve movies. Some of the Fields that might be useful are, movie title, director, film company, main stars – male – female – duration, age rating. Create a sort, simple search and complex search (on two Fields) for a good reason

#### **Evaluation** of project:

Describe how you planned and created your presentation, including an explanation of your choice of designs. Explain your use of formatting and formulas in the profit and loss table. Explain what Big Data is and what database software is, typically, used for.

**Extension – Minecraft Task** – join a team of no more than four other pupils and use Minecraft to complete one of the following tasks (collaboration):

- Create a cinema auditorium, seating, exit doors and screen
- As above, and add speakers, signage, ticket booth
- As above, and add parking, cinema entrance, toilets and bus stops

Suggested approach to this task – plan out on graph paper first to get the proportions right (numeracy).

Use the camera and book and quill to record progress, and save as pdf to h drive

Minecraft Education (downloads, tutorials, help guides) - <https://education.minecraft.net/>

**Must be able to:****Presentation (Communicating information)**

- Use a master slide to create a presentation of three slides (minimum) with transitions
- Combine images (from 2 sources – clipart/internet) and text
- Use Wordart, textboxes, page guides in poster, page numbering
- Drafts must be peer-assessed then an improved final draft created based on suggestions

**Spreadsheet (Modelling)**

- Be in landscape orientation, with row and column headings for printout (Page set up)
- table should have borders, clearly marked headings, three different data types (eg text, currency, number or date)
- should show use of formulas – SUM, MIN, MAX, AVERAGE
- should make use of a variable
- should use relational cell referencing (click and drag formulas)
- should be able to print table in data and formula view

**Database (Data handling)**

- be in landscape orientation with borders and headings displayed for printing
- at least 8 records and 6 fields
- create a sort, simple search, complex filter with appropriate reasons, use of two MATH functions

**For highest levels:****Presentation (Communicating information)**

- add an animation
- add a video or sound file
- no spelling or grammatical errors
- use of custom bullets, custom tables, differing text alignment, use of text wrap, headers and footers, overlapping frames,

**Spreadsheet (Modelling)**

- excellent use of formatting tools (Bold, colour, borders), no spelling errors
- use of absolute cell referencing (\$A%1) or Named cell, other complex tools, two different types of chart with titles and names axes if appropriate
- more than one variable

**Database (Data Handling)**

- excellent use of formatting, no spelling errors
- a report with use of two Math functions

### **Assessment**

Could include written evidence with screenshots, Q&A and Group discussion, Tests, witness statement by teacher (Oracy)

- should be able to explain how the completed tasks are appropriate for a specific audience and purpose
- should be able to explain what formatting means and where they have used it
- should be able to explain a variable and what they are used for
- should be able to explain the importance of managing large amounts of data, and have knowledge of the concept of Big Data

## **KS3 Level Descriptions**

### Level descriptions

The following level descriptions describe the types and range of performance that pupils working at a particular level should characteristically demonstrate. In deciding on a pupil's level of attainment at the end of a key stage, teachers should judge which description best fits the pupil's performance. Each description should be considered in conjunction with the descriptions for adjacent levels.

By the end of Key Stage 2, the performance of the great majority of pupils should be within the range of Levels 2 to 5, and by the end of Key Stage 3 within the range 3 to 7. Level 8 is available for very able pupils and, to help teachers differentiate Exceptional Performance at Key Stage 3, a description above Level 8 is provided.

### **Level 1**

Pupils explore, with support, different types of information held on ICT systems. They use ICT to move objects on-screen for a defined purpose and use words and pictures to communicate ideas. They use the internet/related technologies safely, with support. They are aware of ICT in their world. They recognise the different parts of a computer system.

### **Level 2**

Pupils consider, create and communicate information and ideas in different forms using text, images, pictures and sound. They find information from a given source using it to answer simple questions. Pupils enter information into a record with some assistance. They explore the effects of making changes in models or simulations. Pupils store and retrieve work with some assistance. They are aware of the use of ICT in the outside world.

### **Level 3**

Pupils begin to organise their tasks and use ICT to create, organise, amend and present information and ideas. They find information from a range of given sources and use ICT to search, sort and/or graph data to follow simple lines of enquiry. Pupils understand how changing one variable affects another in models or simulations. They store and retrieve work independently. Pupils send and receive information electronically, with support. They understand the use of a range of input and output devices.

### **Level 4**

Pupils broadly plan their tasks and combine a variety of information and media when creating and developing their ideas, with a sense of purpose and audience. They use ICT to select relevant information from a range of given sources, recognising that poor quality information and data yields unreliable results. Pupils begin to check the validity of data. They add and amend records in databases. They use ICT to explore patterns and relationships. They make simple predictions about how changing one variable affects another in models or simulations. They send and receive information electronically. Pupils discuss and begin to form opinions about some of the issues raised by the use of ICT and internet safety. They use the internet/related technologies safely in accordance with given guidelines. Pupils manage their workspace effectively. They show an awareness of the basic functions of hardware and software.

### **Level 5**

Pupils plan their tasks for purpose and audience. They combine a variety of information and media when creating, refining and developing their own ideas and information. Their presentations are fit for purpose and meet the needs of their intended audience. They search for and select information from a range of sources, considering relevance, plausibility and accuracy. Pupils create their own databases and search or sort on more than one field to follow particular lines of enquiry. They create

their own models or simulations and investigate the effect of changing data. They use ICT to send and receive files electronically. Pupils form opinions about issues raised by the use of ICT and are aware of dangers associated with misuse of the internet/related technologies. They recognise the implications of using networks.

### **Level 6**

Pupils plan their tasks in detail for specific purposes and audiences. They use ICT to create and refine their work using information from a range of sources, recognising the need for different styles for different audiences. They use ICT to check accuracy and plausibility by comparing information from different sources, making choices to meet the needs of a specific purpose or audience. They use databases to follow complex lines of enquiry and draw conclusions. They use models or simulations of increasing complexity, vary the rules within them and test hypotheses. Pupils have opinions about issues raised by the use of ICT and know the dangers associated with misuse of the internet/related technologies.

### **Level 7**

Pupils plan independently for different purposes and audiences specifying resources and sources. They refine their choice of selected information to match the needs of a specific purpose or audience. Pupils identify the advantages and limitations of different applications and select and use suitable ICT facilities. They design a database making appropriate choices within a data-handling application, using its specialised functions. They design computer models and procedures, with variables, to meet specific needs. Pupils have informed opinions of legal and other issues raised by the use of ICT in the wider world. They use the internet/related technologies safely and independently.

### **Level 8**

Pupils plan independently for a specific purpose and refine in the light of development. They make informed judgements on selected information, evaluating its plausibility, accuracy and relevance to purpose and audience. Pupils design and implement ICT systems for others to use. They create presentations for others to meet specific requirements. They discuss in an informed way the social, economic, ethical and moral issues raised by ICT.

### **Exceptional Performance**

Pupils evaluate software packages and complex computer models, analysing the situation for which they were developed and assess their efficiency, ease of use and appropriateness, suggesting possible refinements. Pupils design, implement and document systems for others to use, predicting some of the consequences that could arise in use. When discussing their own and others' use of ICT, they relate their understanding of the technical features of information systems to an appreciation of how those systems affect wider social, economic, ethical and moral issues.





## Tracking sheet

I have completed, printed out or made electronically available the following:

Recording Data Tasks	Level 4	Level 5	Level 6	Level 7	Other
Can Add, Delete, Edit data in a given database					
Can insert/delete fields					
Can Sort data					
Can create a simple filter					
Can create a complex filter					
Few errors in spelling					
Effective formatting for printing off tables					
Can create an original database of at least 8 records and 6 Fields					
Can insert/ delete/rename Fields					
Use of a range of data types (3)					
Can create a sort for a good reason					
Can create a simple filter for a good reason					
Can create a complex filter for a good reason					
Use of mailmerge*					
No errors in spelling					
Can set up to print in landscape with h&f					
No errors in original database					
Formatting suitable for audience and purpose					
Use of database report feature with MATHS operation					
Can explain the use of primary keys for tables					
Use of autofilters/ validation rules (ACCESS only)					
Excellent understanding of Access or Excel/Publisher mailmerge					
Independent learner – little or no help needed					

\*if attempting mailmerge extension work from Works database use Works Word not Office365 word. Alternatively, use an access or excel table and mailmerge with Publisher.