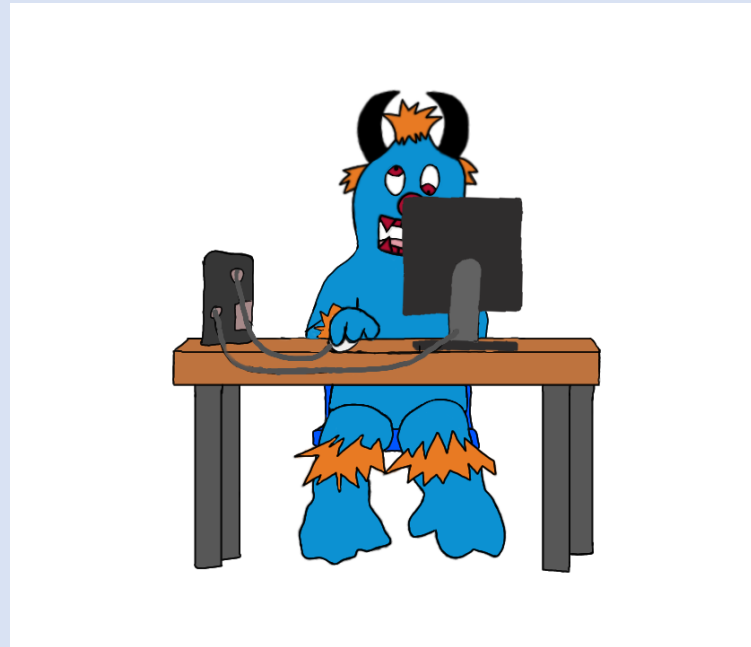


# Computing Intention Map

## Upper Key Stage Two



**Intention Map 2023 - 2024**

**Placing learning at the heart of everything we do.**



## Term One (Spreadsheets)



### Learning Intentions

Week 1	• enter data and formulas into a spreadsheet.
Week 2	• order and present data based on calculations.
Week 3	• add, edit and calculate data.
Week 4	• use a spreadsheet to solve problems.
Week 5	• plan and calculate a spending budget
Week 6	• design a spreadsheet for a specific purpose.

### Assessment

*Design a spreadsheet for a specific purpose.*

### Knowledge Intentions

Week 1	<ul style="list-style-type: none"> <li>• Identify cells using rows and columns.</li> <li>• Type text and numbers into cells.</li> <li>• Use the SUM function to add numbers together.</li> <li>• Use the SUM function to perform further calculations.</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>• Use the fill tool to copy formulas correctly.</li> <li>• Insert a bar or column graph.</li> <li>• Format aspects of a bar or column graph.</li> <li>• Sort data appropriately.</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• Use formulas to calculate totals and averages.</li> <li>• Sort data by different criteria.</li> <li>• Add extra data, including inserting rows or columns.</li> <li>• Edit existing data and be aware of the results.</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>• Create a formula to solve a specific calculation (using figures and cell references).</li> <li>• Replicate formulas over several cells.</li> <li>• Check calculations for errors.</li> <li>• Interpret data and make comparisons.</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>• Select and add items from a given list.</li> <li>• Calculate totals based on price and quantity of items.</li> <li>• Calculate a running total.</li> <li>• Calculate an amount remaining from a budget.</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>• Plan the requirements for a new spreadsheet.</li> <li>• Make decisions on formatting to improve the appearance.</li> <li>• Create a range of suitable formulas for a purpose.</li> </ul>

### The IT Suite



**Software: Microsoft Excel**  
**Hardware: Laptops**



### National Curriculum

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# Term Two (Kudo Programming)



## Learning Intentions

Week 1	• Investigate and evaluate the features of programming software.
Week 2	• Program Kodu using When and Do instructions.
Week 3	• Use tools and add features to create an original landscape in Kodu.
Week 4	• Analyse and deconstruct code to work out its purpose.
Week 5	• Program a character to be controlled around a custom track to reach a goal.
Week 6	• Program a character to follow an automatic path.

## Assessment

Create a game with an opponent and a path for their character to follow in the format of a race.

## Knowledge Intentions

Week 1	<ul style="list-style-type: none"> <li>• Open Kodu and load a new world.</li> <li>• Navigate to and from the Kodu home menu using keyboard or mouse.</li> <li>• Follow instructions given in the software.</li> <li>• View existing code and explain how it might work.</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>• Open the Kodu Game Lab and start a new world.</li> <li>• Add objects to a world.</li> <li>• Program an object to react to an event.</li> <li>• Describe the actions of a sequence of commands.</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• Plan and design the features of an original virtual environment.</li> <li>• Increase or decrease the size of the ground.</li> <li>• Use tools to smooth, raise or lower the landscape.</li> <li>• Add objects to enhance an environment.</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>• Decompose code into smaller parts.</li> <li>• Write a description of code in my own words.</li> <li>• Use ideas in code to write my own programs.</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>• Create the shape of a racetrack in Kodu.</li> <li>• Program a character to move.</li> <li>• Create a finish and an end goal for a game.</li> <li>• Refine a track and character to improve playability.</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>• Add further characters and distinguish them by colour.</li> <li>• Create a path for a character to follow.</li> <li>• Program a character to follow a path.</li> <li>• Adjust character settings to create a close race.</li> </ul>

## The IT Suite

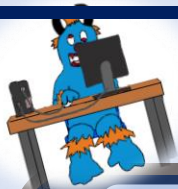


**Software: Kudo Game Lab**  
**Hardware: Laptops**



## National Curriculum

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## Term Three (Online Safety)



### Learning Intentions

Week 1	• Identify spam emails and what to do with them.
Week 2	• Write citations for websites I use for research.
Week 3	• Create strong passwords.
Week 4	• Recognise when, why and how photographs we see online may have been edited.
Week 5	• Apply online safety rules to real-life scenarios.
Week 6	• Apply online safety rules to real-life scenarios.

### Knowledge Intentions

Week 1	<ul style="list-style-type: none"> <li>• Look at the sender and subject to spot a spam email.</li> <li>• Identify the potential dangers of spam email.</li> <li>• Know what to do with spam email.</li> <li>• Take steps to avoid receiving spam.</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>• Explain why it is important to cite a source.</li> <li>• Cite a website.</li> <li>• Follow a citation to access an online source.</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• Explain the rules for creating a strong password.</li> <li>• Create a strong password using a set of rules.</li> <li>• Explain why having a strong password is important.</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>• Recognise changes that have been made to an original photograph.</li> <li>• Digitally alter a photograph.</li> <li>• Understand that not everything I see online is true.</li> <li>• Explain how false photographs can make people feel bad about themselves.</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>• Explain how to stay safe online.</li> <li>• Give an example of unsafe online behaviour and the possible consequences.</li> <li>• Explain how to apply online safety rules to a given scenario.</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>• Explain how to stay safe online.</li> <li>• Give an example of unsafe online behaviour and the possible consequences.</li> <li>• Explain how to apply online safety rules to a given scenario.</li> </ul>

### Assessment

Create a Comic Strip to explain how to stay safe online, with examples of unsafe behaviour.

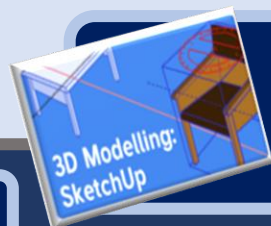
### The IT Suite

**Software: Internet Explorer, Google Chrome**  
**Hardware: Laptops or tablets**



### National Curriculum

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## Term Four (3D Modelling, Sketch Up)

### Learning Intentions

Week 1	<ul style="list-style-type: none"> <li>Draw 3D shapes.</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>Add detail to 3D drawings.</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>Add detail to 3D drawings.</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>Add and manipulate 3D models.</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>Create a complex 3D model.</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>Create a 3D model of my own design.</li> </ul>

### Assessment

Children create a room with wall features, including at least 2 windows that are the same, decorations and carpets and furniture from the 3D warehouse, with some items copied.

### The IT Suite



**Software: Sketch Up**  
**Hardware: Laptops**



### Knowledge Intentions

Week 1	<ul style="list-style-type: none"> <li>Draw a 2D shape or line.</li> <li>Manipulate 2D shapes into 3D shapes.</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>Use the measure tool to draw shapes.</li> <li>Use inference points to draw lines and shapes.</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>Use inference points to draw lines and shapes.</li> <li>Double click to copy push/pull and offset.</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>Import 3D models from the 3D Warehouse.</li> <li>Copy and manipulate 3D models.</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>Select the tools I need to use for different features.</li> <li>Use the main tools independently.</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>Select the tools I need to use for different features.</li> <li>Use the main tools in SketchUp.</li> </ul>

### National Curriculum

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## Learning Intentions

Week 1	• Use appropriate software and other tools effectively to write a film script.
Week 2	• Locate and check appropriate digital content and provide accurate crediting of sources.
Week 3	• Use digital recording devices to film and import into video editing software.
Week 4	• Plan, conduct and import video interviews as part of a short film.
Week 5	• Use video editing software to create a short film.
Week 6	• Use video editing software to turn a film project into a finished movie and present it.



## Term Five (Film Making)



## Assessment

An edited and published film to present to the class.

## Knowledge Intentions

Week 1	<ul style="list-style-type: none"> <li>• Plan and write a script using appropriate software.</li> <li>• Plan additional elements for filmmaking such as locations and props.</li> <li>• Structure the timing of sections to meet a given running time.</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>• Search for relevant information using appropriate websites.</li> <li>• Evaluate whether information is reliable or not.</li> <li>• Cross-check information using different sources.</li> <li>• Provide accurate crediting for sources of information.</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>• Plan and write a script using appropriate software.</li> <li>• Plan additional elements for filmmaking such as locations and props.</li> <li>• Structure the timing of sections to meet a given running time.</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>• Plan suitable questions to ask someone about a given topic.</li> <li>• Improvise and react to responses by an interviewee.</li> <li>• Frame an appropriate filming shot when interviewing someone.</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>• Import video files into video editing software.</li> <li>• Arrange video files to form a complete film.</li> <li>• Create transitions and visual effects to enhance a movie project.</li> <li>• Preview a movie project using software and then refine, based on the preview.</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>• Add finishing touches, including titles and credits, to complete a movie.</li> <li>• Record narration to add to a movie project.</li> <li>• Convert a movie editing project into a finished movie file.</li> <li>• Play back and present my finished movie.</li> </ul>

## The IT Suite



**Software: Video editing software**  
**Hardware: Laptops or iPads**



## National Curriculum

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## Term Six (Using & Applying Skills)

### Learning Intentions

Weeks 1 - 6	<ul style="list-style-type: none"> <li>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</li> </ul>
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### Assessment

*Design the ultimate new bedroom for a 10 year old.*

### Knowledge Intentions

Week 1	<ul style="list-style-type: none"> <li>Explain what a search engine is.</li> <li>Explain what a search engine is used for.</li> <li>Access a trusted search engine.</li> <li>Complete a search to find a website or specific information.</li> </ul>
Week 2	<ul style="list-style-type: none"> <li>Use keywords to refine my search.</li> <li>Explain how using keywords in my search terms can help when using search engines.</li> <li>Explain how Boolean operators can affect my search results.</li> <li>Explain how Boolean operators can be useful when using a search engine.</li> </ul>
Week 3	<ul style="list-style-type: none"> <li>Explain that just because information is online doesn't mean it is true.</li> <li>Identify what makes a trusted web page.</li> <li>Identify why trusted websites are important.</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>Explain what a web crawler is.</li> <li>Explain how web indexing works.</li> <li>Explain how search engines work.</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>Understand that search results are ranked.</li> <li>Explain how search results are ranked.</li> <li>Suggest some of the criteria that search engines use to decide on web page ranking.</li> <li>Compare the page ranking across different search engines.</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>Explain what SEO is.</li> <li>Explain why SEO is used on websites.</li> <li>Compare web pages against a specification.</li> <li>Suggest SEO improvements on a website.</li> </ul>

### The IT Suite



### National Curriculum

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