| Year 2 - Computing planning document  |
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## Termly overview

|  | Spring 1 | Spring 2 | Summer 1  | Summer 2  |
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| Computer Science  | **Unit 2.1 - crash course** | **Unit 2.1 - coding** |  |  |
| Core Knowledge to be taught  | * To recognise what instructions are and predict what might happen when they are followed.
* To use code to make a computer program.
* To recognise what objects and actions are.
* To describe what an event is.
* To use an event to control an object.
* To begin to identify how code executes when a program is run.
* To describe what backgrounds and objects are.
* To plan and make a simple computer program based on prior learning.
 | * To understand what an algorithm is.
* To create a computer program using an algorithm.
* To create a program using a given design.
* To understand the collision detection event.
* To understand that algorithms follow a sequence.
* To design an algorithm that follows a timed sequence.
* To understand that different objects have different properties.
* To understand what different events do in code.
* To understand the function of buttons in a program.
* To understand and debug simple programs.
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| Key Vocab  | Action, Code, Event, Algorithm, Command, Execute, Background, Debug, Debugging, Input, Collision detection, timer-after-command, properties, buttons | Action, button, Design mode, Algorithm, Collision detection, Event, Background, Debug/Debugging, Key pressed, nesting |  |  |
| Information Technology | Spring 1 | **Unit 2.5 - effective searching** | Summer 1 **Crash course + 2.3 Spreadsheets**  | Summer 2 **2.7 - Making Music** **2.8 - Presenting Ideas**  |
| Core Knowledge to be taught  |  | * To understand the terminology associated with searching.
* To gain a better understanding of searching on the Internet.
* To create a leaflet to help someone search for information on the Internet
 | • To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine. • To learn how to copy and paste in 2Calculate. • To use the totalling tools. • To use a spreadsheet for money calculations. • To use the 2Calculate equals tool to check calculations. • To use 2Calculate to collect data and produce a graph. | To make music digitally using 2Sequence. • To explore, edit and combine sounds using 2Sequence. • To edit and refine composed music. • To think about how music can be used to express feelings and create tunes which depict feelings. • To upload a sound from a bank of sounds into the Sounds section. • To record and upload environmental sounds into Purple Mash. • To use these sounds to create tunes in 2Sequence.**2.8 Presenting IDeas** • To explore how a story can be presented in different ways. • To make a quiz about a story or class topic. • To make a fact file on a non-fiction topic. • To make a presentation to the class. |
| Key Vocab  |  | InternetSearchSearch Engine | Spreadsheet Backspace key Copy and paste Cells Count tool Delete key Equals tool Image toolbox Lock toolMove cell tool RowsSpeak tool  | **2.7 Making Music** Music Soundtrack Instrument BPMComposition Digitally Sound effectsTempoVolume **2.8 Presenting Ideas** Concept Quiz Narrative Node Non fiction Audience Animated Presentation  |
| Online Safety  | Spring 1**Self image and identity / Online relationships** Unit 2.2 -  | Spring 2 **Online relationships** | Summer 1 **Online reputation / Online bullying / Online reputation**Unit 2.5  | Summer 2 **Health wellbeing and lifestyle**  |
| Use - PM and links to Education for a connected world when planning [Purple Mash and Education for a Connected World 2020.pdf](https://drive.google.com/file/d/14BDEPByBe2VdCwObrB8rJTjRlHuekeFd/view?usp=sharing) |  | [Click on these links for resources related to this unit](https://czone.eastsussex.gov.uk/safeguarding/safeguarding-in-schools-colleges-and-early-years-settings/education-for-a-connected-world-resources/education-for-a-connected-world-year-2/efacw-year-2-online-relationships/) | Online Bullying [Click on these links for resources related to this unit](https://czone.eastsussex.gov.uk/safeguarding/safeguarding-in-schools-colleges-and-early-years-settings/education-for-a-connected-world-resources/education-for-a-connected-world-year-2/efacw-year-2-online-bullying/) Online Reputation [Click on this link for resources to this unit](https://czone.eastsussex.gov.uk/safeguarding/safeguarding-in-schools-colleges-and-early-years-settings/education-for-a-connected-world-resources/education-for-a-connected-world-year-2/efacw-year-2-online-reputation/)  | Health and wellbeing [Click on this link for resources related to this unit](https://czone.eastsussex.gov.uk/safeguarding/safeguarding-in-schools-colleges-and-early-years-settings/education-for-a-connected-world-resources/education-for-a-connected-world-year-2/efacw-year-2-health-well-being-and-lifestyle/)  |
| Core Knowledge to be taught  | * I can explain how other people may look and act differently online and offline.
* I can give examples of issues online that might make someone feel sad, worried, uncomfortable or frightened; I can give examples of how they might get help.
* I can give examples of how someone might use technology to communicate with others they don’t also know offline and explain why this might be risky. (e.g. email, online gaming, a pen-pal in another school / country).
 | * I can explain who I should ask before sharing things about myself or others online.
* I can describe different ways to ask for, give, or deny my permission online and can identify who can help me if I am not sure.
* I can explain why I have a right to say ‘no’ or ‘I will have to ask someone’. I can explain who can help me if I feel under pressure to agree to something I am unsure about or don’t want to do.
* I can identify who can help me if something happens online without my consent.
* I can explain how it may make others feel if I do not ask their permission or ignore their answers before sharing something about them online.
* I can explain why I should always ask a trusted adult before clicking ‘yes’, ‘agree’ or ‘accept’ online
 |  |  |
| Key Vocab  |  |  |  |  |

# Midterm Planning

Year 2

| Spring 1 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
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| Computing | **Prior vocabulary to be reviewed: N/A - coding not taught previously - so children will complete a catch up** **Prior knowledge to be recapped: N/A** |
| **Unit 2.1 crash course****Key vocabulary to be taught:** Action, Code, Event, Algorithm, Command, Execute, Background, Debug, Debugging, Input, Collision detection, timer-after-command, properties, buttons**Core Knowledge to be taught:** To recognise what instructions are and predict what might happen when they are followed.To use code to make a computer program.To recognise what objects and actions are.To describe what an event is.To use an event to control an object.To begin to identify how code executes when a program is run.To describe what backgrounds and objects are.To plan and make a simple computer program based on prior learning. |
| **Useful Links:** [**Knowledge Organisers**](https://drive.google.com/file/d/122N-hx0LY65doyeVTNsq7FkXGjyv1E73/view?usp=sharing)**,** [**Overview**](https://drive.google.com/file/d/126azSnHmwIYQhd0cO6oZGjDanT3gmhMu/view?usp=sharing)**,** [**Vocabulary**](https://drive.google.com/file/d/124EvtcmnwuuZ0sFFOmLDfaZzKlXK98QT/view?usp=sharing)**,** [**Crash Course Overview**](https://drive.google.com/file/d/12EkXjX_PIAwluVdlL0c7RgHs7dj47us-/view?usp=sharing) |
| **Online Safety/RSE** |
|  |  |  |  |  |  |  |
| **LI: Introduction to coding - objects and actions** See [overview](https://drive.google.com/file/d/12EkXjX_PIAwluVdlL0c7RgHs7dj47us-/view) for detailed step by step. **Preparation**Set [Fun with Fish](https://www.purplemash.com/app/code/chimp/codefish) as a 2Do.**Children** can explain what coding is.**Children** know that for the computer to make something happen, it needs to follow clear instructions.**Children** can create a program using code blocks.**Children** can use object and action code blocks. | **LI: Simple programming - events**See [overview](https://drive.google.com/file/d/12EkXjX_PIAwluVdlL0c7RgHs7dj47us-/view) for detailed step by step. **Preparation**A pot of bubbles and a bubble wand (usually part of the lid!)Set 2Do:[Bubble Coding](https://www.purplemash.com/app/code/examples/Y1_2Code_Lesson3_2021)Open: [Bubble Wand Example Code](https://static.purplemash.com/mashcontent/applications/flashcards/y1_lesson1_Example_Code_2021/Example%20Code_2021.pdf)**Children** can create a simple program using code blocks.**Children** can use **event, object** and **action** code blocks**.** | **LI: Simple programming - algorithm** See [overview](https://drive.google.com/file/d/12EkXjX_PIAwluVdlL0c7RgHs7dj47us-/view) for detailed step by step. **Preparation**[Coding Vocabulary Quiz - Crash Course](https://www.purplemash.com/app/games/2diy/coding_vocab_quiz_y2_2021)Two identical sets of any construction toy[Air Traffic Control:](https://www.purplemash.com/app/code/chimp/airtrafficcontrol) On the [main 2Code page](https://www.purplemash.com/#tab/2code_lessons) in the Chimp section.(Optional) [Vocabulary flash cards.](https://static.purplemash.com/mashcontent/applications/flashcards/2c_y2_fc_teacher/Coding%20vocabulary%20flashcards%20-%20Year%202%20-%20Teacher.pdf) The Teacher flash cards have been created so youcan print them on A4 paper, cut them to size, fold them in half and glue them together. You can display and use these throughout coding lessons to support use of vocabulary.**Children** can explain that an **algorithm** is a set ofinstructions.**Children** can describe the **algorithms** they created.**Children** can explain that for the computer to makesomething happen, it needs to follow clear instructions.**Cross curriculum links - writing instructions**  | **LI: Simple programming - collision detection**See [overview](https://drive.google.com/file/d/12EkXjX_PIAwluVdlL0c7RgHs7dj47us-/view) for detailed step by step. **Preparation**Set as 2Do: [Princess and the Frog](https://www.purplemash.com/app/code/chimp/princessfrog) This is on the [main 2Code Page](https://www.purplemash.com/#tab/pm-home/tools/2code_lessons) (scroll down to the Chimp activities).Princess and Frog algorithm examples Print and copy Storyboard Planner OR Algorithm and Scene Plan[StoryboardPlanner](https://static.purplemash.com/mashcontent/applications/flashcards/Y2_Sow_storyboard_planner_2021/Storyboard%20Planner%20-%20Lessson%202%20Y2%20SOW%202021%20Onwards%20%281%29.pdf) (blank).[StoryboardExample.](https://www.purplemash.com/app/pup/y2_storyboard_example_sow_2021)[AlgorithmandScenePlan](https://static.purplemash.com/mashcontent/applications/flashcards/Y2_Sow_algorithm_scene_plan_2021/Algorithm%20and%20Scene%20Plan%202021.pdf).[Super Coder Poster.](https://static.purplemash.com/mashcontent/applications/flashcards/Y2_Sow_poster_2021/CHECKED%20Lesson%202%20Super%20Coders%20%281%29.pdf)Cut blank paper into strips for Super Coder ideas.Children can plan an algorithm that includes collision detection. **Children** can create a program using collision detection. **Children** read blocks of code and predict what will happen when it is run. | **LI: Simple programming - timer after command****Preparation**See [overview](https://drive.google.com/file/d/12EkXjX_PIAwluVdlL0c7RgHs7dj47us-/view) for detailed step by step. Set as 2Do:[Magician](https://www.purplemash.com/app/code/chimp/magician) lesson This is on the [main 2Code Page](https://www.purplemash.com/#tab/pm-home/tools/2code_lessons) (scroll down to the Chimp activities).[Storyboard Planner](https://static.purplemash.com/mashcontent/applications/lessonplans/info/printables_english_writing_frame_5/Storyboard%20Template.pdf) template**Children** can create a program that uses a timer-after command. **Children** can explain what the timer-after command does in their program. **Children** can predict what will happen in a program that includes a timer-after command**.** | **LI: Simple programming - modify the properties of an object**See [overview](https://drive.google.com/file/d/12EkXjX_PIAwluVdlL0c7RgHs7dj47us-/view) for detailed step by step. **Preparation**Set as 2Do:[Free Code Chimp](https://www.purplemash.com/app/code/openended/freecodechimp) (this is found on the [main 2Code page](https://www.purplemash.com/site#tab/pm-home/tools/2code_lessons)).[Snail Race](https://www.purplemash.com/app/code/chimp/snailrace) lesson This is on the [main 2Code Page](https://www.purplemash.com/site#tab/pm-home/tools/2code_lessons) (scroll down to the Chimp activities).[Turtle and Character - Crash Course version](https://www.purplemash.com/app/code/examples/2code_example_turtle_character_crash_course)Set as 2Do for less confident children:[Road Scene.](https://www.purplemash.com/app/code/examples/2code_example_road_scene_2021)**Children** can create a computer program that includes different objects types. **Children** can modify the properties of an object. **Children** can use different events in their program to make objects move. **Children** can create a computer program that includes a button object. **Children** can explain what a button does in their program. **Children** can modify the properties of a button to fit their program design. | **LI:****Activity: Consolidation and assessment**  |

| Spring 2 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
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|  | **RSE AND ONLINE SAFETY RESOURCES CAN BE FOUND** [**HERE**](https://czone.eastsussex.gov.uk/safeguarding/safeguarding-in-schools-colleges-and-early-years-settings/education-for-a-connected-world-resources/education-for-a-connected-world-year-2/efacw-year-2-online-relationships/)**RSE and online safety is to be taught weekly 30 mins each, however, there are only 4 sessions in a 7 week term so they can be spaced out.** |
|  | **30 mins** **Preparation** Create a class jamboard to share messages anonymously  | **30 Mins** **Preparation** Arrange with partner school to set up messaging service through gmail  | **30mins** **Preparation** Class decide on what email/message to send to a professional; related to topic or core text.  | **30 mins****Preparation**Set up an assignment on google classroom: Class write questions related to core text for other members of the class to answer using a username and profile. |  |
| Computing | **Prior vocabulary to be reviewed:**Action, Code, Event, Algorithm, Command, Execute, Background, Debug, Debugging, Input, Collision detection, timer-after-command, properties, buttons**Prior knowledge to be recapped: Year 2 coding crash course** |
| **Unit 2.1****Key vocabulary to be taught:** design mode, event, key pressed, nesting**Core Knowledge to be taught:** To understand what an algorithm is.To create a computer program using an algorithm.To create a program using a given design.To understand the collision detection event.To understand that algorithms follow a sequence.To design an algorithm that follows a timed sequence.To understand that different objects have different properties.To understand what different events do in code.To understand the function of buttons in a program.To understand and debug simple programs. |
| **Useful Links:** [**Knowledge Organisers**](https://drive.google.com/file/d/122N-hx0LY65doyeVTNsq7FkXGjyv1E73/view?usp=sharing)**,** [**Overview**](https://drive.google.com/file/d/126azSnHmwIYQhd0cO6oZGjDanT3gmhMu/view?usp=sharing)**,** [**Vocabulary**](https://drive.google.com/file/d/124EvtcmnwuuZ0sFFOmLDfaZzKlXK98QT/view?usp=sharing) |
| **LI: To revisit what an algorithm is**See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_1_2021/Unit%202.1%20Coding.pdf) for detailed step by step. **Preparation**Set [Air Traffic Control Final Stage](https://www.purplemash.com/app/code/examples/2code_example_air_traffic_control_final_Stage_2021) as a 2Do for your class.Build two models using two identical sets of any construction toy - one that follows theinstructions and one that does not. An example would be using Lego Duplo to build a bird, one that follows [these instructions](http://www.buildingexamples.com/index.php/examples/duplo/animals/farm/113-duplo-animal-bird) and one that uses the same bricks but not the instructions. Download the instructions for your model so that you can display them on the board.**Children can** explain that an algorithm is a set of instructions.**Children can** describe the algorithms they created.**Children can** explain that for the computer to make something happen, it needs to followclear instructions. | **LI: To** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_1_2021/Unit%202.1%20Coding.pdf) for detailed step by step. **Preparation**Set [Princess and the Frog](https://www.purplemash.com/app/code/chimp/princessfrog) as a 2Do for your class. Print and copy [Storyboard Planner](https://static.purplemash.com/mashcontent/applications/flashcards/Y2_Sow_storyboard_planner_2021/Storyboard%20Planner%20-%20Lessson%202%20Y2%20SOW%202021%20Onwards%20%281%29.pdf) OR [Algorithm and Scene Plan](https://static.purplemash.com/mashcontent/applications/flashcards/Y2_Sow_algorithm_scene_plan_2021/Algorithm%20and%20Scene%20Plan%202021.pdf) **Children can** plan an algorithm that includes collision detection. **Children can** create a program that uses collision detection.**Children can** read blocks of code and predict what will happen when it is run | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_1_2021/Unit%202.1%20Coding.pdf) for detailed step by step. **Preparation**Set [Magician](https://www.purplemash.com/app/code/chimp/magician) lesson as a 2Do for your class. Print and copy the Storyboard Planner for the children. You might want to make this double sided.  | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_1_2021/Unit%202.1%20Coding.pdf) for detailed step by step. **Preparation**Set [Free Code Chimp](https://www.purplemash.com/app/code/openended/freecodechimp) as a 2Do.Set [Road Scene](https://www.purplemash.com/app/code/examples/2code_example_road_scene_2021) as a 2Do for less confident children.**Children can** create a computer program that includes different object types. **Children can** modify the properties of an object.**Children can** use different events in their program to make objects move | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_1_2021/Unit%202.1%20Coding.pdf) for detailed step by step. **Preparation**Set [Free Code Chimp](https://www.purplemash.com/app/code/openended/freecodechimp) as a 2Do.Create a display board for the class to share their programs to. Details of how to do this are given in [Appendix 1](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_1_2021/Unit%202.1%20Coding.pdf)**Children can** create a computer program that includes a button object. **Children can** explain what a button does in their program.**Children can** modify the properties of a button to fit their program design. | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_1_2021/Unit%202.1%20Coding.pdf) for detailed step by step. **Preparation****‘Smelly Code’ Debugging**[Debug Challenge Chimp](https://www.purplemash.com/app/code/debugchallenges/2codedebugchimp) this is on the main 2Code page.[Debugging process](https://www.purplemash.com/site#app/flashcards/2c_debugging_process) [Smelly Code Worksheet](https://www.purplemash.com/app/flashcards/Y2_Sow_smelly_code_ws_2021) **Children can** explain what debug (debugging) means. **Children can** use a design document to start debugging a program. **Children can** debug simple programs. |  |

| Summer 1 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
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| Online safetyCoding  | RSE & Online Safety is to be taught weekly with the first session in Week 1 being 45-50 minutes followed by smaller sessions weekly (10-15 minutes)

| **Online Safety/RSE Online reputation / Online bullying / Online reputation**  |
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| **Online Bullying** [Click on these links for resources related to this unit](https://czone.eastsussex.gov.uk/safeguarding/safeguarding-in-schools-colleges-and-early-years-settings/education-for-a-connected-world-resources/education-for-a-connected-world-year-2/efacw-year-2-online-bullying/) [**Project Evolve Materials**](https://projectevolve.co.uk/toolkit/resources/years/year-two/online-reputation/)  |  |  | **Online Reputation** [Click on this link for resources to this unit](https://czone.eastsussex.gov.uk/safeguarding/safeguarding-in-schools-colleges-and-early-years-settings/education-for-a-connected-world-resources/education-for-a-connected-world-year-2/efacw-year-2-online-reputation/) [**Project Evolve Materials**](https://projectevolve.co.uk/toolkit/resources/years/year-two/online-reputation/)  |  |  |  |
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**Prior vocabulary to be reviewed:**Action, Code, Event, Algorithm, Command, Execute, Background, Debug, Debugging, Input, Collision detection, timer-after-command, properties, buttons**Prior knowledge to be recapped:** To recognise what instructions are and predict what might happen when they are followed. |
| **Unit 2.3 Spreadsheets****Key vocabulary to be taught:** Backspace key, copy and paste, columns, cells, count tool, delete key, equals tool, image toolbox, lock tool, move cell tool, rows, speak tool, spreadsheet**Core Knowledge to be taught:** To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine.To learn how to copy and paste in 2Calculate.To use the totalling tools.To use a spreadsheet for money calculations.To use the 2Calculate equals tool tocheck calculations.To use 2Calculate to collect data and produce a graph.**Key Questions:**Why would you copy and paste when using a spreadsheet? How could a spreadsheet help you when you are planning some shopping?  |
| **Useful Links:** [**Knowledge Organiser**](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/knowledge_organiser_unit_2_3/Year%202-%202.3%2001%202022.pdf)**,** [**Overview**](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_3/Unit%202.3%20Spreadsheets.pdf)**,** [**Vocabulary**](https://drive.google.com/file/d/124EvtcmnwuuZ0sFFOmLDfaZzKlXK98QT/view?usp=sharing)**,** [**Year 2 Crash course**](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_year2_spreadsheets_crash_course/Spreadsheets%20Crash%20Course%20Y2.pdf)**,** [**Year 3 Crash course**](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_year3_spreadsheets_crash_course/Spreadsheets%20Crash%20Course%20Y3.pdf) |
| **LI: To introduce spreadsheets**See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_year2_spreadsheets_crash_course/Spreadsheets%20Crash%20Course%20Y2.pdf) for detailed step by step (unit 2.3 crash course lesson 1)**Preparation**Familiarise yourself with [2Calculate tool](https://www.purplemash.com/site#app/tools/2Calculate) in Purple mash and set [Toy Data spreadsheet](https://www.purplemash.com/app/pup/Toy_Data_Example) as 2Do.**Children can** understand what a spreadsheet looks like**Children can** navigate around a spreadsheet**Children can** explain what rows and columns are**Children can** enter data into cells**Children can** create a table of data on a spreadsheet | **LI: To use tools to calculate totals**See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_year2_spreadsheets_crash_course/Spreadsheets%20Crash%20Course%20Y2.pdf) for detailed step by step (unit 2.3 crash course lesson 2)**Preparation**Set [Ferret Walking](https://www.purplemash.com/#app/pup/Ferret_Walking_Example) as 2Do**Children can** use tools in a spreadsheet to automatically total rows and columns.* **Children can** use calculations to answer questions about data.
* **Children can** collect some simple data and use a spreadsheet to interpret it (extension).
 | **LI: To be able to use images and the “Speak” and “Count” tools within a spreadsheet**See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_year2_spreadsheets_crash_course/Spreadsheets%20Crash%20Course%20Y2.pdf) for detailed step by step (unit 2.3 crash course lesson 3)**Preparation**Nothing to set - children will use 2Calculate tool - ***it may be useful for children to have headphones for the speech tool**** **Children can** insert images and make them draggable.
* **Children can** give images a value that the spreadsheet can use to count them.
* **Children can** use the speak tool in conjunction with the count tool to count items.
 | **LI: To be able to create a table and a block graph in a spreadsheet**See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_year2_spreadsheets_crash_course/Spreadsheets%20Crash%20Course%20Y2.pdf) for detailed step by step (unit 2.3 crash course lesson 4) **Preparation**Set as 2Do:[Ice Cream Choice example file.](https://www.purplemash.com/app/pup/sow_y2_lesson4_exampleicecreamchoice)[Challenge files 1 (School / TV).](https://www.purplemash.com/app/pup/sow_y2_lesson4_examplechallenge1)[Challenge files 2 (School/TV).](https://www.purplemash.com/app/pup/sow_y2_lesson4_examplechallenge2)**Children can** create a table of data on a spreadsheet.**Children can** use the data to create a block graph manually. | **LI: To be able to use a spreadsheet to add amounts**See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_3/Unit%202.3%20Spreadsheets.pdf) for detailed step by step (unit 2.3 lesson 3) **Preparation**Examples of coins. It would be useful if the children are familiar with how pence and pounds are written e.g., 17p is the same as £0.17 as the spreadsheet will automatically display as £s.Set as 2Do:[Shop1](https://www.purplemash.com/app/pup/sow_y2_lesson3_exampleshop1)[Shop2](https://www.purplemash.com/app/pup/sow_y2_lesson3_exampleshop2)**Children can** use images in a spreadsheet.**Children can** work out how much they need to pay using coins by using a spreadsheet tohelp calculate. | **LI: To be able to create pie charts and bar graphs on spreadsheets**See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_year3_spreadsheets_crash_course/Spreadsheets%20Crash%20Course%20Y3.pdf) for detailed step by step (unit 3.3 crash course lesson 3) **Preparation**You need to have collected data already or decide what data to use with the class and how you organise data collection.Set as 2Do:[Bird Data - Challenge 1](https://www.purplemash.com/app/pup/sow_y3_L1_Challengeexample1) [Cars Data - Challenge 2](https://www.purplemash.com/app/pup/sow_y3_L1_Challengeexample2)**Children can** create a table on a spreadsheet with inputted data.**Children can** use a spreadsheet program to automatically create charts and graphs fromdata. | **LI: To introduce advanced mode and cell addresses** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_year3_spreadsheets_crash_course/Spreadsheets%20Crash%20Course%20Y3.pdf) for detailed step by step (unit 3.3 crash course lesson 4) **Preparation**For these activities we recommend using a desktop / laptop machine where possible to achieve maximum performance.Set as 2Do:[Advanced Mode example 1.](https://www.purplemash.com/site#app/pup/sow_y3_L3_1)[Advanced Mode example 2.](https://www.purplemash.com/site#app/pup/sow_y3_L3_2)Open: [Advanced Mode example 2 Completed](https://www.purplemash.com/app/pup/sow_y3_L3_2_examplecompleted)[Advanced Mode example 3.](https://www.purplemash.com/site#app/pup/sow_y3_L3_3) Set up a class Display Board – see the [Display Boards User Guide](https://static.purplemash.com/mashcontent/applications/guides/Displayboards_pdf_Guide/Purple%20Mash%20Display%20Boards%20011121.pdf) if you need guidancewith this.**Children can** describe a cell location in a spreadsheet using the notation of a letter for the column followed by a number for the row.**Children can** find specified locations in a spreadsheet. |

| Summer 2 | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
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| Information Technology | **Prior vocabulary to be reviewed:** Backspace key, copy and paste, columns, cells, count tool, delete key, equals tool, image toolbox, lock tool, move cell tool, rows, speak tool, spreadsheet**Prior knowledge to be recapped:** To use 2Calculate image, lock, move cell, speak and count tools to make a counting machine.To learn how to copy and paste in 2Calculate.To use the totalling tools.To use a spreadsheet for money calculations.To use the 2Calculate equals tool tocheck calculations.To use 2Calculate to collect data and produce a graph. |
| **Unit 2.7 Making music and Unit 2.8 Presenting Ideas****Key vocabulary to be taught:** bpm, composition, digitally, instrument, music, sound effects (SFx), soundtrack, tempo, volume, concept map (mind map), node, animated, quiz, non-fiction, presentation, narrative, audience.**Core Knowledge to be taught:** To make music digitally using 2Sequence.To explore, edit and combine sounds using 2Sequence.To edit and refine composed music.To think about how music can be used to express feelings and create tunes which depict feelings.To upload a sound from a bank of sounds into the Sounds section.To record and upload environmental sounds into Purple Mash.To use these sounds to create tunes in 2Sequence.To explore how a story can be presented in different ways.To make a quiz about a story or class topic.To make a fact file on a non- fiction topic.To make a presentation to the class**Key questions:** What is meant by digital music?How can I change how my music sounds?What is it meant by the tempo of the music?What do we need to think about when planning a presentation?Why should I plan out my presentation? |
| **Useful links:** [**Unit 2.7 knowledge organiser**](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/knowledge_organiser_unit_2_7/Year%202-%202.7%2001%202022.pdf)**,** [**Unit 2.7 overview**](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_7/Unit%202.7%20Making%20Music.pdf)**,** [**Unit 2.8 knowledge organiser**](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/knowledge_organiser_unit_2_8/Year%202-%202.8%2001%202022.pdf)**,** [**Unit 2.8 overview**](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_8/Unit%202.8%20Presenting%20Ideas.pdf)  |
| **Online Safety/RSE - Health wellbeing and lifestyle**  |
| Health and wellbeing [Click on this link for resources related to this unit](https://czone.eastsussex.gov.uk/safeguarding/safeguarding-in-schools-colleges-and-early-years-settings/education-for-a-connected-world-resources/education-for-a-connected-world-year-2/efacw-year-2-health-well-being-and-lifestyle/)  |  |  |  |  |  |  |
| **LI: To introduce 2Sequence**See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_7/Unit%202.7%20Making%20Music.pdf) for detailed step by step (unit 2.7 lesson 1)**Preparation**Children will need headphones.[Twinkle Twinkle](https://www.purplemash.com/site#app/guides/2Seq_Twinkle_twinkle) 2Sequence file.[2Sequence](https://www.purplemash.com/app/tools/2seq) tool. This is found within the tools area of Purple Mash.**Children can** understand what 2Sequence is and how it works.**Children can** use the different sounds within 2Sequence to create a tune.**Children can** explore how to speed up and slow down tunes.**Children can** understand what happens to the tune when sounds are moved. | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_7/Unit%202.7%20Making%20Music.pdf) for detailed step by step (unit 2.7 lesson 2)**Preparation**Children will need headphones.[Twinkle Twinkle](https://www.purplemash.com/site#app/guides/2Seq_Twinkle_twinkle) 2Sequence file.[2Sequence](https://www.purplemash.com/app/tools/2seq) tool. This is found within the tools area of Purple Mash.**Children have** added sounds to a tune to change it.**Children have** considered how music can be used to express feelings.**Children can** change the volume of the background sounds.**Children have** created two tunes which depict two feelings. | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_7/Unit%202.7%20Making%20Music.pdf) for detailed step by step (unit 2.7 lesson 3)**Preparation**Children will need headphones.[2Sequence](https://www.purplemash.com/app/tools/2seq)[2Beat](https://www.purplemash.com/#app/tools/2beat)**Children have** uploaded and used their own sound chosen from a bank of sounds.**Children have** created, uploaded and used their own recorded sound.**Children have** created their own tune using some of the chosen sounds. | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_8/Unit%202.8%20Presenting%20Ideas.pdf) for detailed step by step (unit 2.8 lesson 1)**Preparation****LI: Presenting a Story Three Ways****Children have** examined a traditional tale presented as a mind map, as a quiz, as an e-book and as a fact file. **Children know** that digital content can be represented in many forms. | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_8/Unit%202.8%20Presenting%20Ideas.pdf) for detailed step by step (unit 2.8 lesson 2)**Preparation**[**Three bears mind map**](https://www.purplemash.com/app/guides/2Connect_Three_Bears)**Presenting Ideas as a Quiz** **Children have** made a quiz about a story using 2Quiz. **Children can** talk about their work and make improvements to solutions based on feedback received. | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_8/Unit%202.8%20Presenting%20Ideas.pdf) for detailed step by step (unit 2.8 lesson 3)**Preparation**[United Kingdom 2connect file](https://www.purplemash.com/site#tab/Teachers/computing_sow/computing_sow_y2/computing_sow_y2_unit_2-8) **Children have** extracted information from a 2Connect file to make a publisher fact file on a non-fiction topic. **Children have** added appropriate clipart. **Children have** added an appropriate photo. **Children know** that data can be structured in tables to make it useful. | **LI:** See [overview](https://static.purplemash.com/mashcontent/applications/schemes_of_work/computing_schemes_of_work/computing_sow_year2_unit_2_8/Unit%202.8%20Presenting%20Ideas.pdf) for detailed step by step (unit 2.8 lesson 4)**Preparation****To make a presentation to the class**[**Blank Fact File**](https://www.purplemash.com/#app/pup/blank_factfile) [**2create a story**](https://www.purplemash.com/app/tools/2cas2) • **Children can** use a variety of software to manipulate and present digital content and information. • **Children can** collect, organise and present data and information in digital content. • **Children can** create digital content to achieve a given goal by combining software packages. |

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