Computing @ Oakwood

Oakwood Academy

PATHWAY 1 SOW

Year 7 – Me and My Computer

AUT 1 – Using My Computer

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
Parts of a Computer	Turning on and logging in	The desktop and explorer	Recap	Creating Files and Folders	Saving, Retrieving and Printing	Google Classroom	Assessment
Students explore the basic parts that make up a computer. They learn the correct terminology and the usages for each part.	Students are given their log in details and log in for the first time. They practice logging in and different ways of logging out. They discuss what an account is and the importance of choosing a secure password.	Students explore the desktop, understand the different elements of the interface and practice basic instructions; full screen, minimise etc. They compare this to the experience on an iPad for understanding. Students take a first look at the file explorer.	Students engage in a variety of tasks to assess understanding so far and consolidate what they have learned.	Students explore files and folders, understand the difference, then create a set of folders for their work. Any files they have already created will be organised into these folders.	Students explore saving and retrieving work from a variety of destinations. They explore the shared areas of the school network and learn how to navigate the explorer with more accuracy. Students learn how to print work.	Students are introduced to the Google Classroom and shown the basic elements. They are tasked with creating a variety of quick tasks in order to submit them to get used to the process.	Rubric, monitor progress for ongoing topics.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Computer parts ❑ Terminology ❑ Part usage	❑ Logging in ❑ Logging out ❑ Safe passwords ❑ Accounts	❑ Desktop ❑ Maximise ❑ Minimise ❑ Windows		❑ Files ❑ Folders ❑ Organisation	❑ Saving ❑ Retrieving ❑ Personal Areas ❑ Shared Areas ❑ Printing	❑ Google Classroom ❑ Submitting work ❑ Google Suite	

Year 7 – Creating Media 1

AUT 2 – Creating Publications

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Words and Pictures	Editing	Creating Comics	Using Templates	Adding Content	Layout information
Learners should become familiar with “text” and “images.” Understand the need to use them to communicate clearly. Students should be able to give advantages and disadvantages of using text, images or both, to communicate effectively.	Explore the decision making process behind appropriate font size, colour and type of text. Students are to create an invitation using these skills. It is important for learners to understand that once content has been added, it can be rearranged on the page.	Students create their own comics using online comic creation software. They add images and text and think carefully about how to use them to create the best effect. Students self and peer judge how effective they were in their use of text and images.	Introduce the idea of ‘templates’, ‘orientation’ and ‘placeholders’ within desktop publishing software. Students to create their own magazine template which they will add content to next lesson.	Students to add content (text and images) to the magazine templates they created last lesson. The information they need to add will be provided and they will use copy and paste skills to input the information into their template.	Students to explore the different ways information can be laid out on a page. Introduce a range of layouts such as letters and newspapers, begin to think about the purpose of each of them.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Text and images ❑ Communication ❑ Advantages of using text and images.	❑ Editing fonts ❑ Editing text ❑ Communication in text	❑ Choosing fonts for effect ❑ Choosing images for effect	❑ Page orientation ❑ Placeholders ❑ Templates	❑ Thinking about location of content ❑ Copy and paste ❑ Editing content	❑ Layouts. ❑ Purpose of layouts

Year 7 – Programming 1

SPR 1 - Sequences

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Scratch	Sprites	Sequences	Ordering Commands	Costumes	Instruments Reflection	
This lesson introduces learners to a new programming environment: Scratch. Learners will begin by comparing Scratch to other programming environments they may have experienced, before familiarising themselves with the basic layout of the screen.	In this lesson, learners will create movement for more than one sprite. In doing this, they will design and implement their code, and then will create code to replicate a given outcome. Finally, they will experiment with new motion blocks.	In this lesson, learners will be introduced to the concept of sequences by joining blocks of code together. They will also learn how event blocks can be used to start a project in a variety of different ways. In doing this, they will apply principles of design to plan and create a project. Reflect on learning.	This lesson explores sequences, and how they are implemented in a simple program. Learners have the opportunity to experiment with sequences where order is and is not important. They will create their own sequences from given designs.	This lesson develops learners' understanding of sequences by giving them the opportunity to combine motion and sounds in one sequence. They will also learn how to use costumes to change the appearance of a sprite, and backdrops to change the appearance of the stage. They will apply the skills in Activity 1 and 2 to design and create their own project, including sequences, sprites with costumes, and multiple backdrops..	In this lesson, learners will create a musical instrument in Scratch. They will apply the concept of design to help develop programs and use programming blocks — which they have been introduced to throughout the unit. They will learn that code can be copied from one sprite to another, and that projects should be tested to see if they perform as expected. Reflect on learning using assessment rubric.	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	
❑ Scratch basics ❑ Backdrops, sprites ❑ Attributes ❑ Commands	❑ Sprites ❑ Commands ❑ Programs	❑ Events ❑ Sequenced commands ❑ Code specificity	❑ Sequences ❑ Sound commands ❑ Ordering notes	❑ Sequence of commands ❑ Events and actions ❑ Design choices	❑ Identifying objects for a project ❑ Task descriptions ❑ Design choices ❑ Algorithms ❑ Assessment	

Year 7 – Data and Information

SPR 2 - Branching Databases

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Yes or No questions	Making Groups	Creating a branching database	Structuring a branching database	Planning a branching database	Making a dinosaur identifier
Learners will start to explore questions with yes/no answers, and how these can be used to identify and compare objects. They will create their own yes/no questions, before using these to split a collection of objects into groups.	Learners will develop their understanding of using questions with yes/no answers to group objects more than once. They will learn how to arrange objects into a tree structure and will continue to think about which attributes the questions are related to.	Learners will continue to develop their understanding of ordering objects/images in a branching database structure. They will learn how to use an online database tool to arrange objects into a branching database, and will create their own questions with yes/no answers. Learners will show that their branching database works through testing Reflect on learning.	Learners will continue to develop their understanding of how to create a well-structured database. They will use attributes to create questions with yes/no answers, and will apply these to given objects. Learners will compare the efficiency of different branching databases, and will be able to explain why questions need to be in a specific order.	Learners will independently plan a branching database by creating a physical representation of one that will identify different types of dinosaur. They will continue to think about the attributes of objects to write questions with yes/no answers, which will enable them to separate a group of objects effectively. Learners will then arrange the questions and objects into a tree structure, before testing the structure.	Learners will independently create a branching database to identify different types of dinosaur, based on the paper-based version that they created in Lesson 5. They will then work with a partner to test that their database works, before considering real-world applications for branching databases. Complete assessment.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Yes/No answers ❑ Make Yes/No questions about a collection of objects ❑ Make two groups of objects, separated by one attribute.	❑ Select attributes to separate objects into groups. ❑ Create a group of objects within an existing group. ❑ Arrange objects into a tree structure.	❑ Select objects to arrange in branching databases ❑ Group objects using my own yes/no questions ❑ Testing databases	❑ Create yes/no questions using given attributes. ❑ Compare different branching database structures.	❑ Creating questions independently for a branching database. ❑ Create questions to enable objects in being uniquely identified. ❑ Create a physical branching database.	❑ Create our own branching databases. ❑ Testing our databases. ❑ Exploring real wold uses for databases.

Year 7 – Creating Media 2

SUM 1- Animations

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
Can a picture move?	Working with Frames	Creating a storyboard	Recap	Stop-Frame Animations	Evaluation lesson	Using music and text in SFAs.	Assessment
Discuss the difference between a static picture and a moving picture, or the 'movies.' Explore simple animation techniques and create a simple animation.	Explore the iMotion app and make some basic stop-frame animations. Start to explore possibilities of what students animation projects might be.	Create a storyboard to show the characters, settings and events that would take place in their own stop frame animations.	Recap what they have learned, consolidate the learning before moving on. Check any misconceptions and address within this lesson. Complete a mini assessment.	Using the plans created in the last lesson, students will begin to create their stop frame animations, with a strong focus on consistency.	Students to evaluate the animations they made last lesson and make improvements to them. It is important that they make changes to their original design.	Students finalise their animations by adding music, text and a variety of effects to complete the finished project.	Students to present their animations and teacher to judge using the assessment rubric.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Animation ❑ Moving pictures	❑ Predicting end results of animations ❑ Stop-Frame animations	❑ Storyboarding ❑ Understanding achievable animations.		❑ Use onion skinning to make changes between frames. ❑ Review a sequence of frames to check work. ❑ Evaluate the quality of animations.	❑ Self/peer reflection and improvement. ❑ Using a range of animation techniques.	❑ Adding additional media. ❑ Providing reasons for these additions. ❑ Self evaluation.	

Year 7 – Programming 2

SUM 2 – Events and Actions

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Moving sprites	Maze movement	Drawing lines	Adding features	Debugging	Project making	
In this lesson, learners will investigate how characters can be moved using 'events'. They will analyse and improve an existing project, and then apply what they have learned to their own projects. They will then extend their learning to control multiple sprites in the same project.	In this lesson, learners will program a sprite to move in four directions: up, down, left, and right. They will begin by choosing a sprite and sizing it to fit in with a given background. Learners will then create the code to move the sprite in one direction before duplicating and modifying it to move in all four directions. Finally, they will consider how their project could be extended to prove that their sprite has successfully navigated a maze.	This lesson will introduce learners to extension blocks in Scratch using the Pen extension. Learners will use the pen down block to draw lines, building on the movement they created for their sprite in Lesson 2. Learners will then decide how to set up their project every time it is run. Reflect on learning.	In this lesson, learners will be given the opportunity to use additional Pen blocks. They will predict the functions of new blocks and experiment with them, before designing features to add to their own projects. Finally, they will add these features to their projects and test their effectiveness.	This lesson explores the process of debugging, specifically looking at how to identify and fix errors in a program. Learners will review an existing project against a given design and identify bugs within it. They will then correct the errors, gaining independence as they do so. Learners will also develop their projects by considering which new setup blocks to use.	In this lesson, learners will design and create their own projects. Using a template (which can be blank or partially completed), learners will complete projects to move a sprite around a maze, with the option to leave a pen trail showing where the sprite has moved. Ideally, projects will include setup blocks to position the sprite at the start of the maze and clear any lines already on the screen. Complete assessment	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	
❑ Events and actions ❑ Key choice ❑ Improving programs	❑ Choosing characters ❑ Maze design ❑ Programing movement	❑ Programming extensions ❑ Real world reflection ❑ Choosing blocks	❑ Adding additional features ❑ Choosing suitable keys ❑ Building sequences	❑ Testing programs ❑ Connecting blocks of code to outcomes ❑ Modifying programs	❑ Justifying design choices ❑ Implementing design choices ❑ Evaluating designs ❑ Assessment	

Year 8 – Me and My Computer

AUT 1 – Communicating Online

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
Types of Online Communication	Using Social Media	Can you believe everything online?	Recap	Using Email	Online Collaboration		Assessment
Brainstorming what students already know about Online Communication whilst providing students with the correct terminology. Students explore the different contexts for Online Communication.	Students explore the main social media programs and the law surrounding their use. They explore examples of good communication and bad communication, and what their online self looks like to others.	Students explore how easy it is to spread fake information online, and how information can be manipulated to serve a purpose. They explore the concept of identify impersonation and the dangers that follow it.		Students are introduced to their email accounts and explore the basics of how to send an email. They practice sending emails to each other and discuss correct email etiquette.	Having access to their own emails, students use their addresses to begin working collaboratively online with one another. They use Google Slides and its collaborative functions to work in teams, "remotely," to complete a group project. During this time they are introduced to instant messaging online in order to facilitate a "remote working" condition.		Compare progress against assessment rubric.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ The Internet ❑ Online Communication ❑ Instant Messaging ❑ Email ❑ Direct Messaging ❑ Social media	❑ Social Media ❑ E Safety	❑ E Safety ❑ Online awareness ❑ Digital Literacy		❑ Emails ❑ Email Addresses ❑ Email Etiquette	❑ Online Collaboration ❑ Working Remotely ❑ Remote tools ❑ Instant Messaging		

Year 8 – Creating Media 1

AUT 2 – Photo Editing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Changing Digital images	Recolouring	Cloning	Combining	Creating	Evaluation
In this lesson, you will introduce learners to the concept of editing images. They will go on to explore when we need to rotate and crop an image as well as how to use an image editor to make these changes. Learners will then discuss image composition.	In this lesson, learners will look at the effect that different colours and filters can have on an image. They will choose appropriate effects to fit a scenario, and explain how they made their choices. They will then edit the images using different effects to suit two different scenarios.	In this lesson, learners will be introduced to the cloning tool and its use in both changing the composition of a photo and photo retouching. They will see how parts of a photo can be removed or duplicated using cloning. Learners will consider what parts of an image can be retouched and learn techniques to make this as unnoticeable as possible. Finally, they will consider when it is necessary to edit photographs in this way. Reflect on learning.	In this lesson, students learn how to use different tools to select areas of an image. Learners then use copy and paste within one image and between two images to produce a combined image. Finally, learners will consider when it's appropriate to edit an image and discuss some of the ethics around retouching photos.	In this lesson, learners will apply all the skills they have learnt in the unit so far. They will start by reviewing some images and considering what makes an image look real or made up. Learners will then plan their own image. They will choose from a selection of images, open them and edit them to create their own project.	This lesson is the final lesson in the unit on photo editing. Learners will review the image that they created in Lesson 5. After they have reviewed their image, they will have the opportunity to make changes to their image based on their review. Learners will then add text to their image to complete it as a publication. Reflect on learning using assessment rubric.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Editing Images ❑ Rotation and cropping ❑ Image editors ❑ Image composition	❑ Editing Images ❑ Filters and effects ❑ Choosing an effect to suit a scenario.	❑ Cloning ❑ Photo composition ❑ Retouching	❑ Image selection ❑ Copy & Paste ❑ Editing Ethics	❑ Examining real/fake images ❑ Editing images	❑ Self reflection ❑ Self/peer improvement ❑ Adding text to images.

Year 8 – Programming 1

SPR 1 – Repetition in Shapes

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Screen turtles	Programming letters	Patterns and repeats	Using loops	Decomposition	Creating a program	
This lesson will introduce pupils to programming in Logo. Logo is a text-based programming language where pupils type commands that are then drawn on screen. Pupils will learn the basic Logo commands, and will use their knowledge of them to read and write code	In this lesson, pupils will create algorithms (a precise set of ordered instructions, which can be turned into code) for their initials. They will then implement these algorithms by writing them in Logo commands to draw the letter. They will debug their code by finding and fixing any errors that they spot.	In this lesson, pupils will first look at examples of patterns in everyday life. They will recognise where numbers, shapes, and symbols are repeated, and how many times repeats occur. They will create algorithms for drawing a square, using the same annotated diagram as in Lesson 2. They will use this algorithm to program a square the 'long' way, and recognise the repeated pattern within a square. Once they know the repeated pattern, they will use the repeat command within Logo to program squares the 'short' way. Reflect on learning.	In this lesson, pupils will work with count-controlled loops in a range of contexts. First, they will think about a real-life example, then they will move on to using count-controlled loops in regular 2D shapes. They will trace code to predict which shapes will be drawn, and they will modify existing code by changing values within the code snippet	In this lesson, pupils will focus on decomposition. They will break down everyday tasks into smaller parts and think about how code snippets can be broken down to make them easier to plan and work with. They will learn to create, name, and call procedures in Logo, which are code snippets that can be reused in their programming.	In the final lesson, pupils will apply the skills that they have learnt in this unit to create a program containing a count-controlled loop. Over the course of the lesson, they will design wrapping paper using more than one shape, which they will create with a program that uses count-controlled loops. They will begin by creating the algorithm, either as an annotated sketch, or as a sketch and algorithm, and then implement it as code. They will debug their work throughout, and evaluate their programs against the original brief. Reflect on learning using assessment rubric.	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	
❑ Turtle Academy ❑ Written programming commands	❑ Algorithms ❑ Debugging	❑ Recognising shapes and patterns ❑ Algorithms ❑ Repetition	❑ Trace code ❑ Programming predictions ❑ Count-controlled loops	❑ Decomposition ❑ Procedures	❑ Programming ❑ Algorithms ❑ Repetition and loops ❑ Debugging ❑ Evaluation	

Year 8 – Data and Information

SPR 2 – Flat File Databases

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Understanding Databases	Sorting and Filtering	Formula and Functions	Creating Databases	Visual Data	Databases in the real world
In this lesson, students will be introduced to the concept of databases and familiarize themselves with their basic features.	Students will explore the basics of sorting and filtering data to find answers to questions.	Students will be introduced to common formulas and functions used in Google Sheets for performing calculations and manipulation. Recap learning so far.	In this lesson, students will create their own databases using the skills they have gained so far.	Students will explore the different ways in which they can present data and reflect on the benefits of their choices.	Students explore databases in the real world and compare the differences between their own and more visual ones used in an everyday situation. Complete test.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Data ❑ Databases ❑ Cells ❑ Fields ❑ Records	❑ Sorting data ❑ Filtering data ❑ Answering questions based on data	❑ Using formulae ❑ Using functions ❑ Answering questions based on data	❑ Viewing data ❑ Records ❑ Fields ❑ Functions ❑ Formulae	❑ Thinking about data ❑ Questioning data ❑ Creating questions ❑ Sorting data ❑ Filtering Data ❑ Formulae	❑ Commonly used databases ❑ Visual presentation of Databases

Year 8 – Creating Media 1

SUM 1 – Audio Production

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
Recording Sounds	Editing Audio	Planning a Podcast	Recap	Creating a Podcast	Combining Audio	Evaluating Podcasts	Assessment
In this lesson, learners will identify the input devices used to record sound and output devices needed to listen to it. They will then record their voices using a computer, and reflect on what makes a good audio recording. Lastly, learners will consider ownership and copyright issues related to recordings.	In this lesson, learners will record and re-record their voices to improve their recordings. They will edit the recordings, removing long pauses and mistakes. Learners will also listen to a range of podcasts and identify the features of a podcast.	In this lesson, learners will record their voices and then import and align sound effects to create layers in their recordings. Learners will learn how to save their work so it remains editable. They will then plan their own podcast which they will work on in future lessons.	Recap what they have learned, consolidate the learning before moving on. Check any misconceptions and address within this lesson. Complete a mini assessment.	In this lesson, learners will record the voice tracks for their podcast. They will review their recordings and re-record if necessary. Learners will edit, trim, and align their voice recordings, and then save their project so they can continue working on it in the next lesson.	In this lesson, learners will develop their podcast further by adding content such as sound effects and background music. The audio will be layered with their existing voice recordings and exported as an audio file.	In this lesson, learners will evaluate their own podcasts and that of others. After looking at the evaluation, learners will decide if they can improve their podcast and then make any changes they have chosen.	Students to present their animations and teacher to judge using the assessment rubric.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Input / Output ❑ Recording voices ❑ Ownership / Copyright	❑ Recording Voices ❑ Editing Audio	❑ Importing sound clips ❑ Layering audio ❑ Editing audio ❑ Planning a production		❑ Podcasts ❑ Recording and editing audio ❑ Trim and align	❑ Layering Audio ❑ Exporting files	❑ Evaluation ❑ Self reflection and improvement	

Year 8 – Programming 2

SUM 2 – Repetition in Games

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Using loops	Different Loops	Animating names	Modifying code	Designing a game	Creating a game	
In the first lesson, learners look at real-life examples of repetition, and identify which parts of instructions are repeated. Learners then use Scratch, a block-based programming environment, to create shapes using count-controlled loops. They consider what the different values in each loop signify, then use existing code to modify and create new code, and work on reading code and predicting what the output will be once the code is run.	In this lesson, learners look at different types of loops: infinite loops and count-controlled loops. They practise using these within Scratch and think about which might be more suitable for different purposes.	In this lesson, learners create designs for an animation of the letters in their names. The animation uses repetition to change the costume (appearance) of the sprite. The letter sprites will all animate together when the **event** block (**green flag**) is clicked. When they have designed their animations, the learners will program them in Scratch. After programming, learners then evaluate their work, considering how effectively they used repetition in their code. Reflect on learning.	In this lesson, learners look at an existing game and match parts of the game with the design. They make changes to a sprite in the existing game to match the design. They then look at a completed design, and implement the remaining changes in the Scratch game. They add a sprite, re-use and modify code blocks within loops, and explain the changes made.	In this lesson, learners look at a model project that uses repetition. They then design their own games based on the model project, producing designs and algorithms for sprites in the game. They share these designs with a partner and have time to make any changes to their design as required.	In this lesson, learners build their games, using the designs they created in Lesson 5. They follow their algorithms, fix mistakes, and refine designs in their work as they build. They evaluate their work once it is completed, and showcase their games at the end. Complete assessment	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	
❑ Repetition ❑ Block-based coding ❑ Modifying code	❑ Infinite and count-controlled loops	❑ Animation ❑ Events ❑ Loops	❑ Modifying code ❑ Modifying sprites	❑ Designing a game ❑ Using repetition ❑ Editing code ❑ Debugging	❑ Creating algorithms ❑ Debugging ❑ Refinement and evaluation.	

Year 9 – Me and My Computer

AUT 1 – What's inside a computer?

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
What do all devices have in common?	The Parts	CPU & Operating Systems	Recap	Memory	Storage	Problems	Assessment
Students explore a variety of digital devices and the hardware that they all have in common. They make connections between similar devices and understand that seemingly different interfaces actually work in similar ways, e.g. touchscreen and mouse.	Students explore an overview of the main parts of every digital device. They begin to create an eBook to house their learning over the topic.	Students explore the CPU by comparing it to a control centre. They explore Binary as a concept of computer language and understand the need for an Operating System to make that information more user friendly. They compare this to a translator helping two people understand a foreign language.		Students explore RAM and the concept of computer memory. They compare this to a human beings short term memory, and explore what would happen to a computer if it didn't have enough memory.	Students explore the difference between Storage and Memory. They compare storage to real storage boxes and the importance of labelling and organising these boxes.	Students explore common problems that they may face with a digital device and gain some troubleshooting skills and knowledge on how to deal with these issues.	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Digital Devices ❑ Core Hardware	❑ CPU ❑ GPU ❑ RAM ❑ Storage ❑ Motherboard	❑ CPU ❑ Binary ❑ Operating System		❑ RAM ❑ Memory	❑ Storage ❑ Memory ❑ RAM ❑ Computer Organisation	❑ Troubleshooting	

Year 9 – Creating Media 1

AUT 2 – Vector Graphics

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
Drawing Tools	Creating Images	Making effective drawings	Recap	Layers and objects	Manipulating Objects	Creating a vector drawing	Assessment
Learners are introduced to vector drawings and begin to understand that they are made up of simple shapes and lines. They use the main drawing tools within the Google Drawings application to create their own vector drawings. Learners discuss how vector drawings differ from paper-based drawings.	Learners begin to identify the shapes that are used to make vector drawings. They are able to explain that each element of a vector drawing is called an object. Learners create their own vector drawing by moving, resizing, rotating, and changing the colours of a selection of objects. They also learn how to duplicate the objects to save time..	Learners increase the complexity of their vector drawings and use the zoom tool to add detail to their work. They are shown how grids and resize handles can improve the consistency of their drawings. Learners also use tools to modify objects to create a new image.	Recap what they have learned, consolidate the learning before moving on. Check any misconceptions and address within this lesson. Complete a mini assessment.	Learners gain an understanding of layers and how they are used in vector drawings. They discover that each object is built on a new layer and that these layers can be moved forwards and backwards to create effective vector drawings.	Learners find out how to select and duplicate multiple objects at a single time. They develop this skill further by learning how to group multiple objects to make them easier to work with. Learners then use this knowledge to group and ungroup objects, in order to make changes to and develop their vector drawings.	Learners use the skills they have gained in this unit to create a vector drawing for a specific purpose. They reflect on the skills they have used to create the vector drawing and think about why they used the skills they did. Learners then begin to compare vector drawings to freehand paint program drawings.	Students to present their animations and teacher to judge using the assessment rubric.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Vector drawings ❑ Google Drawings	❑ Identifying shapes ❑ Objects ❑ Manipulating vector drawings	❑ Using additional tools ❑ Zoom and detailing ❑ Grids ❑ Resizing		❑ Layers ❑ Layering objects	❑ Duplication ❑ Grouping objects	❑ Reflection ❑ Evaluation	

Year 9 – Programming 1

SPR 1 – Selection in Quizzes

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Exploring Conditions	**Selecting Outcomes**	**Asking Questions**	**Designing a Quiz**	**Testing a Quiz**	**Evaluating a Quiz**	
In this lesson, learners revisit previous learning on 'selection' and identify how 'conditions' are used to control the flow of actions in a program. They are introduced to the blocks for using conditions in programs using the Scratch programming environment. They modify the conditions in an existing program and identify the impact this has.	In this lesson, learners will develop their understanding of selection by using the 'if… then… else...' structure in algorithms and programs. They will revisit the need to use repetition in selection to ensure that conditions are repeatedly checked. They identify the two outcomes in given programs and how the condition informs which outcome will be selected. Learners use this knowledge to write their own programs that use selection with two outcomes.	In this lesson, learners consider how the 'if… then... else…' structure can be used to identify two responses to a binary question. They identify that the answer to the question is the 'condition', and use algorithms with a branching structure to represent the actions that will be carried out if the condition is true or false. They learn how questions can be asked in Scratch, and how the answer is used in the condition to control the outcomes. They use an algorithm to design a program that uses selection to direct the flow of the program based on the answer provided. Reflect on learning.	In this lesson, learners will be provided with a task: to use selection to control the outcomes in an interactive quiz. They will outline the requirements of the task and use an algorithm to show how they will use selection in the quiz to control the outcomes based on the answer given. Learners will complete their designs by using design templates to identify the questions that will be asked, and the outcomes for both correct and incorrect answers. To demonstrate their understanding of how they are using selection to control the flow of the program, learners will identify which outcomes will be selected based on given responses.	In this lesson, learners will use the Scratch programming environment to implement the first section of their algorithm as a program. They will run the first section of their program to test whether they have correctly used selection to control the outcomes, and debug their program if required. They will then continue implementing their algorithm as a program. Once completed, they will consider the value of sharing their program with others so that they can receive feedback. Learners conclude the lesson by using another learner's quiz and providing feedback on it.	In this lesson, learners will return to their completed programs and identify ways in which the program can be improved. They will focus on issues where answers similar to those in the condition are given as inputs, and identify ways to avoid such problems. Learners will also consider how the outcomes may change the program for subsequent users, and identify how they can make use of 'setup' to provide all users with the same experience. They will implement their identified improvements by returning to the Scratch programming environment and adding to their programs. They conclude the unit by identifying how they met the requirements of the given task, and identifying the aspects of the program that worked well, those they improved, and areas that could improve further. Complete assessment	
Key concepts:	**Key concepts:**	**Key concepts:**	**Key concepts:**	**Key concepts:**	**Key concepts:**	
❑ Selection ❑ Conditions ❑ Scratch blocks	❑ IF THEN ELSE ❑ Repetition ❑ Conditions	❑ Binary answers ❑ Branching structures ❑ True/False logic	❑ Selection ❑ Reviewing algorithms ❑ Design templates	❑ Implementing and testing algorithms ❑ Sharing programs on Scratch ❑ Peer feedback	❑ Improvement feedback ❑ Outcomes ❑ Self reflection	

Year 9 – Data and Information

SPR 2 – Spreadsheets

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Collecting Data	Formatting	Formulas	Calculating and Duplicating	Event Planning	Presenting data
Students collect and organise data in a format of their choice. They then explore how data can be structured in a table, before inputting data into a spreadsheet.	Students develop their understanding of the structure of a spreadsheet. They are introduced to cell references, data items and the concept of formatting cells. Students explore data items formatted in different ways, then choose the correct formats for data items before applying these formats in their own spreadsheets.	Students begin to use formulas to produce calculated data. They endeavour to understand that the type of data in a cell is important. Students create formulas to use in a spreadsheet using cell references and identify that changing inputs will change the output of the calculation.	Students calculate data using operations of multiplications, division, subtraction and addition. They use these operations to create formulas in a spreadsheet. Students then begin to understand the importance of creating formulas that include e arrange of cells and the advantage of duplicating in order to apply formulas to multiple cells.	Students plan and calculate the cost of an event using a spreadsheet. They use a predefined list to choose what they would like to include in their event, and use their spreadsheet to answer questions on the data they have selected. Students will be reminded of the importance of organising data and will then create a spreadsheet using formulas to work out costs for their event.	Students explore chart creation in Google Sheets. They evaluate the results from their charts to answer questions. Students explore the different types of charts and their potential uses.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Collecting data ❑ Organising data ❑ Structuring data ❑ Inputting data	❑ Cell references ❑ Data items ❑ Formatting cells ❑ Formatting options	❑ Formulas ❑ Data types ❑ Cell References	❑ Data calculation ❑ Operations ❑ Formulas	❑ Data planning ❑ Calculating costs ❑ Answering questions about data	❑ Presenting Data ❑ Bar Charts ❑ Pie Charts

Year 9 – Creating Media 2

SUM 1 – Video Production

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
What is a video?	Filming Techniques	Using a storyboard	Planning a Video	Importing and Editing Video	Video Evaluation
Learners will be introduced to video as a media format. They will see examples of videos featuring production and editing techniques that they will work towards using their own videos. Learners will begin by explaining what the medium of video is before analysing and comparing examples of videos.	Learners will explore the capabilities of a digital device that can be used to record video. Once they are familiar with their device, learners will experiment with different camera angles, considering how different camera angles can be used for different purposes.	Learners will use a storyboard to explore a variety of filming techniques, some of which they will use in their own video project later in the unit. They will evaluate the effectiveness of these techniques before offering feedback on others' work. Reflect on learning.	Learners will plan a video by creating a storyboard. Their storyboard will describe each scene, and will include a script, camera angles, and filming techniques. Learners will use their storyboards to film the first scene of their videos. .	Learners will film the remaining scenes of their video, and then import their content to video editing software. They will then explore key editing techniques and decide whether sections of their video can be edited or need to be shot again.	Learners will complete their video by removing unwanted content and reordering their clips. They will then export their finished video and evaluate the effectiveness of their edits. Finally, they will consider how they could share their video with others. Reflect on learning using assessment rubric.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Media Formats ❑ Editing Techniques	❑ Recording Devices ❑ Camera angles	❑ Storyboarding ❑ Filming techniques ❑ Evaluation	❑ Storyboarding ❑ Scenes ❑ Scripts ❑ Camera angles ❑ Filming techniques	❑ Filming techniques ❑ Importing content ❑ Editing techniques	❑ Editing video ❑ Exporting video ❑ Evaluating vidoes

Year 9 – Programming 1

SUM 2 – Selection in Games

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Screen turtles	Programming letters	Patterns and repeats	Using loops	Decomposition	Creating a program	
		Reflect on learning.			Reflect on learning using assessment rubric.	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	
❑ Turtle Academy ❑ Written programming commands	❑ Algorithms ❑ Debugging	❑ Recognising shapes and patterns ❑ Algorithms ❑ Repetition	❑ Trace code ❑ Programming predictions ❑ Count-controlled loops	❑ Decomposition ❑ Procedures	❑ Programming ❑ Algorithms ❑ Repetition and loops ❑ Debugging ❑ Evaluation	

Year 7 – Me and My Computer

AUT – Using My Computer

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
Parts of a Computer	Turning on and logging in	The desktop and explorer	Recap	Creating Files and Folders	Saving, Retrieving and Printing	Google Classroom	Assessment
Students explore the basic parts that make up a computer. They learn the correct terminology and the usages for each part.	Students are given their log in details and log in for the first time. They practice logging in and different ways of logging out. They discuss what an account is and the importance of choosing a secure password.	Students explore the desktop, understand the different elements of the interface and practice basic instructions; full screen, minimise etc. They compare this to the experience on an iPad for understanding. Students take a first look at the file explorer.	Students engage in a variety of tasks to assess understanding so far and consolidate what they have learned.	Students explore files and folders, understand the difference, then create a set of folders for their work. Any files they have already created will be organised into these folders.	Students explore saving and retrieving work from a variety of destinations. They explore the shared areas of the school network and learn how to navigate the explorer with more accuracy. Students learn how to print work.	Students are introduced to the Google Classroom and shown the basic elements. They are tasked with creating a variety of quick tasks in order to submit them to get used to the process.	Rubric, monitor progress for ongoing topics.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Computer parts ❑ Terminology ❑ Part usage	❑ Logging in ❑ Logging out ❑ Safe passwords ❑ Accounts	❑ Desktop ❑ Maximise ❑ Minimise ❑ Windows		❑ Files ❑ Folders ❑ Organisation	❑ Saving ❑ Retrieving ❑ Personal Areas ❑ Shared Areas ❑ Printing	❑ Google Classroom ❑ Submitting work ❑ Google Suite	

Year 8 – Me and My Computer

AUT 1 – Communicating Online

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
Types of Online Communication	Using Social Media	Can you believe everything online?	Recap	Using Email	Online Collaboration		Assessment
Brainstorming what students already know about Online Communication whilst providing students with the correct terminology. Students explore the different contexts for Online Communication.	Students explore the main social media programs and the law surrounding their use. They explore examples of good communication and bad communication, and what their online self looks like to others.	Students explore how easy it is to spread fake information online, and how information can be manipulated to serve a purpose. They explore the concept of identify impersonation and the dangers that follow it.		Students are introduced to their email accounts and explore the basics of how to send an email. They practice sending emails to each other and discuss correct email etiquette.	Having access to their own emails, students use their addresses to begin working collaboratively online with one another. They use Google Slides and its collaborative functions to work in teams, "remotely," to complete a group project. During this time they are introduced to instant messaging online in order to facilitate a "remote working" condition.		Compare progress against assessment rubric.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ The Internet ❑ Online Communication ❑ Instant Messaging ❑ Email ❑ Direct Messaging ❑ Social media	❑ Social Media ❑ E Safety	❑ E Safety ❑ Online awareness ❑ Digital Literacy		❑ Emails ❑ Email Addresses ❑ Email Etiquette	❑ Online Collaboration ❑ Working Remotely ❑ Remote tools ❑ Instant Messaging		

Year 9 – Me and My Computer

AUT 1 – What's inside a computer?

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
What do all devices have in common?	The Parts	CPU & Operating Systems	Recap	Memory	Storage	Problems	Assessment
Students explore a variety of digital devices and the hardware that they all have in common. They make connections between similar devices and understand that seemingly different interfaces actually work in similar ways, e.g. touchscreen and mouse.	Students explore an overview of the main parts of every digital device. They begin to create an eBook to house their learning over the topic.	Students explore the CPU by comparing it to a control centre. They explore Binary as a concept of computer language and understand the need for an Operating System to make that information more user friendly.		Students explore RAM and the concept of computer memory. They compare this to a human beings short term memory, and explore what would happen to a computer if it didn't have enough memory.	Students explore the difference between Storage and Memory. They compare storage to real storage boxes and the importance of labelling and organising these boxes.	Students explore common problems that they may face with a digital device and gain some troubleshooting skills and knowledge on how to deal with these issues.	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Digital Devices ❑ Core Hardware	❑ CPU ❑ GPU ❑ RAM ❑ Storage ❑ Motherboard	❑ CPU ❑ Binary ❑ Operating System		❑ RAM ❑ Memory	❑ Storage ❑ Memory ❑ RAM ❑ Computer Organisation	❑ Troubleshooting	

Year 9 – Creating Media 1

AUT 2 – Creating Publications

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Words and Pictures	Editing	Creating Comics	Using Templates	Adding Content	Layout information
Learners should become familiar with “text” and “images.” Understand the need to use them to communicate clearly. Students should be able to give advantages and disadvantages of using text, images or both, to communicate effectively.	Explore the decision making process behind appropriate font size, colour and type of text. Students are to create an invitation using these skills. It is important for learners to understand that once content has been added, it can be rearranged on the page.	Students create their own comics using online comic creation software. They add images and text and think carefully about how to use them to create the best effect. Students self and peer judge how effective they were in their use of text and images.	Introduce the idea of ‘templates’, ‘orientation’ and ‘placeholders’ within desktop publishing software. Students to create their own magazine template which they will add content to next lesson.	Students to add content (text and images) to the magazine templates they created last lesson. The information they need to add will be provided and they will use copy and paste skills to input the information into their template.	Students to explore the different ways information can be laid out on a page. Introduce a range of layouts such as letters and newspapers, begin to think about the purpose of each of them.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Text and images ❑ Communication ❑ Advantages of using text and images.	❑ Editing fonts ❑ Editing text ❑ Communication in text	❑ Choosing fonts for effect ❑ Choosing images for effect	❑ Page orientation ❑ Placeholders ❑ Templates	❑ Thinking about location of content ❑ Copy and paste ❑ Editing content	❑ Layouts. ❑ Purpose of layouts

Year 9 – Programming 1

SPR 1 - Sequences

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Scratch	Sprites	Sequences	Ordering Commands	Costumes	Instruments Reflection	
This lesson introduces learners to a new programming environment: Scratch. Learners will begin by comparing Scratch to other programming environments they may have experienced, before familiarising themselves with the basic layout of the screen.	In this lesson, learners will create movement for more than one sprite. In doing this, they will design and implement their code, and then will create code to replicate a given outcome. Finally, they will experiment with new motion blocks.	In this lesson, learners will be introduced to the concept of sequences by joining blocks of code together. They will also learn how event blocks can be used to start a project in a variety of different ways. In doing this, they will apply principles of design to plan and create a project. Reflect on learning.	This lesson explores sequences, and how they are implemented in a simple program. Learners have the opportunity to experiment with sequences where order is and is not important. They will create their own sequences from given designs.	This lesson develops learners' understanding of sequences by giving them the opportunity to combine motion and sounds in one sequence. They will also learn how to use costumes to change the appearance of a sprite, and backdrops to change the appearance of the stage. They will apply the skills in Activity 1 and 2 to design and create their own project, including sequences, sprites with costumes, and multiple backdrops..	In this lesson, learners will create a musical instrument in Scratch. They will apply the concept of design to help develop programs and use programming blocks — which they have been introduced to throughout the unit. They will learn that code can be copied from one sprite to another, and that projects should be tested to see if they perform as expected. Reflect on learning using assessment rubric.	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	
❑ Scratch basics ❑ Backdrops, sprites ❑ Attributes ❑ Commands	❑ Sprites ❑ Commands ❑ Programs	❑ Events ❑ Sequenced commands ❑ Code specificity	❑ Sequences ❑ Sound commands ❑ Ordering notes	❑ Sequence of commands ❑ Events and actions ❑ Design choices	❑ Identifying objects for a project ❑ Task descriptions ❑ Design choices ❑ Algorithms ❑ Assessment	

Year 9 – Data and Information

SPR 2 - Branching Databases

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Yes or No questions	Making Groups	Creating a branching database	Structuring a branching database	Planning a branching database	Making a dinosaur identifier
Learners will start to explore questions with yes/no answers, and how these can be used to identify and compare objects. They will create their own yes/no questions, before using these to split a collection of objects into groups.	Learners will develop their understanding of using questions with yes/no answers to group objects more than once. They will learn how to arrange objects into a tree structure and will continue to think about which attributes the questions are related to.	Learners will continue to develop their understanding of ordering objects/images in a branching database structure. They will learn how to use an online database tool to arrange objects into a branching database, and will create their own questions with yes/no answers. Learners will show that their branching database works through testing Reflect on learning.	Learners will continue to develop their understanding of how to create a well-structured database. They will use attributes to create questions with yes/no answers, and will apply these to given objects. Learners will compare the efficiency of different branching databases, and will be able to explain why questions need to be in a specific order.	Learners will independently plan a branching database by creating a physical representation of one that will identify different types of dinosaur. They will continue to think about the attributes of objects to write questions with yes/no answers, which will enable them to separate a group of objects effectively. Learners will then arrange the questions and objects into a tree structure, before testing the structure.	Learners will independently create a branching database to identify different types of dinosaur, based on the paper-based version that they created in Lesson 5. They will then work with a partner to test that their database works, before considering real-world applications for branching databases. Complete assessment.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Yes/No answers ❑ Make Yes/No questions about a collection of objects ❑ Make two groups of objects, separated by one attribute.	❑ Select attributes to separate objects into groups. ❑ Create a group of objects within an existing group. ❑ Arrange objects into a tree structure.	❑ Select objects to arrange in branching databases ❑ Group objects using my own yes/no questions ❑ Testing databases	❑ Create yes/no questions using given attributes. ❑ Compare different branching database structures.	❑ Creating questions independently for a branching database. ❑ Create questions to enable objects in being uniquely identified. ❑ Create a physical branching database.	❑ Create our own branching databases. ❑ Testing our databases. ❑ Exploring real wold uses for databases.

Year 9 – Creating Media 2

SUM 1- Animations

Stage 1	Stage 2	Stage 3	Reflection	Stage 4	Stage 5	Stage 6	Reflection
Can a picture move?	Working with Frames	Creating a storyboard	Recap	Stop-Frame Animations	Evaluation lesson	Using music and text in SFAs.	Assessment
Discuss the difference between a static picture and a moving picture, or the 'movies.' Explore simple animation techniques and create a simple animation.	Explore the iMotion app and make some basic stop-frame animations. Start to explore possibilities of what students animation projects might be.	Create a storyboard to show the characters, settings and events that would take place in their own stop frame animations.	Recap what they have learned, consolidate the learning before moving on. Check any misconceptions and address within this lesson. Complete a mini assessment.	Using the plans created in the last lesson, students will begin to create their stop frame animations, with a strong focus on consistency.	Students to evaluate the animations they made last lesson and make improvements to them. It is important that they make changes to their original design.	Students finalise their animations by adding music, text and a variety of effects to complete the finished project.	Students to present their animations and teacher to judge using the assessment rubric.
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:
❑ Animation ❑ Moving pictures	❑ Predicting end results of animations ❑ Stop-Frame animations	❑ Storyboarding ❑ Understanding achievable animations.		❑ Use onion skinning to make changes between frames. ❑ Review a sequence of frames to check work. ❑ Evaluate the quality of animations.	❑ Self/peer reflection and improvement. ❑ Using a range of animation techniques.	❑ Adding additional media. ❑ Providing reasons for these additions. ❑ Self evaluation.	

Year 9 – Programming 2

SUM 2 – Events and Actions

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7
Moving sprites	Maze movement	Drawing lines	Adding features	Debugging	Project making	
In this lesson, learners will investigate how characters can be moved using 'events'. They will analyse and improve an existing project, and then apply what they have learned to their own projects. They will then extend their learning to control multiple sprites in the same project.	In this lesson, learners will program a sprite to move in four directions: up, down, left, and right. They will begin by choosing a sprite and sizing it to fit in with a given background. Learners will then create the code to move the sprite in one direction before duplicating and modifying it to move in all four directions. Finally, they will consider how their project could be extended to prove that their sprite has successfully navigated a maze.	This lesson will introduce learners to extension blocks in Scratch using the Pen extension. Learners will use the pen down block to draw lines, building on the movement they created for their sprite in Lesson 2. Learners will then decide how to set up their project every time it is run. Reflect on learning.	In this lesson, learners will be given the opportunity to use additional Pen blocks. They will predict the functions of new blocks and experiment with them, before designing features to add to their own projects. Finally, they will add these features to their projects and test their effectiveness.	This lesson explores the process of debugging, specifically looking at how to identify and fix errors in a program. Learners will review an existing project against a given design and identify bugs within it. They will then correct the errors, gaining independence as they do so. Learners will also develop their projects by considering which new setup blocks to use.	In this lesson, learners will design and create their own projects. Using a template (which can be blank or partially completed), learners will complete projects to move a sprite around a maze, with the option to leave a pen trail showing where the sprite has moved. Ideally, projects will include setup blocks to position the sprite at the start of the maze and clear any lines already on the screen. Complete assessment	
Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	Key concepts:	
❑ Events and actions ❑ Key choice ❑ Improving programs	❑ Choosing characters ❑ Maze design ❑ Programing movement	❑ Programming extensions ❑ Real world reflection ❑ Choosing blocks	❑ Adding additional features ❑ Choosing suitable keys ❑ Building sequences	❑ Testing programs ❑ Connecting blocks of code to outcomes ❑ Modifying programs	❑ Justifying design choices ❑ Implementing design choices ❑ Evaluating designs ❑ Assessment	

KS4 Core Computing @ Oakwood

	AUT1	AUT2	SPR1	SPR2	SUM1	SUM2
Y10 Core – S & F	**WJEC Entry Pathways – ICT Fundamentals Entry 3 – 6384/E3** Students explore the fundamentals of using ICT. They examine the main components of a computer system and how to use, maintain and troubleshoot them. They learn how to organise computer systems effectively. They explore safe use of ICT in a variety of scenarios.		**WJEC Entry Pathways – Presentation Software Entry 3 – 6393/E3** Students explore Presentation Software, with a focus on Microsoft PowerPoint. They examine the uses for Presentation software and look at best practice for creating their own. They will gain valuable presentation skills and work towards collecting evidence for their qualification.		**WJEC Entry Pathways – Spreadsheet Software Entry 2 – 6389/E2** Students explore Spreadsheet Software, with a focus on Microsoft Excel. They examine the uses for Spreadsheet software and learn how to collect, store and analyse data. They will explore commonly used formulae in Excel, create tables to house information, use sort and search functions, as well as creating graphs and charts to present their findings	
Y11 Core – S & F	**WJEC Entry Pathways – Using Email Entry 3 – 6401/E3** Students explore the world of electronic mail. They will gain the understanding of how emails work and their appropriate use. They explore relevant safety issues surrounding the use of email, how to set up contact lists, group contacts for various tasks and how they can use email to work collaboratively.		**Submission Activities / ICT For Life** Students will finalise their coursework ready to be submitted for moderation. When finished, students will explore useful ICT skills for life: ❑ CV Writing ❑ Job Searching ❑ Additional basic email skills		**End of school Activities** **Carousel of choices:** Video Editing: Leavers videos Game Design: Kodu Pixel Art	

KS4 Core Computing @ Oakwood

	AUT1	AUT2	SPR1	SPR2	SUM1	SUM2
Y10 Core – Pine	**WJEC Entry Pathways – ICT Fundamentals Entry 2 – 6384/E2** Students explore IT Fundamentals, including internet safety, hardware, software and best practice. A heavy focus is placed on how to stay safe online and what information is acceptable to share and what is not.		**WJEC Entry Pathways – Presentation Software Entry 2 – 6393/E2** Students explore Presentation Software, with a focus on Microsoft PowerPoint. They examine the uses for Presentation software and look at best practice for creating their own. They will gain valuable presentation skills and work towards collecting evidence for their qualification.		**WJEC Entry Pathways – Spreadsheet Software Entry 2 – 6389/E2** Students explore Spreadsheet Software, with a focus on Microsoft Excel. They examine the uses for Spreadsheet software and learn how to collect, store and analyse data. They will explore commonly used formulae in Excel, create tables to house information, use sort and search functions, as well as creating graphs and charts to present their findings.	
Y11 Core – Pine	**WJEC Entry Pathways – Word Processing Entry 2 – 6391/E2** Students explore Word Processing software, with a focus on Microsoft Word. They examine the uses for Word Processing, including the clear and precise presentation of information. They will gain valuable word processing skills and work towards collecting evidence for their qualification.		**Submission Activities / ICT For Life** Students will finalise their coursework ready to be submitted for moderation. When finished, students will explore useful ICT skills for life: ❑ CV Writing ❑ Job Searching ❑ Additional basic email skills		**End of school Activities** **Carousel of choices:** Video Editing: Leavers videos Game Design: Kodu Pixel Art	

KS4 Core Computing @ Oakwood

	AUT1	AUT2	SPR1	SPR2	SUM1	SUM2
Y10 Core – Maple	**WJEC Entry Pathways – IT Fundamentals Entry 2 – 6384/E2** Students explore IT Fundamentals, including internet safety, hardware, software and best practice. A heavy focus is placed on how to stay safe online and what information is acceptable to share and what is not.		**WJEC Entry Pathways – Presentation Software Entry 3 – 6393/E1** Students explore Presentation Software, with a focus on Microsoft PowerPoint. They examine the uses for Presentation software and look at best practice for creating their own. They will gain valuable presentation skills and work towards collecting evidence for their qualification.		**WJEC Entry Pathways – Spreadsheet Software Entry 2 – 6389/E1** Students explore Spreadsheet Software, with a focus on Microsoft Excel. They examine the uses for Spreadsheet software and learn how to collect, store and analyse data. They will explore commonly used formulae in Excel, create tables to house information, use sort and search functions, as well as creating graphs and charts to present their findings.	
Y11 Core – Maple	**WJEC Entry Pathways – Word Processing Entry 3 – 6391/E1** Students explore Word Processing software, with a focus on Microsoft Word. They examine the uses for Word Processing, including the clear and precise presentation of information. They will gain valuable word processing skills and work towards collecting evidence for their qualification.		**Submission Activities / ICT For Life** Students will finalise their coursework ready to be submitted for moderation. When finished, students will explore useful ICT skills for life: ❑ CV Writing ❑ Job Searching ❑ Additional basic email skills		**End of school Activities** **Carousel of choices:** Video Editing: Leavers videos Game Design: Kodu Pixel Art	

Options Computing @ Oakwood

	AUT1	AUT2	SPR1	SPR2	SUM1	SUM2
Y10 Options	**Understand the purpose of Advertising** **Entry 3 – Credits: 3 – KA1/E3/LQ/001**		**Creative Media Production Skills** **Entry 3 – Credits: 4 – KB2/E3/LQ/001**		**Developing Animation** **Entry 3 – Credits: 3 – KB2/E3/LQ/002**	
	Learners will: ❑ Identify examples of advertisements. ❑ Identify key features of advertisements. ❑ Understand how advertisements appeal to specific audiences. ❑ Plan their own ideas for advertising a product. ❑ Present their own ideas for advertising a specific product.		**Learners will:** ❑ Plan the production of a media product showing consideration of some key aspects. ❑ Produce a media product in line with their own plan. ❑ Present their media product to others so that they understand the purpose of the product and its key features. ❑ Improve aspects of their product based on feedback.		**Learners will:** ❑ Generate ideas for an animated sequence. ❑ Create story-boards for an animated sequence. ❑ Create an animated sequence in line with their own story-boards. ❑ Improve their animations based on feedback.	
Y11 Options	**Images and Design in Newspaper and Magazines.** **Entry 3 – Credits: 3 – KH5/E3/LQ/001**		**Introduction to Interactive Media Products** **Entry 3 – Credits: 3 – KJ3/E3/LQ/002**		**End of year activities**	
	Learners will: ❑ Plan a newspaper or magazine to a set brief. ❑ Produce a newspaper/magazine ❑ Understand core concepts of page design. ❑ Use images in effective and appropriate ways. ❑ Use text in effective and appropriate ways. ❑ Understand the importance of sections and use them appropriately. ❑ Improve aspects of their work based on feedback.		**Learners will:** ❑ Plan an interactive media product to a brief. ❑ Produce an interactive media product in line with their own plan. ❑ Test their products with users and gather feedback. ❑ Improve aspects of their own work based on this feedback. ❑ Present the planned interactive media product communicating it's key features.		**Carousel of choices:** Video Editing: Leavers videos Game Design: Kodu Pixel Art	