

The Edward Worlledge Ormiston Academy Computing Curriculum

All children will be able:

Recall facts about how to use technology safely and responsibly.

Apply specific vocabulary to computer programming, including 'algorithm' and 'debug'.

Develop their own questions based on their curiosity of the subject.

Develop skills so they can create digital content using a range of computer software and use technology for a variety of purposes.

Autumn Term 1			
Year Group	Area of study	Key Knowledge / People / Events / Dates / Etc	Key Vocab
1	Digital Literacy ❖ Revisited throughout the academic year	<ul style="list-style-type: none"> - I can recognise the ways we use technology in our classroom - I can recognise ways that technology is used in my home and community - I can keep my password private - I can tell you what personal information is - I can tell an adult when I see something unexpected or worrying online - I can talk about why it's important to be kind and polite - I can recognise an age appropriate website - I can agree and follow sensible e-Safety rules 	Private Kind
2	Digital Literacy ❖ Revisited throughout the academic year	<ul style="list-style-type: none"> - I can tell you why I use technology in the classroom - I can tell you why I use technology in my home and community - I can explain why I need to keep my password and personal information private 	Private Personal Kind

		<ul style="list-style-type: none"> - I can describe the things that happen online that I must tell an adult about - I can talk about why it is important to be kind and polite online and in real life - I know that not everyone is who they say they are on the internet 	
3	<p>Digital Literacy</p> <ul style="list-style-type: none"> ❖ Revisited throughout the academic year 	<ul style="list-style-type: none"> - I can talk about the various uses of technology - I can talk about what makes a secure password and why they are important - I can protect my personal information when I do different things online - I can report concerns to an adult - I can recognise websites and games appropriate for my age - I can make good choices about how long I should spend online - I know to ask an adult before downloading files from the internet - I am positive and kind online 	<p>Secure Private Personal Concerns Appropriate Kind</p>
4	<p>Digital Literacy</p> <ul style="list-style-type: none"> ❖ Revisited throughout the academic year 	<ul style="list-style-type: none"> - I can talk about the various uses of technology - I can talk about what makes a secure password and why they are important - I can talk about the ways I can protect myself and my friends from harm online - I can use the safety features of websites as well as reporting concerns to an adult - I know that anything I share online can be seen by others - I choose websites, apps and games that are appropriate for my age 	<p>Secure Private Personal Harm Concerns Appropriate Respectful</p>

		<ul style="list-style-type: none"> - I can help my friends make good choices about the time they spend online - I can talk about why I need to ask a trusted adult before downloading files and games from the internet - I am positive and respectful online 	
5	<p>Digital Literacy</p> <ul style="list-style-type: none"> ❖ Revisited throughout the academic year 	<ul style="list-style-type: none"> - I can discuss and evaluate the various uses of technology - I can choose a secure password and screen name - I protect my password and other personal information - I can explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult - I know that anything I post online can be seen, used and may affect others - I know how to protect my computer or device from harm on the internet - I am positive and respectful online 	<p>Secure Private Personal Harm Concerns Appropriate Respectful</p>
6	<p>Digital Literacy</p> <ul style="list-style-type: none"> ❖ Revisited throughout the academic year 	<ul style="list-style-type: none"> - I can discuss and evaluate the various uses of technology - I protect my password and other personal information - I can explain the consequences of sharing too much about myself online - I support my friends to protect themselves and make good choices online, including reporting concerns to an adult - I know how to protect my computer or device from harm on the internet 	<p>Secure Private Personal Harm Concerns Appropriate Respectful</p>

		- I can explain the consequences to myself and others of not communicating kindly and respectfully online	
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Autumn Term 2

Year Group	Area of study	Key Knowledge / People / Events / Dates / Etc	Key Vocab
1	Information Technology – Microsoft Word ➤ Researching online	<ul style="list-style-type: none"> - I can use technology to collect information - I can use links to websites to find information - I can sort different kinds of information - I can use the keyboard on my device to enter text - I can save information and retrieve it again 	Website Device Keyboard
2	Information Technology – Microsoft Word ➤ Researching online	<ul style="list-style-type: none"> - I can use technology to collect information, including text and photos - I am starting to understand that people have created the information I use online - I can sort different kinds of information and present it to others - I can use the keyboard on my device to add, delete and space text for others to read - I can change the font, size and colour of text - I can save and open files on the device I use 	Website Device Keyboard Text Font
3	Information Technology – Microsoft PowerPoint ➤ Researching online	<ul style="list-style-type: none"> - I can identify key words to use when searching safely on the World Wide Web - I can use search tools to find and use an appropriate website - I can tell you whether a resource I am using is on the internet, the school network or my own device 	Website Search tool Device Keyboard Text Font Animation effects Slideshow

		<ul style="list-style-type: none"> - I can use appropriate keyboard commands to amend text on my device, including making use of a spellchecker - I can create different effects with different technology tools - I can combine a mixture of text, graphics and sound to share my ideas and learning - I can evaluate my work and improve its effectiveness - I can save and open files on the device I use 	
4	<p>Information Technology – Microsoft Word</p> <ul style="list-style-type: none"> ➤ Researching online 	<ul style="list-style-type: none"> - I can identify key words to use when searching safely on the World Wide Web - I think about the reliability of information I find on the World Wide Web - I can create a hyperlink to a resource on the World Wide Web - I can tell you whether a resource I am using is on the internet, the school network or my own device - I can use a keyboard confidently and make use of a spellchecker to write and review my work - I can change the appearance of text to increase its effectiveness - I can create, modify and present documents for a particular purpose - I can confidently save and open files on the device I use 	<p>Website Search tool Hyperlink Device Keyboard Text Font</p>
5	<p>Information Technology – Microsoft PowerPoint</p> <ul style="list-style-type: none"> ➤ Researching online 	<ul style="list-style-type: none"> - I can use a search engine to find appropriate information and check its reliability - I can recognise and evaluate different types of information I find on the World Wide Web 	<p>Website Search engine Hyperlink Device Keyboard Text</p>

		<ul style="list-style-type: none"> - I can use a keyboard confidently and make use of a spellchecker to write and review my work - I can use text, photo, sound and video editing tools to refine my work - I can select, use and combine the appropriate technology tools to create effects that will have an impact on others - I can select an appropriate online or offline tool to create and share ideas 	<p>Font Animation effects Slideshow</p>
6	<p>Information Technology – Microsoft Publisher</p> <ul style="list-style-type: none"> ➤ Researching online 	<ul style="list-style-type: none"> - I can use a search engine to find appropriate information and check its reliability - I can talk about the way search results are selected and ranked - I can evaluate the reliability of a website - I can combine a range of media, recognising the contribution of each to achieve a particular outcome - I can use the skills I have already developed to create content using unfamiliar technology 	<p>Website Search engine Hyperlink Device Keyboard Text Font Media</p>

Spring Term 1

Year Group	Area of study	Key Knowledge / People / Events / Dates / Etc	Key Vocab
1	Information Technology – Paint	<ul style="list-style-type: none"> - I can be creative with technology - I can use different colours and brush tools to develop my artwork - I can create shapes and fill areas with colour - I can ‘undo’ and ‘redo’ my actions to improve my work - I can talk about whether I like my work 	
2	Information Technology – Microsoft PowerPoint	<ul style="list-style-type: none"> - I can use technology to organise and present my ideas in different ways 	<p>Keyboard Text</p>

		<ul style="list-style-type: none"> - I can use the keyboard on my device to add, delete and space text for others to read - I can change the font, size and colour of text - I can combine a mixture of text and photos to share my learning - I can save and open files on the device I use - I can talk about the information I have gathered 	<p>Font Slideshow</p>
3	Information Technology – Microsoft Excel	<ul style="list-style-type: none"> - I can talk about the different ways data can be organised - I can collect data to help me answer a question - I can make and save a chart or graph using the data I collect - I can search a readymade data table to answer questions 	<p>Data Bar chart Pie chart Line graph</p>
4	Information Technology – Microsoft PowerPoint	<ul style="list-style-type: none"> - I can use a keyboard confidently - I can change the appearance of text to increase its effectiveness - I can use photos, video and sound to create an atmosphere when presenting to different audiences - I can confidently save and open files on the device I use - I can use an appropriate tool to share my work and collaborate online 	
5	Information Technology – Microsoft Excel	<ul style="list-style-type: none"> - I can choose an appropriate tool to help me collect data - I can present data in an appropriate way - I can talk about mistakes in data and suggest how it could be checked 	<p>Data Bar chart Pie chart Line graph</p>

		- I can search a data table using conditions to refine my search	
6	Information Technology – Microsoft Excel	<ul style="list-style-type: none"> - I can select the most effective tool to collect data - I can check the data I collect for accuracy and plausibility - I can interpret the data I collect - I can present the data I collect in an appropriate way 	Data Bar chart Pie chart Line graph

Spring Term 2			
Year Group	Area of study	Key Knowledge / People / Events / Dates / Etc	Key Vocab
1	Digital Literacy	<ul style="list-style-type: none"> - I can recognise common uses of technology and begin to identify their benefits - I can be creative with technology - I can use a digital camera to create digital content - I can save and retrieve digital photos with support - I can talk about whether I like my work 	Digital camera Retrieve
2	Digital Literacy	<ul style="list-style-type: none"> - I can recognise common uses of technology and tell you their benefits - I can be creative with technology - I can use a digital camera to create digital content - I can save and retrieve digital photos - I can evaluate my work and decide how to improve it - I can edit and enhance digital photos to improve their effectiveness 	Digital camera Retrieve Edit

3	Digital Literacy	<ul style="list-style-type: none"> - I can talk about the various uses of technology - I can tell you ways to communicate with others online and begin to identify their benefits - I can compose and send an email to a friend - I can check my own inbox for emails - I can open an email and reply appropriately - I can attach an image to an email 	<p>Communicate Compose Email Inbox Attach</p>
4	Digital Literacy	<ul style="list-style-type: none"> - I can talk about the various uses of technology - I can discuss and evaluate ways to communicate with others online - I can compose and send an email to multiple friends - I can edit the formatting of text within my emails - I can check my own inbox for emails - I can open an email and reply appropriately I can forward an email to another person - I can attach an image to an email 	<p>Communicate Compose Email Inbox Forward Attach</p>
5	Digital Literacy	<ul style="list-style-type: none"> - I can be creative with technology - I can use a digital camera to create digital content - I can save and retrieve digital photos - I can create a series of linked frames that can be played as a short animation - I can change the content of an image by the correct amount between frames - I can sequence frames to create a successful animation 	<p>Digital camera Retrieve Animation Frames</p>

		- I can evaluate the effectiveness of my work	
6	Digital Literacy	<ul style="list-style-type: none"> - I can select an appropriate tool to communicate and collaborate online - I can become familiar with blogs as a medium and genre of writing - I can create a sequence of blog posts on a theme - I can incorporate additional media into my blog posts - I can comment on the posts of others 	Communicate Collaborate Blogs Media

Summer Term 1 & 2

Year Group	Area of study	Key Knowledge / People / Events / Dates / Etc	Key Vocab
1	Computer Science	<ul style="list-style-type: none"> - I can give instructions to my friend and follow their instructions to move around - I can describe what happens when I press buttons on a programmable toy - I can press the buttons in the correct order to make my programmable toy do what I want - I can describe what actions I will need to do to make something happen and begin to use the word algorithm - I can begin to predict what will happen for a short sequence of instructions - I can use the word debug when I correct mistakes when I program 	Instructions Algorithm Predict Debug
2	Computer Science	<ul style="list-style-type: none"> - I can give instructions to my friend (using forward, backward and turn) and physically follow their instructions - I can tell you the order I need to do things to make something happen and talk about this as an algorithm 	Instructions Algorithm Programming Predict Debug

		<ul style="list-style-type: none"> - I can program a programmable toy or software to do a particular task - I can look at my friend's program and tell you what will happen - I can use programming software to make objects move - I can watch a program execute and spot where it goes wrong so that I can debug it 	
3	Computer Science	<ul style="list-style-type: none"> - I can break an open-ended problem up into smaller parts - I can put programming commands into a sequence to achieve a specific outcome - I keep testing my program and can recognise when I need to debug it - I can use repeat commands - I can describe the algorithm I will need for a simple task - I can detect a problem in an algorithm which could result in unsuccessful programming 	<p>Instructions Algorithm Programming Predict Debug</p>
4	Computer Science	<ul style="list-style-type: none"> - I can use logical thinking to solve an open-ended problem by breaking it up into smaller parts - I can use an efficient procedure to simplify a program - I know that I need to keep testing my program while I am putting it together - I can use a variety of tools to create a program - I can recognise an error in a program and debug it 	<p>Instructions Algorithm Programming Efficient Predict Debug</p>

		<ul style="list-style-type: none"> - I recognise that an algorithm will help me to sequence more complex programs - I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology 	
5	Computer Science	<ul style="list-style-type: none"> - I can decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program - I can refine a procedure using repeat commands to improve a program - I can use a variable to increase programming possibilities - I can change an input to a program to achieve a different output - I can use 'if' and 'then' commands to select an action - I can use logical reasoning to detect and debug mistakes in a program - I use logical thinking, imagination and creativity to extend a program 	<ul style="list-style-type: none"> Decompose Instructions Algorithm Programming Variable Efficient Predict Debug
6	Computer Science	<ul style="list-style-type: none"> - I can decompose a problem into smaller steps, recognising similarities to solutions used before - I can explain and program each of the steps in my algorithm - I can evaluate the effectiveness and efficiency of my algorithm while continually testing the algorithm - I can recognise when I need to use a variable to achieve a required output 	<ul style="list-style-type: none"> Decompose Instructions Algorithm Programming Variable Efficient Predict Debug

		<ul style="list-style-type: none">- I can use different inputs (including sensors) to control a device or onscreen action and predict what will happen- I can use logical reasoning to detect and correct errors in algorithms and programs	
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