

<u>St Bartholomew's Computing - Long Term Plan - Year B</u>

| Year B | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 | | | | | | |
|--------------------|--|---|---|---|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | |
| Apple Reception | Technology in the Ear | ly Years will mean: | | | | | | | | | | |
| | taking a photograph with a camera or tablet | | | | | | | | | | | |
| | searching for information on the internet | | | | | | | | | | | |
| | | p. 1, 1, 8, 8 a. 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, | | | | | | | | | | |
| | exploring an old typewriter or other mechanical/electronic toys | | | | | | | | | | | |
| | controlling toys using a remote control using a Beebot watching a video clip listening to music reading ebooks | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | _ | os on the ipads (sugges | sted apps only) | | | | | | | | | |
| | | d writing apps to devel | | s of the curriculum | | | | | | | | |
| | · | buttons to access prov | | | | | | | | | | |
| Apple | Online Safety | Online Safety and | Online Safety and | Online Safety and | Online Safety and | Online Safety and | | | | | | |
| Reception | | Technology at | Technology in | Technology in | Technology in | Programmable toys | | | | | | |
| Termly | | home | school | school | school | | | | | | | |
| Focus | Tarker dam. | Currentura data | Adams a mala a | District activities | District. | B 1 1 21 | | | | | | |
| Apple Y1 | Technology around us | Grouping data | Moving a robot | Digital painting | Digital photography | Robot algorithms | | | | | | |
| | around us | Exploring object | Writing short | Choosing | photography | Creating and | | | | | | |
| | Recognising | labels, then using | algorithms and | appropriate tools in | Capturing and | debugging | | | | | | |
| | technology in school | them to sort and | programs for floor | a program to create | changing digital | programs and using | | | | | | |
| | and using it | group objects by | robots and | art, and making | photographs for | logical reasoning to make predictions. | | | | | | |
| | responsibly. | properties. | predicting program | comparisons with | different purposes. | | | | | | | |
| | (Computer systems | omnutor systems (Data and | | working non- | (Creating Madia) | (Drogramming A) | | | | | | |
| | (Computer systems and networks) | (Data and information) | outcomes. | digitally | (Creating Media) | (Programming A) | | | | | | |
| | Learning Success | Learning Success Intention Criteria | (Programming A) | (Creating Media) | Learning Success Intention Criteria | Learning Success Intention Criteria | | | | | | |
| | Intention Criteria | | Learning Success | Learning Success | Lesson 1 I can | Lesson 1 I can follow | | | | | | |
| | To know how explain to identify technology | Lesson 1 I can describe objects using | Intention Criteria | Intention Criteria | Lesson 1 I can To know recognise how to use what | To know how instructions to describe a given by | | | | | | |
| | technology as something | how to labels label I can match | Lesson 1 I can | Lesson 1 I can make | a digital devices can device to be used to | series of someone else | | | | | | |
| | that helps us | objects objects to groups | To know predict the what a outcome of given a command | To know marks on a screen and different explain | take a take photographs | as a I can choose a series of | | | | | | |
| | I can locate examples of technology | I can identify the label for a group of | command on a device will do I can match | freehand which tools I used | I can talk about how to take a | words that can be | | | | | | |
| | in the classroom | objects Lesson 2 I can count | a command to an | I can draw lines on a | photograph I can explain | acted out as a | | | | | | |
| | l can explain how | To know objects that I can group | outcome I can run a command | screen and explain which tools I | what I did to capture a | sequence I can give clear | | | | | | |
| | these technology examples | objects objects can be I can count a | on a device Lesson 2 I can follow | used I can use the | digital photo Lesson I can explain | instructions Lesson 2 I can use | | | | | | |
| | help us Lesson I can name | counted group of objects | To know an instruction | paint tools to draw a | To know of taking a good | To know the same instructions | | | | | | |
| | the main parts of a | | out a given I can recall word words that | picture Lesson 2 I can make | make photograph choices I can take | happens to create different | | | | | | |
| | to identify a computer computer and I can switch | Lesson 3 To know how to I can describe an object I can describe | can be acted out | To know marks with the square | when taking photos in both | change the algorithms order of I can use an instructions algorithm | | | | | | |
| | its main parts on and log into a | describe a property of an object | I can give directions | use the and line tools tool and I can use the | photograph landscape and portrait | to program a sequence | | | | | | |
| | computer I can use a mouse to | different I can find objects with | | the line shape and line tools | format I can explain why a photo | on a floor robot | | | | | | |
| | click and drag | similar properties | | effectively I can use the | looks better in portrait or | I can show the | | | | | | |
| | | | | shape and line tools to | | difference in | | | | | | |

| | Lesson I can use a mouse to open a to use a program I can click different and drag to make objects on I can use a mouse to create a | Lesson 4 To know similar objects l can group count objects more than one with the same properties how many objects share a property | Lesson 3 To know compare forward combine and backward movements commands to make a sequence from the same place I can predict the | recreate the work of an artist Lesson 3 I can choose appropriate | landscape format lesson 3 can identify To know what is | outcomes between two sequences that consist of the same instructions | |
|---|---|---|--|--|--|---|--|
| | Lesson I can say what a To know how to use a keyboard to type on a computer can save my work to a file | Lesson 5 Can choose how to compare can describe groups of objects Can record how many objects are in a group Lesson 6 Can decide how to group before the can decide to work on the can decide how to group the can decide how to group | outcome of a sequence involving 'forwards' and 'backwards' commands Lesson 4 To know compare how to combine four l can | how to shapes make I can make careful appropriate choices vhen choices painting I can create a digital a picture in picture the style of an artist I can explain To know that how to different explain paint tools | what makes a good photograph I can discuss how to take a good photograph I can improve a photograph by retaking it | Lesson 3 To know how to use logical reasoning to predict the outcome of a program I can compare my prediction to the program | |
| | Lesson 5 To know how to use the keyboard to edit text the arrow keys to move the cursor I can delete letters Lesson 6 I can open my work to move the cursor I can delete letters | how to answer a questions about I can compare groups of objects I can record and share what I have found | direction commands to make sequences to move a robot L can predict the outcome of a sequence involving up to four | why I do different jobs tools I can choose appropriate paint tools and colours to recreate the work of an artist I can say which tools | Lesson 4 I can explore To know the effect how the effect that light photographs photo improved I can experiment with different light sources I can explain why a | Lesson I can 4 explain the To know how to explain that programming projects can have code and artwork programming design identify different routes | |
| | To know how identify rules to trace rules for using technology responsibly healthy when we are using technology in and beyond the home I can give examples of | | Lesson 5 To know explain how to plan a simple program program should do I can choose the order of commands in a sequence | were helpful and why Lesson I can make dots of To know colour on the page I can change computer on my and brush own to sizes paint a I can use dots of colour to | picture may be unclear Lesson 5 I can recognise that images tools to can be change an image I can use a tool to achieve a desired effect | around my mat I can test my mat to make sure that it is usable Lesson 5 To know how to design an algorithm algorithm should achieve | |
| | some of these rules I can discuss how we benefit from these rules | | Lesson 6 To know identify how to find more than one solution to a problem lesson before two programs I can use | create a picture in the style of an artist on my own Lesson 6 I can explain that pictures can be made compare in lots of painting different ways on a I can spot | I can explain my choices Lesson 6 To know range of that photos can be skills to capture a photo I can recognise which photos have been | I can create an algorithm to meet my goal I can use my algorithm to create a program Lesson 6 To know how and debug | |
| | | | two different programs to get to the same place | computer and on paper between painting on a computer and on paper I can say whether I prefer painting using a computer or using paper | changed I can identify which photos are real and which have been changed | to create and debug a program that program that I have I can plan algorithms for different parts of a task I can put together the different parts of my | |
| 1 | <u>Pictograms</u> | Digital writing | Programming | Branching | Programming | Desktop publishing | |
| | Collecting data in tally charts and us attributes to organise and presidata on a compute (Data and Information) Learning Intention Success Criteria | format text, before comparing | animations Designing and programming the movement of a character on screen to tell stories. (Programming B) | Building and using branching databases to group objects using yes/no questions. (Data and information) | Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. (Programming B) | Creating documents by modifying text, images, and page layouts for a specified purpose. (Creating Media) Learning Intention Criteria | |
| | Lesson I can record data in a tally chart I can count and compare objects using tally charts Compare totals in a tally chart | Lesson 1 To know how to use a computer to write weys on a keyboard I can identify and find keys on a keyboard | Lesson 1 To know how to choose a command for a given purpose l Can use commands to move a sprite commands to move a sprite l Can compare different programming tools | Lesson 1 To know how to create questions with yes/no answers I can investigate questions with yes/no answers I can make up a yes/no question about a | Learning Criteria Lesson 1 I can identify the to explain that a sequence of commands has a start I a program needs to be started | To know how to recognise how text and images convey information respectively. I can identify the advantages and disadvantages of using text and images. | |

Palm Y2/3

| Lesson | I can enter | Lesson 2 | I can enter | Lesson 2 | I can use | | collection of | | I can show | Lesson 2 | I can char |
|-------------------------|-----------------------------|----------------------|----------------------------|----------------------|-------------------------------|----------------------------|-------------------------------------|------------------------|----------------------------|----------------------|-------------------------|
| 2 To know | data onto a computer | To know how to | text into a computer | To know that a | more than one block by | | objects | | how to run | To know how to | font style size, and |
| that objects | I can use a | add and | I can use | series of | joining them | | | | my program | recognise | colours fo |
| can be | computer | remove | letter, | commands | together | | I can create | | | that text | given pur |
| represented as pictures | to view data in a | text on a computer | number, and Space | can be joined | I can use a Start block in | | two groups of objects | | | and layout can be | I can edit I can exp |
| us pictures | different | compater | keys | together | a program | | separated by | | | edited | that text |
| | format | | I can use | | I can run my | | one attribute | | | | be chang |
| | I can use pictograms | | Backspace to remove | | program | | | | | | to commun |
| | to answer | | text | Lesson 3 To know | I can find blocks that | Lesson 2 | I can select an | Lesson 2 | I can predict | | more cle |
| | simple | Lesson 3 | I can type | how to | have | To know how | attribute to | To know how to explain | the outcome of | Lesson 3 | I can exp |
| | questions about | To know | capital | identify the | numbers | to identify the attributes | separate objects into | that a | a sequence | To know | what 'pa |
| | objects | how to identify | letters I can | effect of changing a | I can change the value | needed to | groups | sequence of | of | how to choose | orientati means |
| Lesson | I can | that the | explain | value | I can say | collect data | • . | commands | commands | appropriate | I can |
| 3 | organise | look of | what the | | what | about an | I can create a | has an outcome | | page | recognis |
| To know how to | data in a tally chart | text can be | keys that I have | | happens when I | object | group of | Cateome | I can match two | settings | placehol and say |
| create a | I can use a | changed | already | | change a | | objects within an existing | | sequences | | they are |
| pictogram | tally chart | on a | learnt about do | | value | | group | | with the | | importar I can cre |
| | to create a pictogram | computer | I can | Lesson 4 To know | I can show that a project | | | | same | | template |
| | I can | | identify | that each | can include | | I can arrange | | outcome | | a particu |
| | explain what the | | the toolbar and use | sprite has | more than | | objects into a | | I can change | | purpose |
| | pictogram | | bold, italic, | its own instructions | one sprite I can delete a | | tree structure | | the | Lesson 4 | I can cho the best |
| | shows | | and | mstructions | sprite | Lesson 3 | I can select | | outcome of | To know | locations |
| Lesson | I can tally | | underline | | I can add | To know how | objects to | | a sequence | how to add | my conte |
| 4 To know | objects using a | Lesson 4 To know | I can select a word by | | blocks to each of my | to create a | arrange in a | | of commands | content to a desktop | I can pas text and |
| how to | common | how to | double- | | sprites | branching | branching | | | publishing | images to |
| select | attribute | make | clicking | Lesson 5 | I can choose | database | database | Lesson 3 | I can work | publication | create a |
| objects by attribute | I can create a pictogram | careful choices | I can select all of the | To know | appropriate | | I can group | To know how | out the | | magazin cover |
| and make | to arrange | when | text by | how to design the | artwork for my project | | objects using | to create a | actions of a | | I can ma |
| comparisons | objects by | changing | clicking | parts of a | I can decide | | my own | program | sprite in an | | changes |
| | an attribute I can | text | and dragging | project | how each | | yes/no | using a given design | algorithm | | content I've adde |
| | answer | | I can | | sprite will move | | questions | | I can decide | Lesson 5 | I can ide |
| | 'more | | change the | | I can create | | I can test my | | which blocks | To know | different |
| | than'/'less than' and | Lesson 5 | font I can say | | an algorithm for each | | branching | | to use to | how different | layouts I can ma |
| | 'most/least' | To know | what tool I | | sprite | | database to | | meet the | layouts can | layout to |
| | questions about an | how to | used to | Lesson 6 | I can use | | see if it works | | design | suit | purpose |
| | attribute | explain | change the text | To know | sprites that | | | | I can build | different | I can cho suitable |
| Lesson 5 | I can | why I used the | l can | how to use my | match my design | Lesson | I can create | | the | purposes | layout fo |
| To know | choose a | tools that | decide if | algorithm | I can add | 4 To know how | yes/no questions | | sequences | | given pu |
| that people can be | suitable attribute to | I chose | my changes | to create a | programming | to explain | using given | | of blocks I need | | |
| described by | compare | | have | program | blocks based on my | why it is | attributes | | need | Lesson 6 To know | I can idea the uses |
| attributes | people | | improved | | algorithm | helpful for a | | Lesson | I can choose | the | desktop |
| | I can collect the data I | | my writing I can use | | I can test the | database to be well | I can compare | 4 | backgrounds | benefits of desktop | publishin |
| | need | | 'Undo' to | | programs I have created | structured | two branching database | To know how | for the | publishing | the real v |
| | I can create | | remove | | | | structures | to change a | design | , , , , | desktop |
| | a pictogram and draw | Lesson 6 | changes I can make | | | | | given design | | | publishin might be |
| | conclusions | To know | changes to | | | | I can explain | | I can choose characters | | helpful |
| | from it | how to | text on a | | | | that questions need to be | | for the | | I can con |
| Lesson 6 To know | I can use a computer | compare typing on | computer I can | | | | ordered | | design | | work ma on deskt |
| that we can | program to | a | explain the | | | | carefully to | | | | publishir |
| present | present | computer | differences | | | | split objects | | I can create a program | | work cre |
| information using a | information in different | to writing | between typing and | | | | into similarly sized groups | | based on | | by hand |
| computer | ways | on paper | writing | | | | 312cu groups | | the new | | |
| | I can share what I have | | I can say why I | | | Lesson 5 | Lcan | | design | | |
| | found out | | prefer | | | To know how | independently | | | | |
| | using a | | typing or | | | to plan the | create | Lesson 5 | I can choose the images | | |
| | computer I can give | | writing | | | structure of a branching | questions to use in a | To know how | for my own | | |
| | simple | | | | | database | branching | to create a | design | | |
| | examples | | | | | | database | program | | | |
| | of why information | | | | | | | using my own design | I can create | | |
| | should not | | | 1 | | | I can create | uc.s.gii | an algorithm | | |
| | be shared | | | 1 | | | questions that will enable | | I can build | | |
| | | | | 1 | | | objects to be | | sequences | | |
| | | | | | | | uniquely | | of blocks to | | |
| | | | | | | | identified | | match my | | |
| | | | | | | | Lean areat | | design | | |
| | | | | | | | I can create a physical | Lorron | Lean | | |
| | | | | | | | version of a | Lesson 6 | l can compare my | | |
| | | | | | | | branching | To know how | project to | | |
| | | | | | | | database | my project | my design | | |
| | | | | | | | | can be | | | |
| | | | | 1 | | Lesson 6 | I can create a branching | improved | I can improve my | | |
| | | | | | | To know how | database that | | project by | | |
| | | | | | | to | reflects my | | adding | | |
| | | | | | | independently | plan | | features | | |
| | | | | | | create an | | | | | |
| | | | | | | identification tool | I can work | | I can debug | | |
| | | | | | | | with a partner to test my | | my program | | |
| | | | | _ | | - | identification | | | 4 | |
| | | | | Sequenc | cing | | tool | Events an | d actions | | |
| | | 1 | | sounds | | | | in progra | ms | | |
| | | | | | | | I can suggest | III DI VELG | 113 | | |
| | | | | <u>sourius</u> | | | | | | | |
| | | | | <u>sourius</u> | | | real-world uses for | | | | |
| | | | | | , | | real-world uses for branching | | | | |
| | | | | Creating sequence | | | real-world uses for | Writing al | gorithms | | |

Creating sequences in a block-based programming

Writing algorithms and programs that

use a range of events

| | | | language | to make | | to trigg | er | |
|------|------------|---------------|----------------------------------|-------------------------------------|--------------------|----------------------------|---|------------------|
| | | | music. | | | sequen | | |
| | | | | | | of actions. | | |
| | | | (Program | ming A) | | | | |
| | | | | | | (Progra | mming B) | |
| | | | Learning Intention | Success Criteria | | Lacroina | Curren | |
| | | | Lesson 1 | I can | | Learning Intention | Success Criteria | |
| | | | To know how to explore a | identify the objects in a | | 1 | I can explain | |
| | | | new programming | Scratch project | | Lesson 1 To know how a | the relationship | |
| | | | environment | (sprites, backdrops) | | sprite moves in | between an event and an | |
| | | | | I can explain that | | an existing | action I can choose | |
| | | | | objects in Scratch | | project | which keys to use for | |
| | | | | have attributes | | | actions and explain my | |
| | | | | (linked to) I can | | | choices I can identify | |
| | | | | recognise that | | | a way to improve a | |
| | | | | commands in Scratch | | Lesson 2 | program I can choose | |
| | | | | represented | | To know how to | a character for my | |
| | | | Lesson 2 | as blocks I can | | create a program | project I can choose | |
| | | | To know that commands | identify that each | | to move a sprite in | a suitable size for a | |
| | | | have an outcome | sprite is controlled | | four directions | character in a maze | |
| | | | | by the commands I | | | I can program | |
| | | | | choose I can | | Lesson 3 | movement I can use a | |
| | | | | choose a word which describes | | To know how to | programming extension | |
| | | | | an on- screen | | adapt a program | I can consider the | |
| | | | | action for my plan | | to a new context | real world when making | |
| | | | | I can create a program | | | design choices | |
| | | | | following a design | | | I can choose blocks to set up my | |
| | | | Lesson 3 To know that | I can start a program in | | | program | |
| | | | a program has a start | different ways | | Lesson 4 To know | I can identify additional | |
| | | | | I can create a sequence | | how to develop | features (from a given | |
| | | | | of connected | | my program by adding | set of blocks) I can choose suitable keys | |
| | | | | commands I can | | features | to turn on additional | |
| | | | | explain that the objects | | | features I can build | |
| | | | | in my project will | | | more sequences of | |
| | | | | respond exactly to | | | commands to make my | |
| | | | Lesson | the code I can | | Lesson | design work I can test a | |
| | | | To know that | explain what a | | 5 To know | program against a | |
| | | | that a sequence of | sequence is | | how to identify | given design I can match a | |
| | | | commands can have an order | combine sound commands | | and fix bugs in a | piece of code to an | |
| | | | J. aci | I can order notes into a | | program | outcome I can modify | |
| | | | Lesson 5 | sequence | | | a program using a | |
| | | | To know how to change | sequence of commands | | Lesson | l can make | |
| | | | the appearance | I can decide the actions | | 6 To know | design choices and | |
| | | | of my project | for each sprite in a | | how to design | justify them I can | |
| | | | | program I can make | | and create a maze- | implement my design I can | |
| | | | | design choices for | | based challenge | evaluate my project | |
| | | | Lesson | my artwork I can | | Similaringe | F,t | |
| | | | 6 To know how | identify and name the | | | | |
| | | | to create a project from | objects I will need | | | | |
| | | | a task description | for a project | | | | |
| | | | | I can relate a task | | | | |
| | | | | description to a design | | | | |
| | | | | l can implement | | | | |
| | | | | my algorithm as code | | | | |
| Oak | Connecting | Repetition in | Vector dr | | Selection in | The inte | ernet | Audio production |
| Y4/5 | computers | shapes | | | physical computing | | | |
| | | | Creating i | mages in | | Recogn | ising the | Capturing and |
| | | | a drawing | | | interne | | editing audio to |
| | | | | | | | | |

| Identifying that |
|----------------------|
| digital devices have |
| inputs, processes, |
| and outputs, and |
| how devices can be |
| connected to make |
| networks. |

(Computer systems and networks)

| Intention | Criteria |
|--|--|
| Lesson 1 To know how digital devices function | I can explain that digital devices accept inputs I can explain that digital devices produce outputs I can follow a process |
| Lesson 2 To know how to identify input and output devices | I can classify input and output devices I can describe a simple process I can design a digital device |
| Lesson 3 To know how digital devices can change the way that we work | I can explain how I use digital devices for different activities I can recognise similarities between using digital devices and using non-digital tools I can suggest differences between using digital devices and using non-digital tools non-digital tools of the suggest differences between using digital devices and using non-digital tools |
| Lesson 4 To know how a computer network can be used to share information | I can recognise different connections I can explain how messages are passed through multiple connections I can discuss why we need a network switch |
| Lesson 5 To know how digital devices can be connected | I can recognise that a computer network is made up of a devices I can demonstrate how information can be passed between devices I can explain the role of a switch, server, and wireless access point in a network |
| Lesson 6 To know how the physical components of a network | I can identify how devices in a network are connected together I can identify networked devices around me |

Using a text-based programming language to explore countcontrolled loops when drawing sh

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| hapes. | | Learning Intentio |
|--|---|---|
| Program | | Lesson 1 To know how to identify |
| Learning Intention | Success Criteria | that drawing tools ca |
| Lesson 1 To know that accuracy in programming is important | I can program a computer by typing commands I can explain the effect of | be used to produce differen outcom |
| | changing a value of a command I can create a code snippet for a given purpose | Lesson 2 To know how to create a vector drawing by combini shapes |
| Lesson 2 To know how to create a program in a text-based language | I can use a template to draw what I want my program to do I can write an | Lesson |
| | algorithm to produce a given outcome I can test my algorithm in a text- based language | To know how to use tool to achie a desire effect |
| Lesson 3 To know what 'repeat' means | I can identify repetition in everyday tasks I can | |
| | identify patterns in a sequence I can use a count- controlled loop to produce a given outcome | Lesson 4 To know that vector drawing consist layers |
| Lesson 4 To know how to modify a | I can identify the effect | |
| count- controlled loop to produce a given outcome | of changing the number of times a task is repeated I can predict the outcome of a program containing | Lesson S To know how to group objects make them easier to work wi |
| | a count- controlled loop I can choose which values to change in | Lesson 6 |
| Lesson 5 To know how to decompose a task into small steps | a loop I can identify 'chunks' of actions in the real world I can use a procedure in a program I can explain | how to apply what I have learned about vector drawing |

program by using layers and groups of objects.

| (Creating media) | | | | | |
|---|--|--|--|--|--|
| Learning Intention | Success Criteria | | | | |
| Lesson 1 To know how to identify that drawing tools can be used to produce different outcomes | I can recognise that vector drawings are made using shapes I can experiment with the shape and line tools I can discuss how vector drawings are different from paper-based drawings | | | | |
| Lesson 2 To know how to create a vector drawing by combining shapes | I can identify the shapes used to make a vector drawing I can explain that each element added to a vector drawing is an object I can move, resize, and rotate objects I have | | | | |
| Lesson 3 To know how to use tools to achieve a desired effect | I can use the zoom tool to help me add detail to my drawings I can explain how allignment grids and resize handles can be used to improve consistency I cosistency losistency because a new image | | | | |
| Lesson 4 To know that vector drawings consist of layers | I can identify that each added object creates a new layer in the drawing I can change the order of layers in a vector drawing I can use layering to create an image | | | | |
| Lesson 5 To know how to group objects to make them easier to work with | I can copy part of a drawing by duplicating several objects I can recognise when I need to group and ungroup objects I can reuse a group of objects to further develop my vector drawing | | | | |
| Lesson 6 To know how to apply what I have learned about vector drawings | I can create a vector drawing for a specific purpose I can reflect on the skills I have used and why I have used them I can compare vector drawings to | | | | |

Exploring conditions and selection using a programmable microcontroller.

(Programming A)

| Learning Intention | Success Criteria | |
|--|---|--|
| Lesson 1 To know how to control a simple circuit connected to a computer | I can create a simple circuit and connect it to a microcontroller I can program a microcontroller to make an LED switch on I can explain what an infinite loop | |
| Lesson 2 To know how to write a program that includes count- controlled loops | does I can connect more than one output component to a microcontroller I can use a count- controlled loop to control outputs I can design sequences that use count- controlled loops | |
| Lesson 3 To know that a loop can stop when a condition is met | I can explain that a condition is either true or false I can design a conditional loop I can program a microcontroller to respond to an input | |
| Lesson 4 To know that that a loop can be used to repeatedly check whether a condition has been met | I can explain that a condition being met can start an action I can identify a condition and an action in my project I can use selection (an 'ifthen' statement) to direct the flow of a program | |
| Lesson 5 To know how to design a physical project that includes selection | I can identify a real-world example of a condition starting an action I can describe what my project will do I can create a detailed drawing of my project | |
| Lesson 6 To know how to create a program that controls a physical computing project | I can write an algorithm that describes what my model will do I can use selection to produce an intended outcome I can test and debug my project | |

network of networks including the WWW, and why we should evaluate online content.

(Computer

| networks) | |
|--|--|
| Learning Intention | Success Criteria |
| Lesson 1 To know how networks physically connect to other networks | I can describe the internet as a network of networks I can demonstrate how information is shared across the internet I can discuss why a network needs protecting |
| Lesson 2 To know how networked devices make up the internet | I can describe networked devices and how they connect I can explain that the internet is used to provide many services I can recognise that the World Wide Web contains websites and web pages |
| Lesson 3 To know how websites can be shared via the World Wide Web (WWW) | I can explain the types of media that can be shared on the WWW I can describe where websites are stored when uploaded to the WWW I can describe how to access websites on the WWW |
| Lesson 4 To know how content can be added and accessed on the World Wide Web (WWW) | I can explain what media can be found on websites I can recognise that I can add content to the WWW I can explain that internet services can be used to create content online |
| Lesson 5 To know how the content of the WWW is created by people | I can explain that websites and their content are created by people I can suggest who owns the content on websites I can explain that there are rules to protect |

produce a podcast, ensuring that copyright is considered.

(Creating media)

| Learning Intention | Success Criteria |
|---|---|
| Lesson 1 To know that sound can be recorded | I can identify the input and output devices used to record and play sound I can use a computer to record audio I can explain that the person who records the sound can say who is allowed to use it |
| Lesson 2 To know that audio recordings can be edited | I can re- record my voice to improve my recording I can inspect the soundwave view to know where to trim my recording I can discuss what sounds can be added to a podcast |
| Lesson 3 To know how to recognise the different parts of creating a podcast project | I can explain how sounds can be combined to make a podcast more engaging I can save my project so the different parts remain editable I can plan appropriate content for a podcast |
| Lesson 4 To know how to apply audio editing skills independently | I can record content following my plan I can review the quality of my recordings I can improve my voice recordings |
| Lesson 5 To know how to combine audio to enhance my podcast project | I can open my project to continue working on it I can arrange multiple sounds to create the effect I want I can explain the difference between saving a project and exporting an audio file |
| Lesson 6 To know how to evaluate the effective use of audio | I can listen to an audio recording to identify its strengths I can suggest improvements to an audio recording I can choose appropriate edits to improve my |

| | | I can identify the benefits of computer networks | Lesson 6 To know how to create a program that uses count- controlled loops to produce a given outcome | call a procedure I can design a program that includes count-controlled loops I can make use of my design to write a program I can develop my program by debugging it | | | | | Lesson 6 To know how to evaluate the consequences of unreliable content | I can explain that not everything on the World Wide Web is true I can explain why some information I find online may not be honest, accurate, or legal I can explain why I need to think carefully before I share or reshare content | | |
|--------------|--|---|---|---|---|--------------------------------|-----------|----------------|---|--|--|------------------------------------|
| Willow Y6 | Communic collaboration collaboration collaboration description on transferred information on line. (Computer and netwood Learning Intention Lesson 1 To know the importance of internet addresses Lesson 2 To know how data is transferred across the internet internet. Lesson 3 To know how to know to evaluate different ways of working together online. | and now data is d and n is shared | Webpage Creating webpage considera copyright aesthetic navigatio (Creating Learning Intention Lesson 1 To know how to review an existing website and consider its structure Lesson 2 To know how to plan the features of a web page Lesson 3 To know how to consider the ownership and use of images (copyright) Lesson 4 To know how to consider the ownership and use of images (copyright) | g and s, giving ation to t, s, and | Variable games Exploring variables designing coding a (Program Learning Intention Lesson 1 To know how to define a 'variable' as something that is changeable Lesson 2 To know why a variable is used in a program Lesson 3 To know how to improve a game by using variables | g s when g and | of physic | g, ing, and | Sensing Designing coding a that capt inputs from the physical selection can control the flow to update a variable with a user input Lesson 1 To know how to create a program to run on a controllable device Lesson 2 To know how to explain that selection can control the flow of a program Lesson 3 To know how to update a variable with a user input | project cures om a device. | Introduct spreadsh Answering question spreadsh organise calculated (Data and informat) Learning Intention Learning Intention Lesson 1 To know how to create a data set in a spreadsheet Lesson 2 To know how to build a data set in a spreadsheet Lesson 3 To know how to build a data set in a spreadsheet Lesson 4 To know how to apply formulas can be used to produce calculated data | ng s by using neets to and d data. |
| | | internet enables effective collaboration | | edits. | | can be used by a program | | | | statements I can modify a program to achieve a different outcome | | cells by duplicating it |

| Lesson S To know how we communicate using technology | I can explain the different ways in which people communicate I can identify that there are a variety of ways to communicate over the internet I can choose methods of communication to suit | Lesson 5 To know the outline the need for a navigation path | I can explain what a navigation path is I can describe why navigation paths are useful I can make multiple web pages and link them using hyperlinks I can explain | Lesson 4 To know how to design a project that builds on a given example Lesson 5 To know how to use my design | I can choose the artwork for my project I can create algorithms for my project I can explain my design choices I can create the artwork for my project | Lesson 6 To know how to create my own digital 3D model | I can construct a 3D model based on a design I can explain how my 3D model could be improved I can modify my 3D model to improve it | Lesson 5 To know how to design a project that uses inputs and outputs on a controllable device Lesson 6 To know how to | I can decide what variables to include in a project I can design the algorithm for my project I can design the program flow for my project I can create a program based on my | Lesson 5 To know how to create a spreadsheet to plan an event | I can use a spreadsheet to answer questions I can explain why data should be organised I can apply a formula to calculate the data I need to answer questions |
|--|---|--|---|--|--|---|---|---|---|---|---|
| Lesson 6 To know how to evaluate different methods of online communication | particular purposes I can compare different methods of communicating on the internet I can decide when I should and should not share information online I can explain that communication on the internet may not be private | 6 To know the implications of linking to content owned by other people | the implication of linking to content owned by others I can create hyperlinks to link to other people's work I can evaluate the user experience of a website | Lesson 6 To know how to evaluate my project | I can choose a name that identifies the role of a variable I can test the code that I have written I can identify ways that my game could be improved I can use variables to extend my game I can share my game with others | | | develop a program to use inputs and outputs on a controllable device | design I can test my program against my design I can use a range of approaches to find and fix bugs | Lesson 6 To know how to choose suitable ways to present data | I can produce a chart I can use a chart to show the answer to a question I can suggest when to use a table or chart |



<u>St Bartholomew's Computing - Long Term Plan - Year A</u>

| Year A | Term 1 | Term 2 | Term 3 | Term 4 | Term 5 | Term 6 |
|--------------------|--|---|---|--|---|--|
| Apple Reception | searching for playing game exploring an exploring an exploring and exploring and exploring a Beebook watching a vi listening to meading ebook using the app | ograph with a camera information on the interactive whold typewriter or other ys using a remote contact deo clipusic as on the ipads (sugges writing apps to develop | ternet niteboard r mechanical/electro trol ted apps only) op skills in other area | | | |
| Apple YR/Y1 | Technology around us Recognising technology in school and using it responsibly. (Computer systems and networks) Leaming Intention Lesson 1 To know how to identify technology in the classroom I can explain that helps us I can locate examples of technology in the classroom I can explain how these technology in the classroom I can capplain how these technology in the classroom I can computer I can use a mouse to click and drag Lesson 3 To know how to use a mouse in for know how to use a mo | Grouping data Exploring object labels, then using them to sort and group objects by properties. (Data and information) Learning Intention Learning Success Criteria Lesson 1 I can describe objects using labels I can match objects to groups I can identify the label for a group of objects Lesson 2 I can count objects to a proup of objects can be counted objects in different ways Lesson 3 I can describe an object I can describe objects in different ways Lesson 3 I can describe an object I can describe objects in different ways | Moving a robot Writing short algorithms and programs for floor robots and predicting program outcomes. (Programming A) Leaning Intention Leson 1 To know what a given command will do Lesson 2 To know how to act out a given word Lesson 3 To know how to act out a given comband fo an a device Lean run a command on a device Leson 3 To know how to act out a given instruction Lesson 3 To know how to combine forwards' and backwards' commands forwards' and backwards' commands to make a sequence from the same place | Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally (Creating Media) Learning Intention Leson 1 To know what different freehand tools do Leson 2 To know how to use the shape tool and the line tools to used line tools of to draw a picture Leson 2 To know how to use the shape and line tools to use the shape and line tools of the collection of the line tools of the lin | Capturing and changing digital photographs for different purposes. (Creating Media) Learning Intention Lesson 1 To know how to use a digital device to take a photograph l can explain what I did to capture a digital photograph l can explain what I did to capture a digital photo l can take photograph l can explain what I did to capture a digital photo l can explain what I did to capture a digital photo l can explain what I did to capture a digital photo l can explain whow to make choices when taking a photograph l landscape and portrait format l can explain why a photo looks better in portrait or landscape format | Creating and debugging programs and using logical reasoning to make predictions. (Programming A) Learning Intention Success Criteria To know how to describe a series of instructions as a l can choose a series of words that can be acted out as a sequence I can give clear change the order of instructions when we change the order of instructions algorithm to program a sequence on a floor robot I can show the difference in outcomes between |

| | make objects on a screen I can use a mouse to create a picture Lesson 4 To know how to use a keyboard to type on a computer I can sy what a keyboard is for I can type my name on a computer I can save my work to a file Lesson 5 To know how to use the keyboard to edit text the arrow keys to move the cursor I can delete letters Lesson 6 I can identify To know how to create versor I can delete letters Lesson 6 I can identify rules to keep us safe and healthy when we are using technology responsibly I can give examples of some of these rules I can discuss how we benefit from these | Lesson 4 To know how to count objects with the same properties Lesson 5 To know how to compare groups of objects Lesson 6 To know how to compare groups of objects Lesson 6 To know how to compare groups of objects Lesson 6 To know how to compare groups of objects Lesson 6 To know how to compare groups of objects Lesson 6 To know how to answer questions about groups of objects Lear necord how to group objects are in a group Lesson 6 To know how to objects to answer questions about groups of objects Lear necord how to group objects to answer a question Lear compare groups of objects Lesson 6 To know how to answer questions about groups of objects Lear necord and share what I have found | Lesson 4 To know commands to make sequence involving fromwards' and bow to combine four commands to make sequences involving fromwards' and bow to compare left and right turns to make sequences to move a robbot I can predict the outcome of a sequence involving up to four commands to know how to plan a simple program should do I can choose the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program should do I can least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least open least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence I can debug my program least of the order of commands in a sequence least of the order of commands in a sequence least of the order of commands in a sequence least of the order of commands in a sequence least of th | Lesson 3 To know how to shapes careful choices when choices painting la a picture in the style of an artist Lesson 4 To know how to explain chose the tools I can explain tots I can explain tots appropriate colour the style of an artist Lesson 4 To know how to explain tools i can choose appropriate paint tools and colours to recreate the work of an artist I can say which tools were helpful and why Lesson To know how to the page I can change the colour on the | Lesson 3 To know what is wrong with a good photograph photograph I can discuss how to take a good photograph I can improve a photograph by retaking it Lesson 4 To know that light has on a photograph I can explore the effect that light has on a photo improved I can experiment with different light sources I can explain why a picture may be unclear Lesson 5 To know recognise that images can be change an image I can use a desired effect I can explain my choices Lesson 6 To know recognise that images can be change an image I can use a desired effect I can explain my choices Lesson 6 To know recognise that images capture a photo can be changed of the photography skills to can be changed capture a photo I can recognise | Lesson 3 To know how to use logical reasoning to predict the outcome of a program Lesson 4 To know how to use logical reasoning to predict the outcome of a program Lesson 1 can predict the outcome of to the program outcome Lesson 4 la material for the program outcome Lesson 1 can explain the choices that I made for my mat design projects can have code and artwork design and artwork for the programming projects can have code and artwork for the programming projects can have code and artwork for the programming projects can have code and the programming projects can have code and artwork for the projects can have code and artwork for t |
|---------------|--|--|--|--|---|--|
| Polm | rules | Making | a problem two programs I can use two different programs to get to the same place | painting different a picture ways on a computer and on paper l can spot the model of the computer and on paper l can say whether l prefer painting using a computer or using paper | which photos have been changed I can identify which photos are real and which have been changed | l can create an algorithm to meet my goal I can use my algorithm to create a program Lesson 6 I can test and debug to create and debug a program that I have I can plan written algorithms for different parts of a task I can put together the different parts of my program |
| Palm Y2/Y3 | Twinkl – Using the internet Y2 This unit introduces children to using the Internet safely and with a purpose. Children are shown how to search the Internet using one word; how to make sense of the returned results; how to use "for kids" to return more suitable results; how to follow links and return to the search results. | Making Music/Digital Music Using a computer as a tool to explore rhythms and melodies, before creating a musical composition. (Creating media) Learning Intention Learning Intention Intention Learning Intention I | Twinkl — Preparing for turtle logo Y2 This unit has two main aims, to enable children to create, test and debug algorithms, and preparing children to use the language of Turtle Logo. Learning Intention Learning Intention Learning Intention Learning Intention Learning Intention Learning Intention Learning Intructions Learning Ican write instructions. Learning Ican write instructions. Learning Ican write instructions. Learning Ican write instructions. Learning Ican write Ican write instructions. Learning Ican write I | Twinkl - Internet Research and Communication Y3 This unit focuses on how to effectively search using keywords and how to safely communicate online. Learning Intention Learning Intenti | Twinkl - Online safety Y3 Children are introduced to email and other forms of online communication. They will look at how to write and send emails, as well as how to decide if an email is safe to open. They will build on their existing knowledge of cyberbullying and how to deal with unkind behaviour online. | Stop-frame animation Capturing and editing digital still images to produce a stop- frame animation that tells a story. (Creating Media) Learning intention Learning Media) Learning Success Criteria Learning intention Learning intention Success Criteria Learning intention Learning intention Learning intention Success Criteria Learning intention Learning intention I can create a animation is a sequence of drawings or style graining to the sequence of style animation is a neffective flip book— style animation/flip book works |

| | to search the internet Lean type one word tank to word and know how to stay safe when using the internet. Each type one word and know how to stay safe when using the internet. Some information about the returned results. | | forward a number of steps. I can turn to the right or left. | to explain how searches returned. return results. I can support my explanation with examples. | Lesson 1 I can recognise To know what cyberbullying; cyberbullying is I can identify a and how to sape person to address it. tell if I | To know what an immation will look like animated movement with a sequence of s |
|--------------|---|--|--|--|--|--|
| | I can find child- friendly search engines. I can avoid using any private or personal information online. I can tell an adult if anything on the internet makes me feel uncomfortable. I can type in an to know how to search the internet for I can add drew ords to the total tell and the total tell and tell tell | Lesson 2 To know create a rhat there are pattern patterns in music an instrument following a rhythm pattern explain explain that music is created and played | Lesson 2 Lan give clear To know to give and follow an algorithm to make lan write an algorithm, can check an algorithm, can move butters, lan move to make lan move to move to move lan move to m | Lesson 3 To know how to save learn share a webpages and share them use safely. Learn bookmark or favourite a webpage. I can share a webpage ensuring I can bookmark or favourite average ensuring I can bookmark or favo | cyberbullying. I know that cyberbullying can happen via a range of devices. Lesson 2 I can identify To know how websites use lan identify a dwerts online. to promote to promote products. I can explore how companies | animation Lesson 3 To know down a story into settings, characters animation and events I can describe an animation that is |
| | results suitable for suitable for children and search information safely. Lean recognise some information about the returned results. Lean choose sensible words to search for. Lean explain that I need to tell an adult if something makes me uncomfortable online. | tesson 3 To know how to experiment with sound using a computer computer to experiment with sound using a computer to experiment with pitch I can relate an idea to a piece of | Lesson I can give clear accurate To know instructions. To know to give and instructions in follow an instructions in follow an instructions in roder. algorithm commands right 90 and left can turn right 90. 90 and left 90. | Lesson 4 To know how to identify the ways and investigate how we communicate online. | Lesson 3 To know how to create password. strong passwords and understand privacy inportant. settings. I can create a strong password is privacy important. settings. I can explain what privacy | achievable on screen I can create a storyboard Lesson 4 I can use To know the onion skinning to work help me make consistently and between farmes I can review a I can review a |
| | Lesson 3 To know how to follow links to another webpage. Lean click once to follow a link links to previous page or a link will take me before I click on it. Lean tell an adult if something online makes me feel uncomfortable. | Lesson 4 To know how to use a computer is a sequence muscal paterm Lean explain how my music can be played in different ways Lean refine | Lesson 4 To know accurate how to give, istructions. I can give follow and istructions in complete an lcan write an algorithm. Lcan write an algorithm. Lcan check an algorithm. Lcan give and follow instructions accurately | Lesson 5 To know how will be able to read my communication. Iknow what to do communicating online. Lesson 5 It can explain who will be able to read my communication. Iknow what to do when I receive a communication that makes me feel uncomfortable. | Lesson 4 I can discuss To know how to safely send and receive emails. I can identify an email that I should not open. I can write an email with an address and | sequence of frames to check my work can evaluate the quality of my animation Lesson 5 I can explain ways to make my animation treview and improve an animation can evaluate another can evaluate can evalua |
| | Lesson 4 To know how to create content for an online blig and use a camera to take safe photos to use online. Lean clock ance to follow a link, tcan go back to the previous page or a camera to take safe photos to use online. Lean tolook at where a link will take me before I click on it. can tell an adult if something online makes me feel uncomfortable. | my musical pattern on a computer a computer I can create a rhow to create a rhythm discontinuous control of the computer an an animal Five chosen I can create my animal's rhythm on a computer I computer I can a | Lean move forward and turn right 90 and left 90. Lesson 5 Loan give clear To know accurate instructions. Loan give language instructions in order. Loan write an algorithm. Loan check an algorithm. | Lesson 6 To know why I must be kind and encouraging in my online. I can explain why I must be kind and encouraging in my online. I recognise my online activity leaves a digital footprint. | subject. I know how to safely send an email. I know how to safely receive an email. Lesson 5 I can identify online to explore communities I am a part of, children can lan identify different forms online. | animation I can improve my animation based on feedback Lesson 6 To know other meda to my evaluate the impact of adding other media to an to my animation I can explain why I added other media to an to my animation I can explain I can e |
| | Lasson 5 To know how to create content for an online blog and use it safely and respectfully. Lean upfoad a picture to an online blog, ta safely and tan post text to a blog, Lan use first names only and keep my personal details private. Lean make sure I | I can add a sequence of notes to my rhythm Lesson 6 To know review my how to work redie our explain computer work l can listen to music and | Lean use command abbreviations fd, rt, lt from Turtle Logo. Lesson 6 To know accurate instructions. Lean give lear least and debug an order. algorithm. | | communication. I can discuss the positive and negative aspects of online communities. I can discuss the differences between communication in real life and online. | my final film |
| | upload photos that are safe to use and that I have permission for. I can make sure I only use my own words and pictures online. Lesson 6 To know how to post computer. I can upload a | describe how it makes me feel | Lan check an algorithm. Lan move forward and turn right 90 and left 90. Lan use the command abbreviations (d, rt, it from Turtle Logo. | | Lesson 6 To know about and the value online safety to plan a party online. Learn tabout communicate my ideas with a group clearly and listen to others' contributions. L'an use what I know about online safety to online is the value online safety to online safe | |
| | comments picture to an online blog. I can post text to a blog. I can use first names only and keep my personal details private. I can make sure I upload photos that are safe to use and that I have permission for. I can make sure I only use my own words and pictures online. | | | | plan a party using online methods. | |
| Oak Y4/Y5 | Systems and Searching | Flat-file databases | Repetition in games | Video production | Photo editing | Selection in quizzes |
| 17,13 | In this unit, learners will develop their understanding of computer systems and how informatio is transferred between systems and devices. Learners will consider small-scale | Using a database to order data and create charts to answer questions. (Data and information) | Using a block-based programming language to explore count-controlled and infinite loops when creating a game. | Planning, capturing, and editing video to produce a short film. (Creating media) | Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled. (Creating Media) | Exploring selection in programming to design and code an interactive quiz. (Programming B) |

| systems as well as | Lesson 1 To know | I can create a database | (Progran | nming B) | Lesson 1 To know what | I can explain that | Learning Intention | Success Criteria | Learning Intention | Success Criteria | |
|---|----------------------------------|--|--|---|--|--|---|---|---------------------------------------|------------------------------------|--|
| large-scale systems. | how to use a form to | using cards I can explain | | | makes a video effective | video is a visual | | | | | |
| They will explain the | record information | how information | Learning Intention | Success Criteria | | media format | Lesson 1 | Ican | Lesson 1 | I can recall | |
| input, output, and | | can be recorded I can order, | | | | I can identify features of | To know that the | improve an image by | To know how | how | |
| process aspects of a | | sort, and group my | Lesson 1 | I can list an | | videos I can | composition of digital images can | rotating it I can explain why I might | selection is used in | are used in | |
| variety of different | 1,,,,,,,,,, | data cards | To know how to develop | everyday task as a set | | compare features in | be changed | crop an image | computer programs | selection I can | |
| real-world systems. | Lesson 2 To know how to | I can explain what a field and a record | the use of count-controlled | of instructions | | different videos | | I can use photo | | identify conditions in a | |
| Learners will also | compare paper and | is in a database | loops in a different | including repetition I can predict | Lesson 2 To know how to use a digital | I can identify and find | | editing software to crop an | | program I can | |
| take part in a | computer- based databases | I can navigate a flat-file database to | programming environment | the outcome of a snippet | device to record video | features on a digital | Lesson 2 | image I can explain | | modify a condition in a | |
| collaborative online | uatabases | compare different | | of code I can modify a snippet of | | video recording device | To know that colours | that different | Lesson 2 | program I can use | |
| | | views of information | | code to create a | | I can experiment | can be changed in | colour effects | To know that a | selection in an | |
| project with other | | I can choose which field to sort data by | | given outcome | | with different | digital images | make you think and feel | conditional statement | infinite loop to check a | |
| class members and | | to answer a given | Lesson 2 To know that | I can modify loops to | | camera angles I can make | | different things | connects a condition to an | condition | |
| develop their skills in | Lesson 3 | question I can explain | programming there are | produce a given outcome | | use of a microphone | | I can experiment with | outcome | identify the | |
| working together | To know how you can answer | that data can be grouped using chosen | infinite loops and count- | I can choose when to use | Lesson 3 To know how | l can suggest | | different colour | | condition and outcomes | |
| online. | questions by grouping | values I can group | controlled loops | a count- controlled and an | to capture video using a range of | filming techniques for a given | | effects I can explain why I chose | | in an 'if then | |
| | and sorting data | information using a | | infinite loop I can | techniques | purpose I can | | certain colour | | else' statement I can | |
| (Computer systems | | database I can combine grouping and | | recognise that some programming | | capture video using a range of | Lesson 3 | effects I can add to | | create a | |
| and networks) | | sorting to answer | | languages enable more | | filming techniques | To know how cloning can be used | the composition of an image | | that uses selection | |
| | | specific questions | | than one process to be | | l can review how | in photo editing | by cloning I can | | to produce different | |
| | Lesson 4 To know that tools | I can choose which field and value are | Lesson 3 | run at once I can choose | | effective my video is | | identify how a photo edit | Lesson 3 | outcomes | |
| | can be used to select | required to answer a | To know how to develop a design that | which action will be repeated for | Lesson 4 To know how to create a | I can outline the scenes of | | can be improved I can | To know how | explain that | |
| Learning Success Criteria Intention | specific data | given question I can outline | includes two or more | each object I can explain | storyboard | my video I can decide | | remove parts of an | selection directs the flow of a | program flow can branch | |
| | | how 'AND' and 'OR' can | loops which run at the same time | what the outcome of the repeated | | which filming techniques | | image using cloning | program | according to a | |
| Lesson 1 I can explain that | | be used to refine data | June une | action should be | | I will use I can create | Lesson 4 To know that images | I can experiment with tools to | | condition I can | |
| To know systems are built using a number of explain parts | | selection I can choose multiple | | I can evaluate the | | and save video content | can be combined | select and copy part of | | design the flow of a program | |
| that computers | | criteria to answer a | | effectiveness of the repeated | | content | | an image I can use a | | that contains | |
| can be connected together | | given question | | sequences used in my | Lesson 5 To know that a | I can store, retrieve, | | range of tools to copy | | 'if then else' I can show | |
| to form and output of a digital system | Lesson 5 To know that | I can select an appropriate chart to | Lesson 4 | I can identify | video can be improved through | and export my recording | | between images | | that a condition | |
| I can explain that | computer programs | visually compare data | To know how to modify an infinite loop | which parts of a loop can be changed | troubleshooting and editing | to a computer | | I can explain why photos might be | | can direct program flow in | |
| computer systems communicate | to compare data | I can refine a chart by selecting a | in a given program | I can explain the effect of | | l can explain how to improve | Lesson 5 | edited I can | | one of two ways | |
| with other devices | visually | particular filter | | my changes I can re-use existing code | | a video by reshooting | To know how to | describe the image I | Lesson 4 | I can outline a | |
| | | I can explain the benefits | | snippets on new sprites | | and editing I can select the correct | combine images for a purpose | want to create | To know how to | given task I can use a | |
| Lesson 2 I can identify To know tasks that are | | of using a computer to create charts | | | | tools to make edits | purpose | suitable images for | design a program that uses | design format to outline my | |
| how to managed by recognise computer systems the role of | Lesson 6 | I can ask questions | Lesson 5 | l can | Lesson 6 | to my video I can make | | my project I can create | selection | project I can | |
| computer systems in Lean identify the | To know how to use | that will need more than | To know how to design a project that | evaluate the use of repetition in | To know the impact of | edits to my video and | | a project that is a combination | | identify the outcome | |
| human elements of a computer | a real- world database to | one field to answer I can refine a | includes repetition | a project I can select | choices made when making and sharing a | improve the final outcome | | of other images | | of user input in an | |
| system | answer questions | search in a real-world | | key parts of a given project | video | I can recognise | Lesson 6 To know | I can review images | Lesson 5 | algorithm I can | |
| I can explain the benefits of a given | | context I can present my findings to | | to use in my own design I can develop | | that my choices when | evaluate how | against a given criteria | To know how to create a | implement my algorithm | |
| computer system | | a group | | my own design | | making a video will | changes can improve an | I can use feedback to | program that uses | to create the first | |
| Lesson 3 I can make use of | | | | explaining what my project will | | impact the quality of the final | image | guide making changes | selection | section of my program | |
| To know a web search to how to find specific | | | Lesson 6 | do I can refine | | outcome I can | | l can combine | | I can test my | |
| use a information search engine | | | To know how to create a | the algorithm in | | evaluate my video and share | | text and my image to complete | | program I can share | |
| I can refine my web search | | | project that includes repetition | my design I can build a program that | | my opinions | | the project | | my program with | |
| Web statell | | | | follows my design | | | | | Lesson 6 | others I can | |
| I can compare results from | | | | I can evaluate the steps I | | | | | To know how to | identify ways the | |
| different search engines | | | | followed when | | | | | evaluate my program | program could be improved | |
| | | | | building my project | | | | | | I can identify | |
| Lesson 4 I can explain why To know we need tools to | | | | | | | | | | the setup code I need in | |
| how to find things online describe how | | | | | | | | | | my program | |
| search l can recognise engines the role of web | | | | | | | | | | I can extend my | |
| results crawlers in creating an index | | | | | | | | | | program further | |
| | | | | | | | | | | | |
| I can relate a search term to the search | | | | | | | | | | | |
| engine's index | | | | | | | | | | | |
| Lesson 5 I can order a list | | | | | | | | | | | |
| To know by rank how | | | | | | | | | | | |
| results are I can explain that | | | | | | | | | | | |
| a search engine follows rules to | | | | | | | | | | | |
| rank results | | | | | | | | | | | |
| I can give examples of | | | | | | | | | | | |
| criteria used by search engines to | | | | | | | | | | | |
| rank results | <u> </u> | | | | <u> </u> | | | | | | |

| | Lesson 6 To know why the order of results is important, and to whom I can recognise some of the limitations of search engines I can explain how search engines make money | | | | | | |
|--|---|--|---|--|--|---|--|
| Willow Y6 Communication and collaboration Identifying and exploring how data is transferred and information is shared online. (Computer systems and networks) | | is Designing and creating webpages, giving consideration to copyright, | Variables in games Exploring variables when designing and coding a game. (Programming A) | 3D modelling Planning, developing, and evaluating 3D computer models of physical objects. (Creating media) | Designing and coding a project that captures inputs from a physical device. (Programming B) | Introduction to spreadsheets Answering questions by using spreadsheets to organise and calculate data. (Data and | |
| | Learning Intention Criteria Lesson 1 1 Can recognis that data is transferred addresses I can describe how computers us addresses to access websites Lesson 2 To know how data is transferred across the internet internet transferred across the internet internet in packets Lesson 3 To know how | Lesron 1 To know how to land consider its structure Lesson 2 To know how to plan the features of a web page I can sused land consider its structure Lesson 2 To know how to plan the features of a web page I can sused recognise the common features of a web page I can suggest media to include on my page I can draw a web page I can draw a web page I can suggest media to include on my page I can draw a web page I can suggest media to include on my page I can suggest media to include on my page I can suggest suits my purpose Lesson 3 I can say why To know I should use | Learning Intention Lesson 1 To know identify examples of information that is something that is changeable Changeable Lesson 2 To know identify examples of information that is changeable changes can be defined I can identify that variables can hold numbers or letters Lesson 2 To know why a variable is used in a program placeholder in memory for a single value I can explain that the variable as a program placeholder in memory for a single value I can explain that | Lesson 1 To know shapes to a project can work learn with three dimensions on a different perspectives learn work and the different perspectives learn work and different perspecti | Intention Lesson 1 To know how to create a program to run on a controllable device Lesson To know how to controllable device Lesson To know how to conditions in the flow of a program a program to a controllable device Lesson Lean identify examples of conditions in the real vorid Lean use a variable in an lean determine the flow of a program using selection Lesson 3 Lean use a | Information) Learning Intention Criteria Lesson 1 I can collect data data explain what an appropriate format for a cell Lesson 3 To know how to explain that formulas by seed in a spreadsheet Lesson 2 I can enter data into a spreadsheet Lesson 2 I can explain what an item of data is spreadsheet Lesson 3 I can appropriate format for a cell I can apply an appropriate format to a cell Lesson 3 To know how to explain that formulas by seed in lesson 3 to know to explain that formulas by seed in lesson 3 to know to explain that formulas by seed in lesson 3 to know to explain that the seed in lesson 3 to know to explain that the seed in lesson 3 to know to explain that the seed in lesson 3 to know to explain that the seed in lesson 3 to know to explain that the seed in lesson 3 to know to explain that the seed in lesson 3 to know to explain that the seed in lesson 3 to know to explain that the seed in lesson 3 to know to be seed | |
| | To know how sharing information online can help people to work together in different way I can explain that the internet allow different may to evaluate different ways of working together online together online learn be public or private I can explain to the shared to be will be a compared to the | term ffair use' Lesson 4 To know how to my own web recognise the need to preview preview page the need to preview page jage looks | a variable has a name and a value I can recognise that the value of a variable can be changed Lesson I can decide where in a program to change a game by using variables variable I can make use of an event in a program to set a variable I can recognise | model for a given purpose placeholders can create holes in 3D objects I can combine a number of 3D objects Lesson 5 To know to I can choose plan my own 3D use in a 3D model I can combine objects in a design | To know condition to how to change a variable I can with a user input with different physical inputs I can explain that checking a variable doesn't change its value Lesson 4 I can use an operand (e.g. how to use a moorditional statement I can explain the compare a variable importance importance in mortance in the mo | formulas can be used in calculations I can be used to produce calculated data data I can identify that changing inputs changes outputs Lesson I can 4 calculate data using thow to different apply formulas to data Formulas to data I can create a formula which includes a range of cells I can apply I can apply | |
| | how the internet enables effective collaboration Lesson 5 To know how we communicate using technology that there are a variety of ways to communicate over the internet I can choose methods of communicati to suit | suggest/make edits. Lesson 5 To know the outline the need for a navigation path path l can describe why navigation paths are useful l can make multiple web pages and link them using hyperlinks | that the value of a variable can be used by a program Lesson 4 To know choose the artwork for design a project a l can create that builds on a given example Example choices that the value of a variable can be used by a program I can choose the artwork for my project algorithms for my project can explain my design choices | how to create my own digital 3D model 3D model 1 can explain how my 3D model can modify my 3D model to improve it | controllable co | rearrings a formula to multiple cells by duplicating it Lesson 5 To know spreadsheet to answer questions 1 can spreadsheet to plan an explain why data should be organised 1 can apply a formula to calculate the data 1 need to answer questions | |

| Lesson 6 | particular purposes | Lesson 6 To know the implications of linking to content owned by other people | I can explain the implication of linking to content owned by others I can create hyperlinks to link to other people's work I can evaluate the user | Lesson 5 To know how to use my design to create a project | I can create the artwork for my project I can choose a name that identifies the role of a variable I can test the code that I have | | Lesson 6 To know how to develop a program to use inputs and outputs on a controllable device | I can create a program based on my design I can test my program against my design I can use a range of approaches to find and fix bugs | Lesson 6 To know how to choose suitable ways to present data | I can produce a chart I can use a chart to show the answer to a question I can suggest when to use a table or chart |
|--|---|---|--|--|--|--|--|--|--|---|
| To know how to evaluate different methods of online communication | methods of communicating on the internet I can decide when I should and should not share information online I can explain that communication on the internet may not be private | | experience of a website | Lesson 6 To know how to evaluate my project | written I can identify ways that my game could be improved I can use variables to extend my game I can share my game with others | | | | | |