

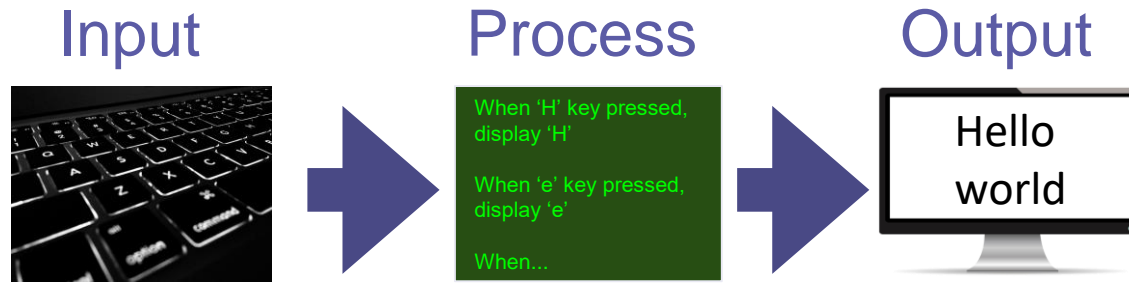


Computing Systems and Networks – Connecting Computers

YEAR 3
Term 1

Knowledge Building Blocks:

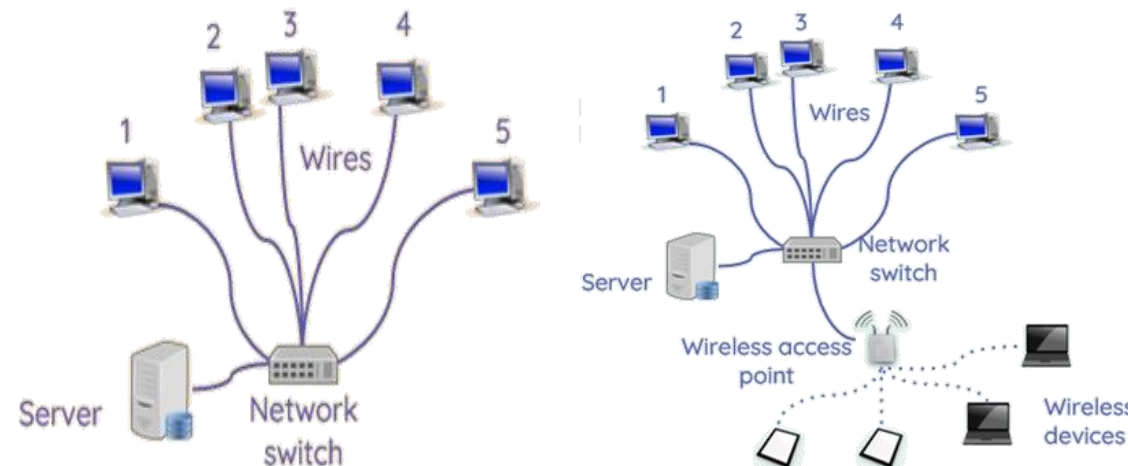
- To describe what an input is.
- To explain that a process acts on the inputs.
- To identify input and output devices.
- To explain that an output is produced by the process.
- To explain that a computer system accepts an input and processes it to produce an output.
- To explain how computer systems can change the way that we work.
- To identify how changing the process can affect the output.
- To recognise that a digital device is made up of several parts.
- To recognise that computers can be connected to each other.
- To identify how devices in a network are connected with one another.
- To recognise that a network is made up of a number of components.
- To explain how a computer network can be used to share information.
- To explain the role of a switch, server, and wireless access point in a network.
- To explain how information is passed through multiple connections.
- To identify the benefits of computer networks.
- To identify network devices around me.
- To explain how networks can be connected to other networks.



Digital Devices:



Networks:



Key Vocabulary:

- input
- process
- output
- device
- computer system
- digital device
- network
- components
- switch
- server
- wireless access
- connections
- infrastructure



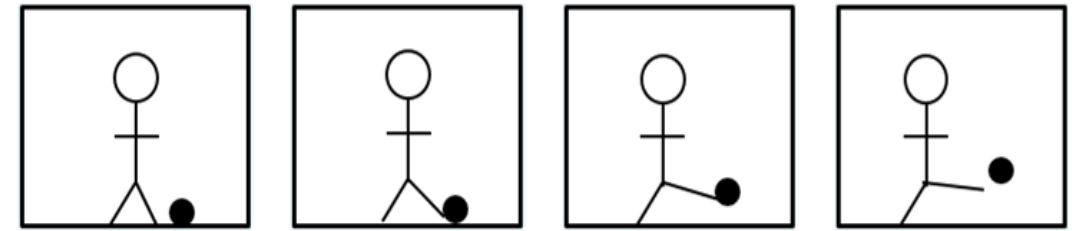
Creating Media – Animation

**YEAR 3
Term 2**

Knowledge Building Blocks:

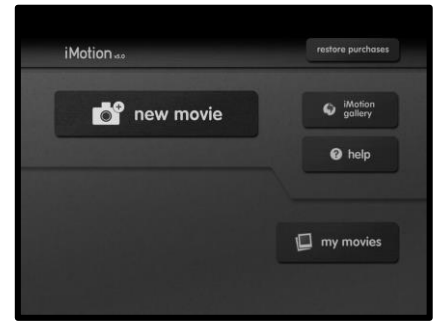
- To explain that an animation is made up of a sequence of images.
- To identify that a capturing device needs to be in a fixed position.
- To set up the work area with an awareness of what will be captured.
- To plan an animation using a storyboard.
- To capture an image.
- To use the onion skinning tool to review subject position.
- To move a subject between captures.
- To recognise that smaller movements create smoother animation.
- To explain the need for consistency in working.
- To review a captured sequence of frames as an animation.
- To remove frames to improve an animation.
- To explain the impact of adding other media to an animation.
- To add media to enhance an animation.
- To review a completed project.
- To explain that a project must be exported so it can be shared.

Stop-Frame Animation:

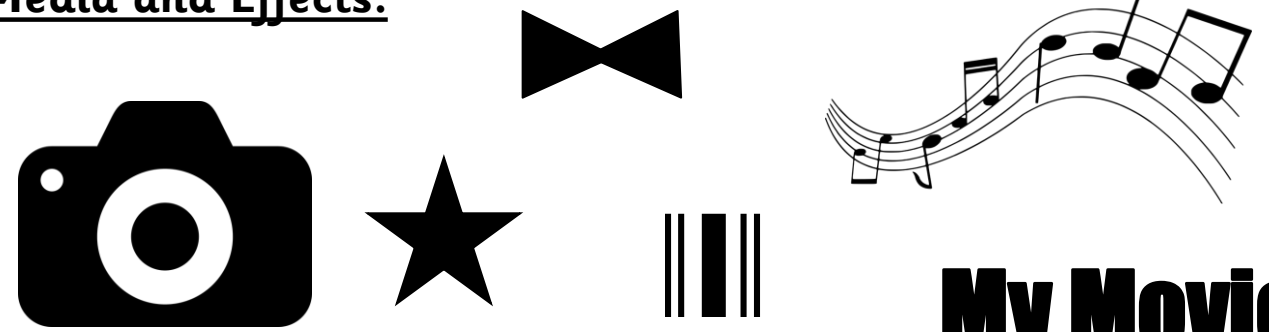


Application:

iMotion



Media and Effects:



My Movie

Key Vocabulary:

- animation
- sequence
- images
- capturing device
- storyboard
- capture
- onion skinning tool
- subject position
- frames
- media
- exported
- shared
- stop-frame animation
- evaluate



Creating Media – Desktop Publishing

**YEAR 3
Term 3**

Knowledge Building Blocks:

- To recognise how text and images can be used together to convey information.
- To define landscape and portrait as two different page orientations.
- To show that page orientation can be changed.
- To consider how different layouts can suit different purposes.
- To recognise that DTP pages can be structured with placeholders.
- To add text to a placeholder.
- To edit text in a placeholder.
- To organise text and image placeholders in a page layout.
- To add and remove images to and from placeholders.
- To move, resize and rotate images.
- To recognise how different font styles and effects are used for particular purposes.
- To choose fonts and apply effects to text.
- To review a document.
- To consider the benefits of using a DTP application.

Image



Text

UNDER
CONSTRUCTION!

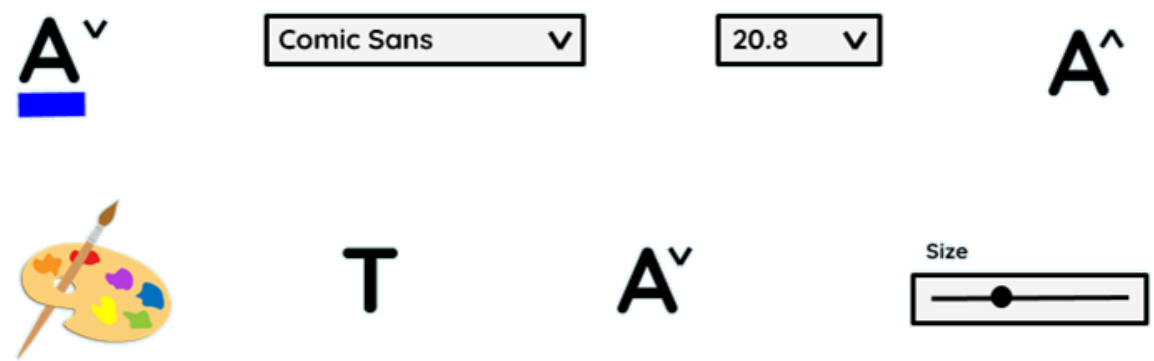
Text and images



Desktop Publishing:



Desktop Publishing Tools:



Key Vocabulary:

- landscape
- portrait
- page orientation
- layouts
- placeholders
- add/remove/edit
- more/resize/rotate
- font
- document
- DTP
- text
- images
- desktop publishing
- return
- backspace
- shift
- keys
- templates
- copy
- paste
- applications



Data and Information – Branching Databases

**YEAR 3
Term 4**

Key Vocabulary:

- attributes
- grouping
- data
- branching database
- identification
- tool
- applications
- identify
- compare
- tree structure
- ordering
- objects
- images
- compare
- physical representation
- test
- applications

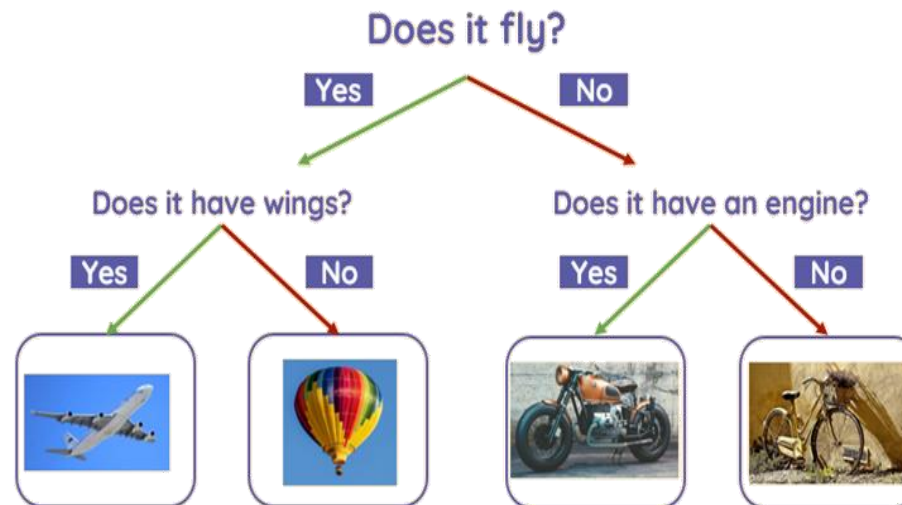
Knowledge Building Blocks:

- To investigate questions with yes/no answers.
- To identify attributes that you can ask yes/no questions about.
- To create questions with yes/no answers.
- To select an attribute to separate objects into two similarly sized groups.
- To choose questions that will divide objects into evenly sized subgroups.
- To repeatedly create subgroups of objects.
- To recognise that a data set can be structured using yes/no questions.
- To explain that a branching database is an identification tool.
- To identify an object using a branching database.
- To retrieve information from different levels of the branching database.
- To explain that a well-structured branching database will enable you to identify objects using fewer questions.
- To relate two levels of a branching database using AND.
- To suggest real-world applications for branching databases.

Grouping Objects:



Branching Database:





Programming A – Sequence in Music

YEAR 3
Term 5

Key Vocabulary:

- programme
- input
- sequence
- commands
- combine
- process
- order
- output
- outcome
- comparing
- movement
- sprite
- design
- implement
- code
- motion
- blocks
- sounds
- costumes
- backdrops
- stage
- instrument
- Scratch

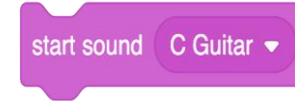
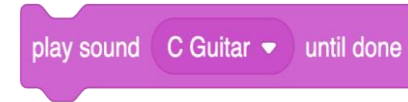
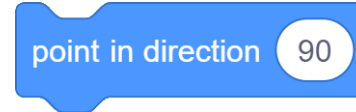
Knowledge Building Blocks:

- To explain that programmes start because of an input.
- To explain what a sequence is.
- To identify that a programme includes sequences of commands.
- To build a sequence of commands.
- To combine commands in a programme.
- To identify that the sequence of a programme is a process.
- To order commands in a programme.
- To explain that the order of commands can affect a programme's output.
- To identify that different sequences can achieve the same output.
- To identify that different sequences can achieve different outputs.
- To create a sequence of commands to produce a given outcome.

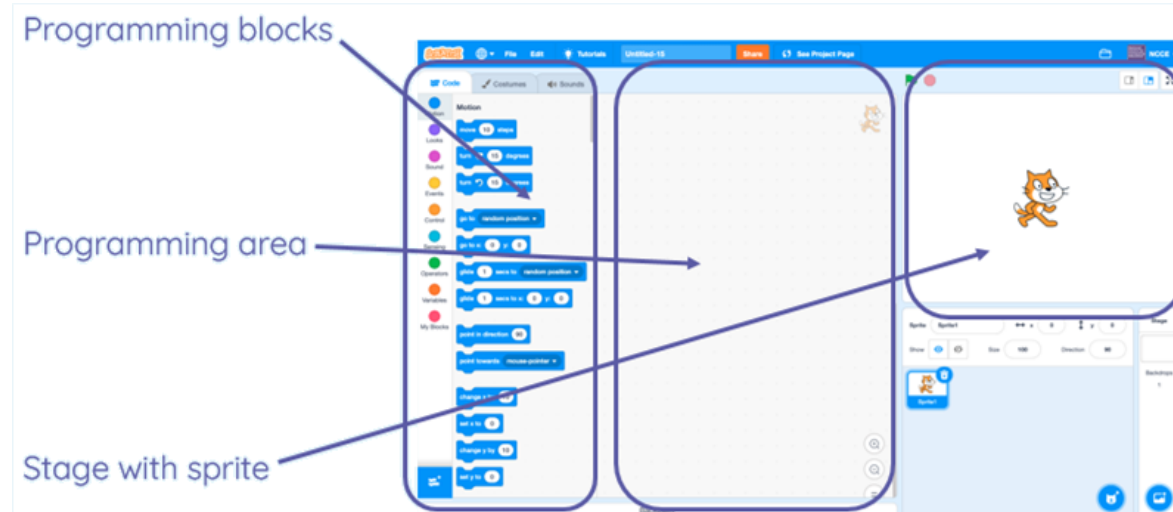
Application:



Commands and Sounds:



Layout:





Programming B – Events and Actions

YEAR 3
Term 6

Key Vocabulary:

programmes
input/output
sequence
commands
process
outcome
characters
events
sprites
up/down
left/right
background
code
duplicating
modifying
direction
navigate
blocks
pen extension
movement
functions
debugging
template

Knowledge Building Blocks:

- To explain that programmes start because of an input.
- To explain what a sequence is.
- To identify that a programme includes sequences of commands.
- To build a sequence of commands.
- To combine commands in a programme.
- To identify that the sequence of a programme is a process.
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- To identify that different sequences can achieve different outputs.
- To create a sequence of commands to produce a given outcome.

Application:



Tools:

