**KNOWLEDGE ORGANISER**
BIG IDEA: Computer Science
TOPIC: Programming using Scratch and Flowo
I

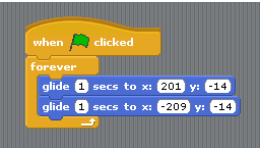| Key Word	Definition
Variable	A 'storage box' used in programming to record data
Sprite	A programmable object in Scratch
Script	A block of programming code in Scratch
Broadcast	A script used to activate other scripts during a project without needing a user prompt
Stage	The playable area / the screen
Background	The image which is like the wallpaper of the stage
Annotation	Labelling the features of your game / level
Success Criteria	What your game needs to have for it to be a success
Objectives	The aim / purpose of the game (or level)
Flowcharts	Graphical and verbal illustrations of algorithms. Useful in describing any step-by-step procedure and making it easier to create programming code
Pseudo code	Flow chart in a text form. More like a computer program, but with human language therefore it can be easily translated into computer languages.
Algorithms	Sequence of step-by-step instructions that will produce a solution to a problem – for this term we will not be playing around with Algorithm exercises

Understand the history of computer games
- First computer game was called "Spacewar" and was released in 1971
- Core computer games – in-depth expensive games e.g COD
- Casual computer games – Simple/Basic e.g Tetris and Space invaders
- Serious computer games – Complex game, like real life e.g Flight simulator
- Educational computer games – aimed at educating the user e.g Typing
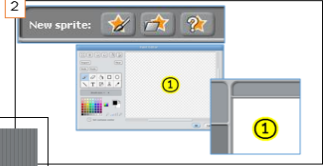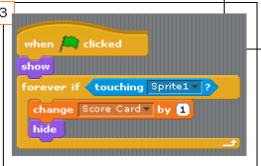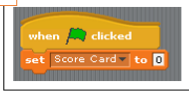
Programming a scoring item

Understand how to make a scratch Character move using the direction keys on the keyboard
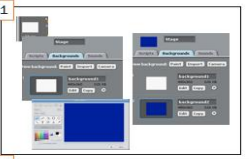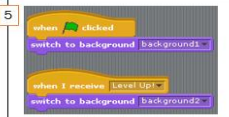
Understand how to make a sprite move automatically

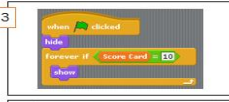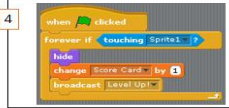## Programming levels

Be able to identify flowchart symbols
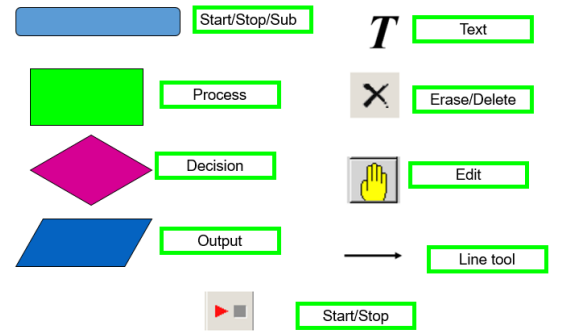

Start/Stop/Sub	Text
Process	Erase/Delete
Decision	Edit
Output	Line tool
	Start/Stop

Understand a basic flowchart

- Start
- Check Room Temperature
- Is temperature > 22 Degrees
- If true then turn heater off
- If not true turn heater on
- Repeat