

# **Computing Intention Map**

**Lower Key Stage Two**



**Placing learning at the heart of everything we do.**



## Lower KS2 Intention Map 2021 - 2022



### Learning Intentions

1. Use digital technology in different ways in the classroom, home and community.
2. Combine a range of images for given purposes.
3. Use familiar computer hardware to successfully complete a task.
4. Use a range of different software to successfully complete a project.



### Term One

### Knowledge Intentions

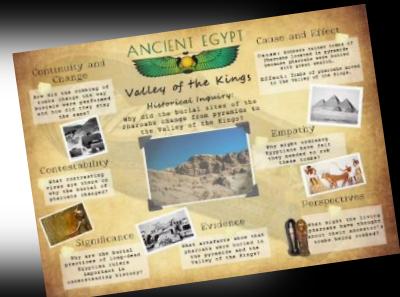
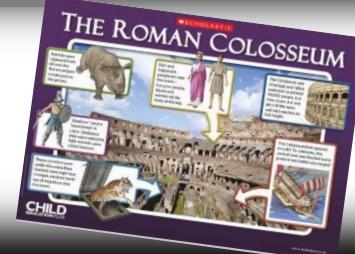
1. Text, images, animation, audio and video clips can be combined using tools within a piece of software or by using a range of software. For example, an image could be inserted into a word processing document or a video could be inserted into a presentation.
2. Digital technology can be used for a range of purposes in different settings, such as using a tablet in the classroom to access educational material, in the home to access entertainment and in the community to share local news.

End products: Create a poster which is laid out effectively using shapes and lines, group objects, use text and images.

### The IT Suite



**Software: Microsoft Word,  
Microsoft Paint**  
**Hardware: Laptops**





## Learning Intentions

1. Manipulate a range of text, images, sound or video clips and animation for given purposes.
2. Use a range of different software to successfully complete a project. and audio and video clips for given purposes.
3. Use familiar computer hardware to successfully complete a task.
4. Describe simple rules for sharing images and data safely.



## Term Two

1. Text, images, animation, audio and video clips can be combined using tools within a piece of software or by using a range of software. For example, an image could be inserted into a word processing document or a video could be inserted into a presentation.
2. Several pieces of software can be used together to complete one task, such as adding a video to a word processed document.
3. Advantages of communicating electronically are that it is available at any time, instant and global. Disadvantages include easier misunderstandings, lack of privacy (once something is published online, it cannot be removed) and a threat to personal safety (access to personal information). Concerns should be reported to a trusted adult.

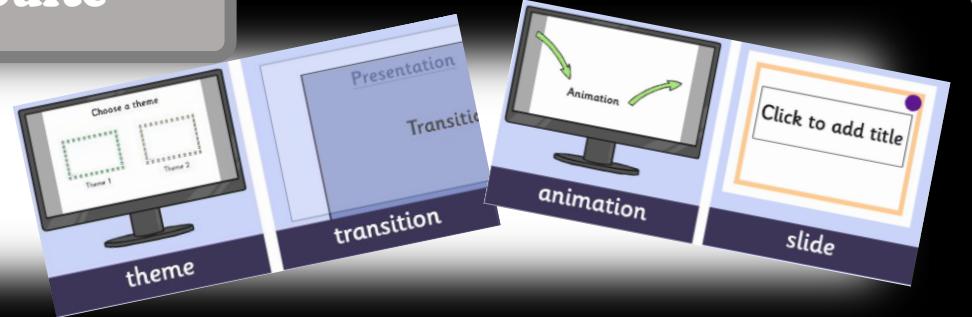
## Knowledge Intentions

End products: Create a 'branching' story (where there are multiple storyline options)



## The IT Suite

**Software: Microsoft PowerPoint,  
Hardware: Laptops, Microphones**





## Learning Intentions

1. Compose clear and appropriate messages in online communities.
2. Use appropriate tools (software, websites and apps) to collaborate and communicate safely online.
3. Use digital technology in different ways in the classroom, home and community.



## Term Three

## Knowledge Intentions

1. Software is the programs that are used by a computer, such as word processing software, presentation software or image editing software. It can be used to create and combine digital content for different audiences and purposes.
2. Digital technology is used in all parts of everyday life, such as on a tablet to play a game or using a microwave to heat food. Some of this digital technology can be used to connect with others locally, such as sharing digital work in the classroom, or globally, such as using Skype on a computer to speak to a friend overseas.
3. Technology is used in many ways to do different jobs, such as using an interactive whiteboard in the classroom, using a tablet to do online shopping at home or using scanners in a shop in the community.
4. Private information includes name, address, date of birth or school and this information should not be shared online. Any concerns or worries should be reported to a trusted adult.
5. Software available online, such as email, social media platforms or blogs, can be made by individuals to communicate their ideas.

End products: Use online Safety skills gained to plan a party online (communicate safely, recognise adverts, message safely).

## The IT Suite



**Software: Internet Explorer or Google Chrome**  
**Hardware: Laptops or tablets**





## Learning Intentions



1. Identify and use repetitions or loops in a program sequence
2. Predict outcomes and notice and correct any mistakes.
3. Plan and enter a sequence of instructions using a robot or other device to achieve specific outcomes.
4. Use a range of different software to successfully complete a project.
5. Use familiar computer hardware to successfully complete a task.

## Term Four

## Knowledge Intentions

1. Repetitions or loops can be used in programming where a computer will continue to run part of a program a number of times or until a condition is met, using the term 'repeat... until'. The given feedback can be used to identify and correct any mistakes in the program.
2. Sequencing instructions is the step-by-step process that robots or other devices follow to achieve specific outcomes. This can be a single algorithm or series of algorithms called a program.

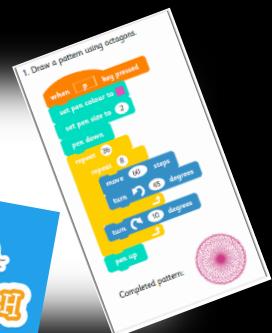
End product: Create and de-bug algorithms to draw patterns



## The IT Suite

**Software: Turtle Logo and Scratch**  
**Hardware: Laptops or tablets**

## Turtle Academy





## Learning Intentions



1. Manipulate a range of text, images, sound or video clips and animation for given purposes.
2. Use new and unfamiliar computing hardware.
3. Apply computing skills to use new computing software.
4. Use digital technology in different ways in the classroom, home and community to achieve a set goal.

## Term Five

## Knowledge Intentions

1. Manipulating a range of text, images, sound or video clips and animation may include changing their style, size, colour, effect, shape, location or format.
2. Interacting regularly with hardware enables users to recognise common features and become confident in working with new or unfamiliar hardware.
3. New computing software commonly has features that should be familiar to users, such as icons or terminology.

End products: Create a stop motion animation

## The IT Suite



**Hardware: Laptops or iPads,  
Software: Apps - iMotion, stopmotion and Pivot Animator**





## Learning Intentions

1. Manipulate a range of text, images, sound or video clips and animation for given purposes.
2. Use digital technology in different ways in the classroom, home and community to achieve a set goal.
3. Use a range of different software to successfully complete a project.
4. Use familiar computer hardware to successfully complete a task.



## Term Six

## Knowledge Intentions

1. Use digital technology in different ways in the classroom, home and community to achieve a set goal.
2. Digital technology can be used in different ways and settings to achieve a set goal, such as using data collection in the community and home to answer a classroom-based question.
3. Several pieces of software can be used together to complete one task, such as adding a video to a word processed document.

*End product: Create an e-voucher including a hyperlink*

## The IT Suite



**Hardware: Laptops**  
**Software: Word, Chrome/Internet explorer**





## LKS2 Intention Map 2022 - 2023



### Learning Intentions

1. Explain that the World Wide Web contains lots of web pages about different subjects that can be searched. Use appropriate tools (software, websites and apps) to collaborate and communicate safely online. Use digital technology in different ways in the classroom, home and community.
2. Explain that the World Wide Web contains lots of web pages about different subjects that can be searched. Use digital technology in different ways in the classroom, home and community.
3. Explain the advantages and disadvantages of communicating electronically and strategies for preventing issues.



### Term One

1. The World Wide Web is a collection of web pages that are run via the internet. The information requested can be displayed as text, images or videos.
2. Advantages of communicating electronically are that it is available at any time, instant and global. Disadvantages include easier misunderstandings, lack of privacy (once something is published online, it cannot be removed) and a threat to personal safety (access to personal information). Concerns should be reported to a trusted adult.
3. Images and data should not be shared online without the permission of the owner. Personal information, such as full name, age, school and address, should not be shared online.
4. Online communication should be done respectfully and responsibly, considering the impact on others.

*End Product: Evidence of the children recording their digital footprint (the resources they use online) and how this knowledge will affect their behaviour online*

### The IT Suite



**Hardware: Laptops, tablets  
Software: Word, Chrome/Internet Explorer/Excel**





## Learning Intentions

1. *Describe and demonstrate a simple program that contains a looping element and how part of a program may need repetition.*
2. *Use sensors to 'trigger' an action, such as sound or movement.*
3. *Use new and unfamiliar computing hardware. Apply computing skills to use new computing software.*
4. *Predict outcomes and notice and correct any mistakes.*



## Term Two

## Knowledge Intentions

1. *Sequencing instructions is the step-by-step process that robots or other devices follow to achieve specific outcomes. This can be a single algorithm or series of algorithms called a program.*
2. *A loop is a sequence of instructions that repeats continually until a certain condition is met.*
3. *A program that contains a looping element is useful for a wide range of scenarios, such as controlling traffic lights.*

*End Product: Evidence that the children can write commands in the correct order to draw an arc and work out how to draw a circle using knowledge of arcs.*

## The IT Suite



**Hardware: Laptops, tablets**

**Software: Internet Explore/Chrome, Turtle Logo**





## Learning Intentions

1. Recognise that the school network links computers to allow the sharing of resources. Use digital technology in different ways in the classroom, home and community to achieve a set goal.
2. Explain that when searching online, some web pages may contain adverts or pop-ups that encourage people to click on them.
3. Explain actions to report and prevent cyberbullying. Identify the positive and negative influences of technology on health and the environment and how to protect themselves. Identify appropriate behaviour when contributing to collaborative online projects for learning.



## Term Three

## Knowledge Intentions

1. Pop-ups or adverts are a form of online advertising that companies use to encourage users to buy something or go to another website. Some pop-ups can be malicious and lead to a virus, whereas some are helpful and give information. Pop-ups can be blocked by computer software. Concerns should be reported to a trusted adult before clicking on anything.
2. Cyberbullying is bullying using technology, such as social media or gaming networks. A trusted adult or child safety organisation should be contacted if there are any concerns or worries. A trusted adult can provide help and support or contact the police if needed.
3. Technology can have positive influences on health, such as enabling people to hear using a hearing aid or helping doctors to diagnose or treat illnesses using special machines. Negative influences on health include problems like eye strain and poor posture. Technology can have positive influences on the environment, such as using systems to monitor and control energy usage. Negative influences on the environment include contributing to pollution by travelling and using a lot of power.
4. Appropriate behaviour when contributing to collaborative online projects includes consideration towards others, awareness of copyright and keeping personal data safe.
5. There are various forms of online communication, such as email, blogging, vlogging and video chatting. Online communication should be used responsibly, remembering that online actions affect other people and there are rules that need to be followed.

End Product: Create an online superhero based on knowledge of online safety.

## The IT Suite



**Hardware: Laptops, tablets**

**Software: Internet Explore/Chrome, Search Engine**





## Learning Intentions

1. Use digital technology in different ways in the classroom, home, and community.
2. Use familiar computer hardware to successfully complete a task.
3. Use a range of different software to successfully complete a project.



## Term Four

## Knowledge Intentions

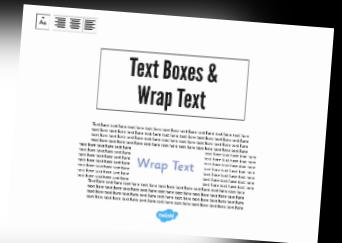
1. When work is saved, it is stored on a storage device, such as the computer's hard drive, a USB flash drive, a shared server or online. This work can then be retrieved from another device (except if it is saved on the computer's hard drive).
2. Text, images, animation, audio and video clips can be combined using tools within a piece of software or by using a range of software. For example, an image could be inserted into a word processing document or a video could be inserted into a presentation.
3. Digital technology can be used for a range of purposes in different settings, such as using a tablet in the classroom to access educational material, in the home to access entertainment and in the community to share local news.

*End Product: Create an 'information book' page (with pictures and text boxes) then annotate with how it was created.*

## The IT Suite



**Hardware: Laptops, tablets**  
**Software: Internet Explorer/Chrome, Search Engine, Word**





## Learning Intentions

1. *Describe and demonstrate a simple program that contains a looping element and how part of a program may need repetition.*
2. *Use sensors to 'trigger' an action, such as sound or movement.*
3. *Apply computing skills to use new computing software.*



## Term Five

## Knowledge Intentions

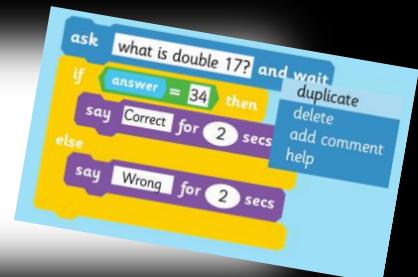
1. *Sequencing instructions is the step-by-step process that robots or other devices follow to achieve specific outcomes. This can be a single algorithm or series of algorithms called a program.*
2. *A loop is a sequence of instructions that repeats continually until a certain condition is met.*
3. *A program that contains a looping element is useful for a wide range of scenarios, such as controlling traffic lights.*

*End product: A quiz created in Scratch with a scoring system which has been debugged.*

## The IT Suite



**Hardware: Laptops, tablets**  
**Software: Scratch**





## Learning Intentions

1. Apply computing skills to use new computing software.
2. Describe and demonstrate a simple program that contains a looping element and how part of a program may need repetition.
3. Manipulate a range of text, images, sound or video clips and animation for given purposes.



## Term Six

## Knowledge Intentions

1. A loop is a sequence of instructions that repeats continually until a certain condition is met. A program that contains a looping element is useful for a wide range of scenarios, such as controlling traffic lights.
2. Manipulating a range of text, images, sound or video clips and animation may include changing their style, size, colour, effect, shape, location or format.
3. Interacting regularly with hardware enables users to recognise common features and become confident in working with new or unfamiliar hardware.
4. Digital technology can be used in different ways and settings to achieve a set goal, such as using data collection in the community and home to answer a classroom-based question.

*End Product: Create a cartoon character and a story to go with it*

## The IT Suite



**Hardware: Laptops, tablets**  
**Software: Scratch, iMotion/Stopmotion, Publisher, Movie Maker**





## Checklist

	National Curriculum Programme of Study	2021 - 2022	2022 - 2023
Computing	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	T4	T2, T5
	use sequence, selection, and repetition in programs; work with variables and various forms of input and output	T4	T2, T5
	use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	T4	T2, T5
	understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration	T1	T1, T3, T4
	use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	T3	T1, T3
	select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	T1, T2, T4, T5, T6	T4, T6
	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	T2, T3	T1, T3