

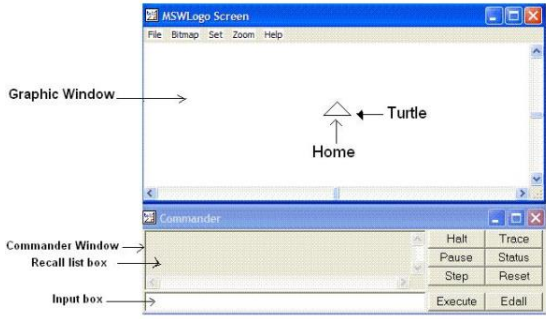
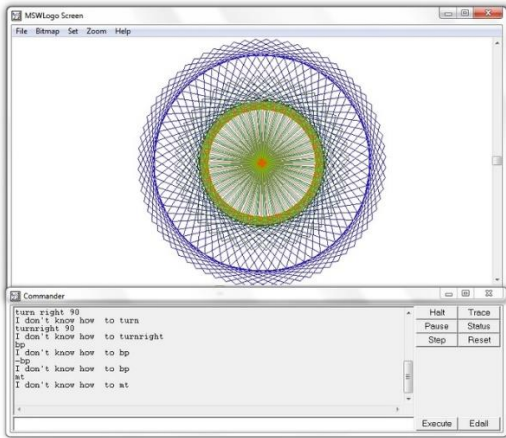
Year 4 Autumn 1: Information Technology Knowledge Mat

Computing systems and networks

Key Vocabulary		Images/ diagrams	Core Knowledge
Device	An item that is made or adapted for a specific purpose.	  	➤ I know what a digital device is. ➤ I know why we use digital devices. ➤ I know how and why digital devices are connected. ➤ I know what the internet is and how we can use it. ➤ I can list a variety of digital devices. ➤ I know a variety of ways that digital devices can interact with each other.
Digital	A piece of physical equipment that sends and receives digital signals.		
Wi-Fi	Uses radio waves to connect digital devices.		
Network	A group of connected digital devices through Wi-Fi or physical wires.		
Internet	A global network of digital devices that can share information.		

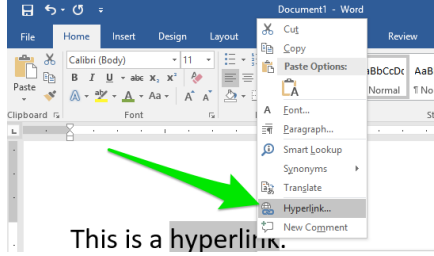
Year 4 Autumn 2: Computing Knowledge Mat

Computer Science

Key Vocabulary		Images/ diagrams	Core Knowledge
Debug	Finding and removing existing and potential errors.	 	➤ To create a program in a text-based language ➤ To explain what 'repeat' means ➤ To modify a count-controlled loop to produce a given outcome ➤ To create a program that uses count-controlled loops to produce a given outcome ➤ To develop the use of count-controlled loops in a different programming environment ➤ To explain that in programming there are infinite loops and count controlled loops ➤ To develop a design which includes two or more loops ➤ To design a project that includes repetition ➤ To create a project that includes repetition
Program	A set of ordered operations for a computer to perform.		
Repetition	Programming parts of a computer program to loop.		
Loop	A computer process that happens twice or more continuously.		
Algorithm	A procedure used for solving a problem or performing a task.		
Computer science	Using computer technology to complete a given goal-oriented task.		

Year 4 Spring 1: Computing Knowledge Mat

Digital Literacy

Key Vocabulary		Images/ diagrams	Core Knowledge
Hyperlink	A link from a text document to an online page or document.	  	➤ To know that a hyperlink can take you directly to the world wide web. ➤ To know that information is not always reliable. ➤ To understand that key words can help search safely on the internet. ➤ To know that not all online images should be used. ➤ I can identify personal information that should be kept private. ➤ I can use appropriate tools to collaborate online. ➤ To use various sources to find information and consider reliability.
Keyword	A significant word that helps make a search more accurate online.		
Network	A system of devices that are connected online.		
Personal Information	Information that can identify an individual and often should be kept private.		
Age-Appropriate	Content and information that is relevant and safe for people of a certain age.		

Year 4 Summer 2: Information Technology Knowledge Mat

Data information – data logging

Key Vocabulary		Images/ diagrams	Core Knowledge
Data	Information that is usually converted into a digital form.	  	➤ I know how to choose a data set to answer a given question. ➤ I know that data is collected over time. ➤ I know that sensors are input devices. ➤ I know how to identify that data from sensors can be recorded. ➤ I know how to interpret data that has been collected using a data logger. ➤ I know that a computer program sorts data. ➤ I know how to use a computer to view data in different ways.
Data Set	A collection of data that provides information about a subject.		
Data Logger	A device that collects raw data from a subject.		
Sensor	A device that responds to a physical stimulus such as light or sound.		
Interval	A set amount of time when data is not collected.		
Interpret	To look at and discuss data and what we can learn from it.		
Reliable / Unreliable	If data can be trusted and used as evidence or not.		

