



The Computing Curriculum is divided into 3 areas:

Computer Science	<p>PROBLEM SOLVING:</p> <ol style="list-style-type: none"> 1. Understand what algorithms are. 2. Understand that algorithms are implemented as programs on digital devices. 3. Understand that programs execute by following precise and unambiguous instructions. <p>PROGRAMMING:</p> <ol style="list-style-type: none"> 1. Create simple programs. 2. Debug simple programs. <p>LOGICAL THINKING:</p> <ol style="list-style-type: none"> 1. Use logical reasoning to predict the behaviour of own programs. 2. Use logical reasoning to predict the behaviour of others' programs
Information Technology	<p>CREATING CONTENT:</p> <ol style="list-style-type: none"> 1. Use technology purposefully to create digital content. 2. Use technology purposefully to store digital content. 3. Use technology purposefully to retrieve digital content. 4. Use technology purposefully to organise digital content. 5. Use technology purposefully to manipulate digital content.
Digital Literacy	<p>DIGITAL CREATIVITY:</p> <ol style="list-style-type: none"> 1. The ability to create multimedia content. <p>DIGITAL TECHNOLOGY:</p> <ol style="list-style-type: none"> 1. Recognise common uses of technology. 2. Researching using the internet and search engines. <p>DIGITAL CITIZENSHIP (e-Safety):</p> <ol style="list-style-type: none"> 1. Use technology safely. 2. Keep personal information private. 3. Use technology respectfully. 4. Identify where to go for help when you have concerns.



The aim at Dropmore Infant School is to have 6 dedicated Computing units per academic year (2 per term) as well as covering e-Safety at the start of every term. In addition to this, children should be taught basic computing skills and have plenty of opportunity to use technology to support their learning in literacy, maths and all other areas of the curriculum.

Each Year group will have the freedom to choose which units to teach, depending on the topics covered and the learning focus (CS, IT, DL). The units can be chosen from 2 main sources/schemes and 2 further optional schemes:

- Main Scheme – TWINKL
- Main Source – DROPMORE
- Optional Scheme - Switch on Computing by Year Group
- Optional Scheme - Knowsley Scheme of Work by Year Group

At Dropmore we include at least two effective learner objectives to be the focus for the term, in addition to the specific objectives in the Computing activities.

Ability to work independently	Ability to work with each other	Resilience and Challenge	Creativity	Academic Progress
I do not rely on the teacher or other children for support.	I am willing to work with others.	I attempt any task and try hard.	I can come up with ideas and use these ideas to help myself.	I am enthusiastic about the lesson and happy to contribute.
I can take independent notes or photographs at appropriate times to support my learning.	I share thoughts and ideas with the rest of the group or class.	I ask relevant questions of the teacher.	I am keen to express my ideas in different ways.	I am keen to improve my knowledge and understanding.
	I communicate appropriately and put forward my ideas within a group.	I engage in different activities and small competitions, accepting and embracing challenges.	I take other’s ideas into account alongside my own.	I understand how to improve.
	I can give others constructive feedback on their ideas.	I see difficult tasks as a challenge, something I must work at and learn from.	I use a wide variety of sources effectively.	



CURRICULUM MAP - YEAR 1

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Unit / Activities	<p>For each half term, choose:</p> <ul style="list-style-type: none"> One of the 7 units from TWINKL Scheme of Work OR replace them with one of the Dropmore Units (R:\Teachers Only\CURRICULUM\COMPUTING\SCHEMES OF WORK) Alternatively, you can choose one of the other schemes (Knowsley or Switched on Computing) <p>Ensure equal coverage of 3 areas (CS, IT, DL) when choosing your units. For more information on the units see below. Detailed plans and resources for all units can be found here: T:\CURRICULUM\COMPUTING\PLANNING</p>					
Continuous Provision?	Depending on the topic and/or unit of work, have one or more of following resources available for children: Laptops, Beebots, Roamer, Cameras, iPads, Microphones					
e-Safety	Acceptable Use Policy Jessie and Friends		DIS e-Safety Planning 2 Lesson 1-4		Discovery Education Create Poster	
Basic Skills Computer	Login with username and password Big Brown Bear Typing Logoff	Create / save documents	Retrieve / edit documents	Twinkl Touch Typing	Twinkl Touch Typing	Twinkl Touch Typing
Basic Skills iPad	Login / Locked screen Find Apps	Close Apps	Battery Life	Letter join	Maths Mastery	Discovery Education



TWINKL PLANNING - OVERVIEW OF UNITS

Computing Year 1

Explore our exciting range of lessons covering **computer skills and online activities** for year 1 children, from basic computing to software programming.

Year One

Year Two

Year Three

Year Four

Year Five

Year Six

Progression Maps



Updated Content!

Digital
Painting



Updated Content!

Computing
Skills



Online
Safety



Programming Toys



Programming
with ScratchJr



Using and
Applying



Word Processing
Skills



Software
and Hardware
Requirements
Overview





DROPMORE PLANNING - OVERVIEW OF UNITS

UNIT	Description	Computing Curriculum
Programmable toys	<ol style="list-style-type: none"> 1. DIS PROGRAMMABLE TOYS Carousel of 3 activities programming Beebots 2. DIS PROGRAMMABLE TOYS Carousel of 5 activities programming Beebots & Espresso Coding 	CS
Beebots 2021	Progress through 5 stages of programming your Beebot using Dropmore Beebot mats At the end of the unit the children can use precise instructions to control direction and distance moved by a programmable toy.	CS
Scratch Jr 2023	At the end of the unit each child will be confident in using scratch jr to write and run a sequence of instructions to achieve simple objectives. Some children may be able to challenge themselves by experimenting with further functionality and designing their own projects	CS
Stop Motion	The children will create a short movie using the App Quik. They will work in small groups. Using a story board, they will decide on the different frames needed. They will make their own props, backdrops etc.	DL
Data Handling Data Handling 2023	At the end of the unit a database will have been created. Each child will have entered their own data record into the database. Children can sort information and use it to answer simple questions. More able children can investigate more complex questions by using criteria.	IT
Basic Skills	Login / Logoff, open & save document, mouse and keyboard skills	IT & DL
Online Safety Posters	At the end of the unit the children have produced a visually attractive online safety poster by editing fonts in Word	IT & DL
Recount	At the end of the unit the children will have created a powerpoint presentation about their trip to Mop End. The children will use a (differentiated) template to help them. More able children can add addition information, more slides and animations. The powerpoint presentation can be printed and displayed. A selection of presentations can be shared on the website.	IT & DL
Sharing Hour Invitation	At the end of the unit the children will have created an invitation using Microsoft Publisher. The children will use a (differentiated) template to help them.	IT & DL



UNIT	Description	Computing Curriculum
Who am I? Who am I? 2023	<p>At the end of the unit the children will have created a 2-page powerpoint presentation 'Who am I?' The first page will contain a self-portrait drawing (using 2paint a picture) and some facts. The second page will reveal their identity with a picture (photograph) and name. See example: 'Who am I? – GS' The children will use a (differentiated) template to help them. More able children can add additional information, more slides and animations. The powerpoint presentation can be printed and displayed. A selection of presentations can be shared on the website.</p>	IT & DL



KNOWSLEY SCHEME OF WORK YEAR 1 - OVERVIEW OF UNITS

	Apptivity Name	Target Skills & Summary	Computing Curriculum
Y1 - 7	Walking with Dinosaurs	By the end of this project, children will fully understand the term algorithm and will be able to use a simple app on an iPad to reinforce this learning.	CS
Y1 - 8	Pictures Tell a Thousand Words	This project will teach children about the main functions and buttons of a digital camera as well as about different shots. Children will see how important images can be by looking at well-known picture books such as The Snowman.	DL
Y1 - 9	App Attack - Games Design	The aim of this apptivity is to introduce children to the simple concepts of games design as well as notions of sequencing, computational thinking, directional language and problem solving.	DL & IT
Y1 - 10	Crazy Creatures	Throughout this project, children will further develop their understanding of control, directional language and programming, by programming a Bee-Bot and using appropriate control apps.	CS
Y1 - 11	Young Investigators	In this apptivity, children will learn how to search on the internet in relation to a specific topic to develop basic web skills. The children will use Thinglink to produce and publish an interactive image.	IT & DL
Y1 - 12	We are all Connected	The aim of this apptivity is to show children how the web works. The children will produce a simple eBook or presentation incorporating the key terminology they learn from this session.	CS & DL
Y1 - 101	Our Local Area	In this computing activity we will be using technology to help us explore our local area. It uses investigative tasks to introduce children to the idea of looking at their local area with the aid of technology.	DL & IT
Y1 - 102	Ready, Steady, Go	In this computing activity, children will learn about algorithms to produce their own simple game.	CS & IT



SWITCHED ON COMPUTING YEAR 1 - OVERVIEW OF ACTIVITIES

	Unit Name	Description	Computing Curriculum
1.1	We are treasure hunters	The children will program a toy to move around a map to find buried treasure. They will start by thinking of algorithms for their routes, then input these as stored programs for the robot. They predict how the robot will move and will debug their programs.	CS
1.2	We are TV chefs	Pupils produce short videos of themselves making a healthy meal or snack. They also decompose a complex problem into smaller parts – an important idea from computer science.	CS & DL
1.3	We are painters	This unit will particularly engage children who love the illustrations in the books they read. It is a great opportunity for the children to work creatively.	IT & DL
1.4	We are collectors	The pupils will use web search engines to collect pictures of different types of animals and then explore ways in which those pictures can be organised.	IT & DL
1.5	We are storytellers	The children create a talking book that they can share with others.	IT
1.6	We are celebrating	Pupils will have the opportunity to create a digital greetings card, which could be used for a religious festival such as Diwali or Christmas, pupils' birthdays, or simply to say thank you or good luck.	IT & DL



PLEASE COMPLETE THIS CURRICULUM MAP FOR EACH ACADEMIC YEAR WITH THE UNITS AND ACTIVITIES COMPLETED AND ANY NOTES OR COMMENTS.

PLEASE RETURN THE COMPLETED FORM TO THE SUBJECT LEADER.

	Autumn 1 20xx	Autumn 2 20xx	Spring 1 20xx	Spring 2 20xx	Summer 1 20xx	Summer 2 20xx
Unit / Activities						
Continuous Provision						
e-Safety						
Basic Skills Computer						
Basic Skills iPad						