

Computing Long Term Overview

KS3

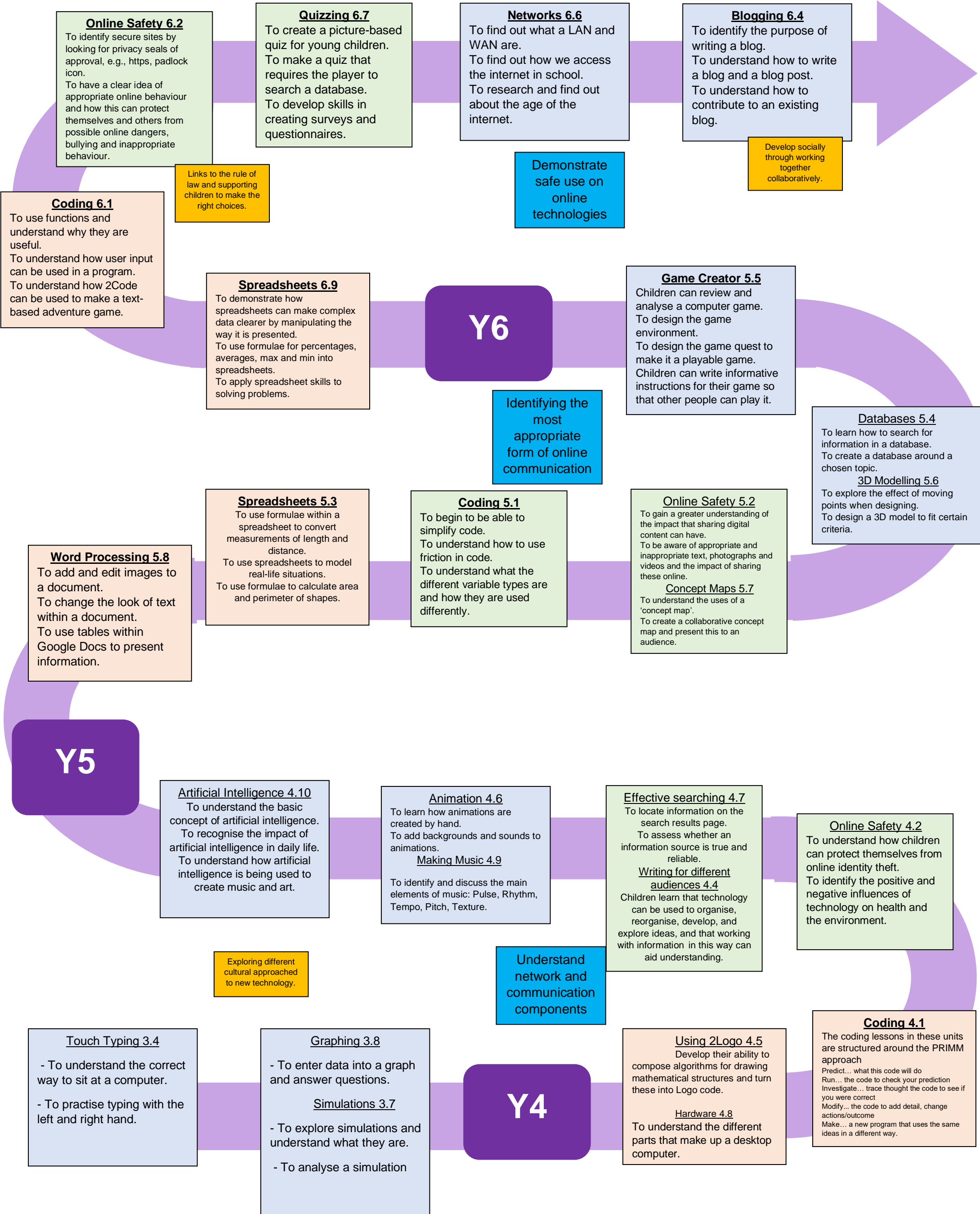
Autumn

Spring

Summer

PD Opportunity

Substantive Concept



Y6

Spreadsheets 6.9
To demonstrate how spreadsheets can make complex data clearer by manipulating the way it is presented.
To use formulae for percentages, averages, max and min into spreadsheets.
To apply spreadsheet skills to solving problems.

Game Creator 5.5
Children can review and analyse a computer game.
To design the game environment.
To design the game quest to make it a playable game.
Children can write informative instructions for their game so that other people can play it.

Identifying the most appropriate form of online communication

Databases 5.4
To learn how to search for information in a database.
To create a database around a chosen topic.
3D Modelling 5.6
To explore the effect of moving points when designing.
To design a 3D model to fit certain criteria.

Coding 5.1
To begin to be able to simplify code.
To understand how to use friction in code.
To understand what the different variable types are and how they are used differently.

Online Safety 5.2
To gain a greater understanding of the impact that sharing digital content can have.
To be aware of appropriate and inappropriate text, photographs and videos and the impact of sharing these online.
Concept Maps 5.7
To understand the uses of a 'concept map'.
To create a collaborative concept map and present this to an audience.

Spreadsheets 5.3
To use formulae within a spreadsheet to convert measurements of length and distance.
To use spreadsheets to model real-life situations.
To use formulae to calculate area and perimeter of shapes.

Word Processing 5.8
To add and edit images to a document.
To change the look of text within a document.
To use tables within Google Docs to present information.

Y5

Artificial Intelligence 4.10
To understand the basic concept of artificial intelligence.
To recognise the impact of artificial intelligence in daily life.
To understand how artificial intelligence is being used to create music and art.

Animation 4.6
To learn how animations are created by hand.
To add backgrounds and sounds to animations.
Making Music 4.9
To identify and discuss the main elements of music: Pulse, Rhythm, Tempo, Pitch, Texture.

Effective searching 4.7
To locate information on the search results page.
To assess whether an information source is true and reliable.
Writing for different audiences 4.4
Children learn that technology can be used to organise, reorganise, develop, and explore ideas, and that working with information in this way can aid understanding.

Online Safety 4.2
To understand how children can protect themselves from online identity theft.
To identify the positive and negative influences of technology on health and the environment.

Exploring different cultural approaches to new technology.

Understand network and communication components

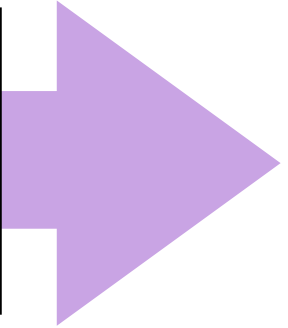
Y4

Touch Typing 3.4
- To understand the correct way to sit at a computer.
- To practise typing with the left and right hand.

Graphing 3.8
- To enter data into a graph and answer questions.
Simulations 3.7
- To explore simulations and understand what they are.
- To analyse a simulation

Using 2Logo 4.5
Develop their ability to compose algorithms for drawing mathematical structures and turn these into Logo code.
Hardware 4.8
To understand the different parts that make up a desktop computer.

Coding 4.1
The coding lessons in these units are structured around the PRIMM approach
Predict... what this code will do
Run... the code to check your prediction
Investigate... trace through the code to see if you were correct
Modify... the code to add detail, change actions/outcome
Make... a new program that uses the same ideas in a different way.



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