Computing Skill Progression

Year 3

Computer Systems and Networks – Connecting Computers

Explain that digital devices accept inputs.

Explain that digital devices produce outputs.

Follow a process.

Design a digital device.

Recognise similarities between using digital devices and non-digital tools.

Recognise different connections.

Explain how messages are passed through multiple connections.

Discuss why we need a network switch.

Recognise that a computer network is made up of a number of devices.

Explain the role of a switch, server, and wireless access point in a network.

Identify networked devices around me.

Identify the benefits of computer networks.

Creating Media – Animation

Create an effective flip book–style animation.

Explain how an animation/flip book works.

Explain why little changes are needed for each frame.

Create an effective stop frame animation.

Create a storyboard.

Review a sequence of frames to check my work

Improve my animation based on feedback.

Add other media to my animation.

Creating Media – Desktop Publishing

Explain the difference between text and images.

Recognise that text and images can communicate messages clearly.

Change font style, size, and colours for a given purpose.

Edit text.

Create a template for a particular purpose.

Paste text and images to create a magazine cover.

Make changes to content after I've added it.

Match a layout to a purpose.

Choose a suitable layout for a given purpose.

Say why desktop publishing might be helpful.

Data and information – Branching Databases

Investigate questions with yes/no answers.

Select an attribute to separate objects into groups.

Arrange objects into a tree structure.

Select objects to arrange in a branching database.

Prove my branching database works.

Compare two branching database structures.

Create questions and apply them to a tree structure.

Use my branching database to answer questions.

Explain what a branching database tells me.

Programming A – Sequence in Music

Identify the objects in a Scratch project (sprites, backdrops).

Create a program following a design.

Start a program in different ways.

Create a sequence of connected commands.

Combine sound commands.

Decide the actions for each sprite in a program.

Implement my algorithm as code.

Programming B – Events and Actions

Explain the relationship between an event and an action

Choose which keys to use for actions and explain my choices.

Identify a way to improve a program.

Program movement.

Use a programming extension.

Identify additional features (from a given set of blocks).

Choose suitable keys to turn on additional features.

Build more sequences of commands to make my design work.

Test a program against a given design.

Match a piece of code to an outcome.

Modify a program using a design.

Make design choices and justify them.

Implement my design.