

LKS2 Computing Curriculum and Knowledge



Upper KS2

Systems and searching, video production, selection in physical computing, flat-file databases, vector graphics, selection in quizzes.

Pentecost - Programming B - Repetition in games

I can describe how to use a loop command in a program to repeat instructions (bas).

I can explain when to use a loop and when not to (adv). I can propose a design which includes two or more loops which run at the same time (deep).

Lent - Data and Information - Data Logging

I can describe how data collected over time can be used to answer questions (bas).

can explain that a data logger works by collecting 'data points' from sensors over time (adv).

can make generalisations from a set of logged data (deep).

Pentecost - Creating Media - Photo Editing

I can describe how digital images can be manipulated (bas).

I can identify and explain that not all images are real (adv).

I can select the most appropriate tool for a particular purpose (deep).

Lent - Programming A - Repetition in shapes

I can define the word 'repeat' and list everyday tasks that include repetition (bas).

I can explain the difference between indefinite and count-controlled loops (adv).

can justify the use of indefinite and count-controlled loops to create different outcomes (deep).

Advent - Creating Media - Audio Production

Year

I can create a sound recording using a digital device (bas). I can explain that a digital recording is stored as a file (adv). I can investigate editing and layering audio, considering the effect of this (deep).

Pentecost - Programming B – events and actions in programs

I can create a program to move a sprite in four directions (bas).

I can describe the effect of changing the sequence of commands (bas).

I <mark>can explain how</mark> to add features to and debug a program (adv).

Advent - Computing Systems and Networks - The Internet

I can describe how networks connect to other networks (bas).

I can explain that the World Wide Web is comprised of content created, owned and shared by people (adv).
I can draw conclusions about the reliability of content and the consequences this has (deep).

Pentecost - Media - desktop publishing

I can describe how text and images covey information (bas).

I can describe how to use templates, orientation and placeholders to edit text and images (bas).

I can explain why different layouts suit different purposes (adv).

Lent - Data and information - branching databases

I can create questions with yes/no answers (bas).

I can create a branching database (bas).

I can explain that a branching database is an identification tool (adv).

Advent - Creating media – stop-frame animation

I can create a stop motion animation (bas).
I can define an animation as a sequence of drawings or photographs (bas).

I can explain how to improve an animation (adv).

Lent - Programming A - sequencing sounds

I can describe how to record, play and edit a piece of sound (bas). I can describe how each sprite is controlled by the commands I choose (bas).

I can explain the effect of re-ordering a sequence of commands (adv).

Advent - Computing systems and networks – connecting computers

I can label input and output devices (bas).

can describe how information is passed around a computer network (bas).

I can summarise now digital devices can change the way we work (adv).

Year 3

KS1

IT around us, digital photography, robot algorithms, pictograms, digital music, programming quizzes.