Key Knowledge, Vocabulary and Questions

Computing: Computing Systems and Networks – IT Around Us / Creating Media – Digital Photography

Year 2

Key knowledge

- Identify examples of information technology and how they are used.
- Know some uses of information technology outside school.
- Understand that using information technology has benefits.
- Explain how to use information technology safely.
- Recognise that choices are made when using information technology.
- Know how to make digital photographs.
- Know how photographs can be improved.
- Know that photographs can be changed after they are taken.

Key questions

1	Can you name some examples of information technology?
2	Can you give examples outside school?
3	How does information technology help us?
4	What rules can you tell me to help us use computers safely?
5	Which devices could be used to take photographs?
6	What do you need to think about before taking a photograph?
7	How could you change a photograph after it is taken?

Key vocabulary`

Information technology	Using computer systems for storing, changing, finding, and sending information.
Online safety	Staying safe on the internet.
Digital device	A computer or device with a computer inside that has been programmed for a specific task
Digital Camera	Used to take electronic pictures. Either a whole device or part of a device.
Lighting	Affects the colour in a photograph.
Zoom	Used to make a photograph bigger and smaller on the screen.
Filter	Can be used to change a photograph after it is taken.

Digital Device

Digital Camera

Lighting

Zoom

Filter

Online Safetv

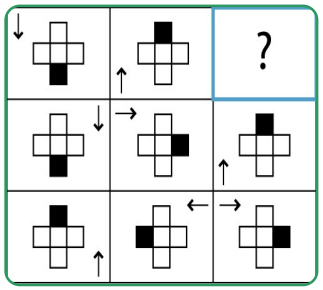
UK Safer Internet Centre

Key Knowledge, Vocabulary and Questions

Computing: Programming A – Robot Algorithms / Data and Information - Pictograms

Year 2

Key knowledge



- Know which commands to use to move a robot.
- Use logical reasoning to predict the outcome of a program.
- Understand that to correct a program we need to debug.
- Know that we can present information using a computer.
- Know that objects can be counted using a tally chart.
- Know that objects can be represented as pictures.

Key questions

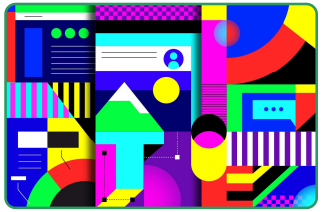
1	Which commands would you use to move a robot?
2	Where does this code move the robot?
3	What is wrong with this program?
4	What attributes do these objects have in common?
5	How could you show this information on a computer?
6	What is a tally chart?
7	Can you use one to count these objects?
8	What is a pictogram?
9	Can you use one to count these objects?
10	Which commands would you use to move a robot?

Key vocabulary`

Task	What is needed?
Design	What it should do?
Code	Instructions that set out how the task is done.
Execute	Starts the program. Same meaning as run.
Algorithm	A precise set of steps to achieve a task. (Recapped from Y1)
Debug	Correcting mistakes within a program. (Recapped from Y1)
Common	Such as colour, size, or price. (Common to more than one object)
Attribute	Chart with marks (grouped in bunches of 5) used to count.
Tally Chart	Chart with pictures used to represent objects.
Pictogram	What is needed?

Execute

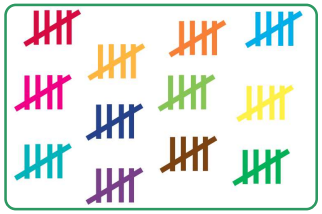
Design



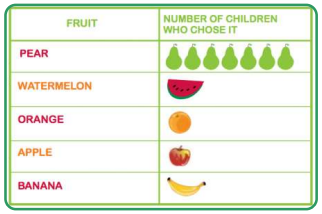
Code

Debug

Tally Chart



Pictogram

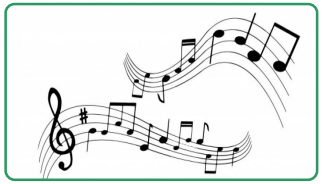


Key Knowledge, Vocabulary and Questions

Computing: Creating Media – Digital Music / Programming B – Programming Quizzes

Year 2

Key knowledge



- Know what a rhythm is.
- Know how sound can be changed on a computer.
- Know how sound is outputted from a device.
- Explain that a sequence of commands has a start
- Explain that a sequence of commands has an outcome

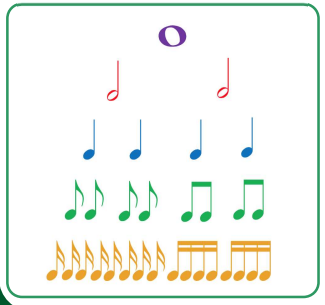
Key vocabulary

1	What is a rhythm?
2	How could you change sound on a computer?
3	Which part of the device produces sound?
4	What is a sequence of commands?
5	What does this code snippet do?

Key questions

Rhythm	A repeated pattern of sound.
Volume	How loud or quiet the sound is.
Pitch	The highness or lowness of a sound.
Tempo	The speed of the music.
Melody	The main tune in a piece of music.
Speaker	Output device used to produce sound.
Headphones	Output device used to produce sound (to one person)
Output device	A piece of hardware that is controlled by outputs from a computer
Sequence	A list of commands in order.
Code snippet	A section of a program on its own.

Rhythm



Speaker

Volume