

# Computing Learning Journey



2026



Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

2025



Use technology purposefully to create, organise, store, manipulate and retrieve digital content

How are skills from the iron/stone age still used today?

How do different countries and religions celebrate?

How high can I travel on Earth?

What was life like in medieval times?

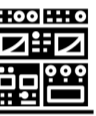
Are rivers important for survival?

Create and debug simple programs

Use sequence, selection, and repetition in programs; work with variables and various forms of input and output

Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration



2024

Could you survive in the desert?

Are the Pyramids of Giza an important part of world history?

Can you travel the whole way around the world?

How does it feel to be part of a carnival?

How did the Romans change our world?

When did the most? Hendon thrive?

Would you like to live near the equator?

What was life like during the turn of BC to AD?

Could you survive in a rainforest?

How does it feel to be part of a carnival?

Did the Vikings change our world?

2023

How has Hendon changed over the past 100 years?

Why was the year 1666 important to London?

Would you like to live in Kenya?

How has history changed the way we celebrate?

How have significant people changed our world?

Would you like to holiday in Hendon during the Victorian times?

2022

Human or Physical: what makes a good seaside?

Why was the year 1666 important to London?

Would you like to live in Kenya?

How has history changed the way we celebrate?

How have significant people changed our world?

Would you like to holiday in Hendon during the Victorian times?

What is the difference between the weather and climate?

How was life different when Queen Victoria ruled?

Where in the world are you?

How has history changed the way we celebrate?

What makes a person significant?

2021



Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies

Use logical reasoning to predict the behaviour of simple programs

Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Respond in different ways to people, places and environment's by expressing their views about their surroundings

Use technology purposefully to create, organise, store, manipulate and retrieve digital content

Recognise common uses of information technology beyond school

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Use technology purposefully to create, organise, store, manipulate and retrieve digital content

Recognise common uses of information technology beyond school

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

Use technology purposefully to create, organise, store, manipulate and retrieve digital content

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration



# KS 3/4

# Computing Learning Journey

## 2026

Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability



How did WW2 change everyday life in London?

Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem



Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems

Develop and apply their analytic, problem-solving, design, and computational thinking skills

Are rivers important for survival?

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration

Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits

What was life like in medieval times?

Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems



How high can I travel on Earth?

Develop their capability, creativity and knowledge in computer science, digital media and information technology

How do different countries and religions celebrate?

Understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]

How are skills from the iron/stone age still used today?

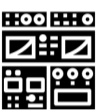
Understand how changes in technology affect safety, including new ways to protect their online privacy and identity, and how to report a range of concerns

## 2025

Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem

Have the effects of London's growth changed over the past 100 years?

Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability



Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem



When did the Romans thrive the most?

## 2024

Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability

How did the Romans change our world?

Understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]

How does it feel to be part of a carnival?

Use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions

Can you travel the whole way around the world?

Develop their capability, creativity and knowledge in computer science, digital media and information technology

Are the Pyramids of Giza an important part of world history?

Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems

Could you survive in the desert?

Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits

Develop and apply their analytic, problem-solving, design, and computational thinking skills

Develop and apply their analytic, problem-solving, design, and computational thinking skills



Would you like to live near the equator?

What was life like during the turn of BC to AD?



Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems

Could you survive in a rainforest?

Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users

How does it feel to be part of a carnival?

Understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]

Did the Vikings change our world?

Understand how changes in technology affect safety, including new ways to protect their online privacy and identity, and how to report a range of concerns

## 2023

Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

How has London changed over the past 100 years?

Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability

Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem



Would you like to holiday in London during the Victorian times?

## 2022

Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability

How have significant people changed our world?

Understand how changes in technology affect safety, including new ways to protect their online privacy and identity, and how to report a range of concerns

How has history changed the way we celebrate?

Understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]

Would you like to live in Kenya?

Develop their capability, creativity and knowledge in computer science, digital media and information technology

Why was the year 1666 important to London?

Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems

Human or Physical: what makes a good seaside?

Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits

Develop and apply their analytic, problem-solving, design, and computational thinking skills

Develop and apply their analytic, problem-solving, design, and computational thinking skills



What is the difference between weather and climate?

Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits

How was life different when Queen Victoria ruled?

Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems

Where in the world are you?

Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users

How has history changed the way we celebrate?

Understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]

What makes a person significant?

Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online privacy and identity, and how to report concerns

## 2021

