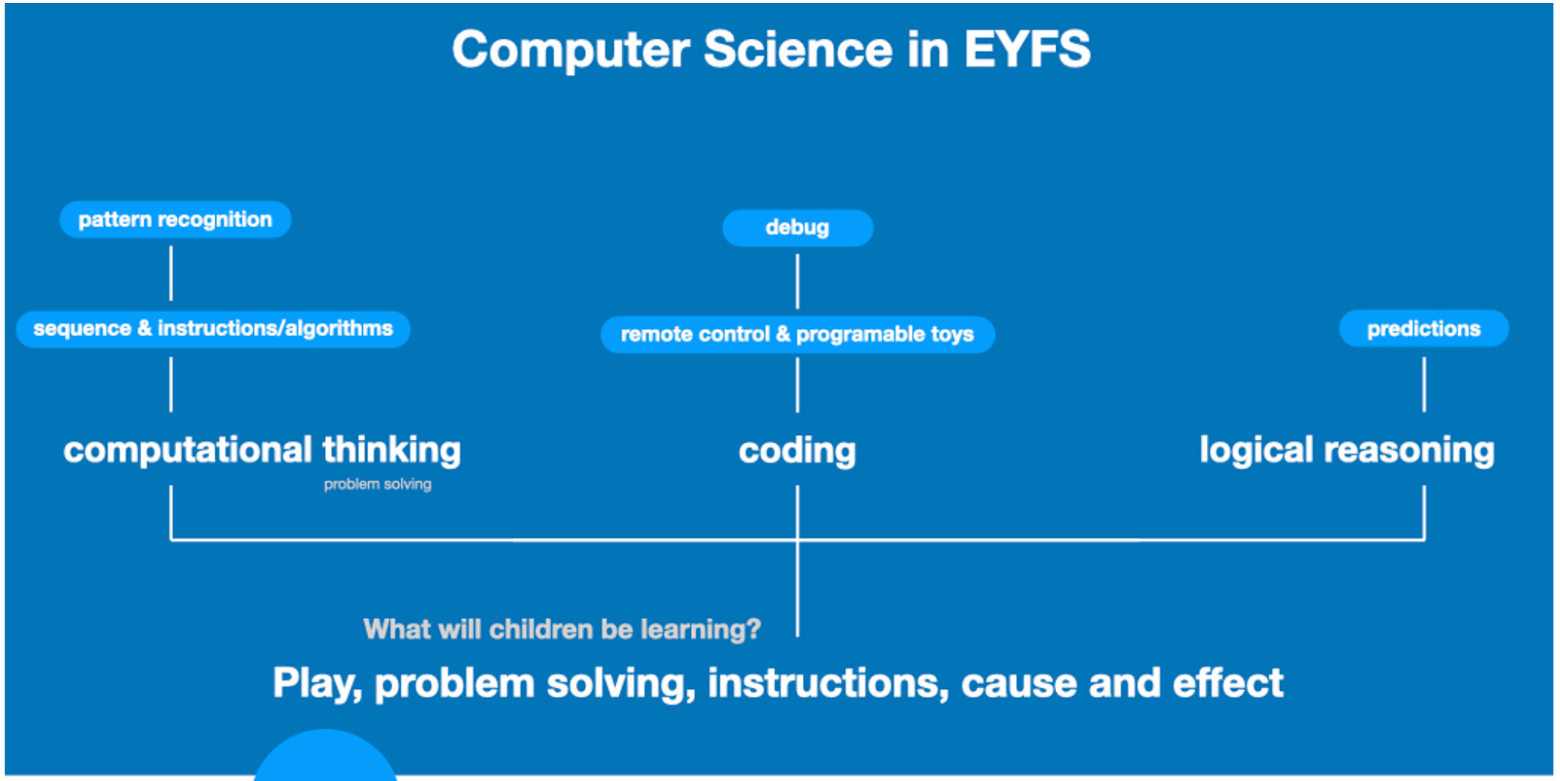
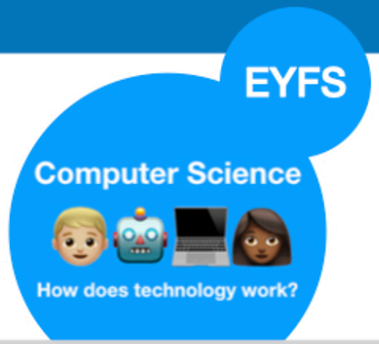
The Teaching and Learning of Computing at St. Aloysius

Below you will find the outlined teaching and learning with technology across EYFS, Key Stage 1 and Key Stage 2.

- A wide range of teaching and learning styles are employed to ensure all children are sufficiently challenged and supported. Children may be required to work individually, in pairs or in small groups according to the nature of the task. Different outcomes may be expected depending on the ability and needs of the individual child.





The children in our Early Years provision will be exploring basic computational thinking through film, music and dance. They will learn about the sequencing of instructions and events, directional language and using programmable toys.

EYFS framework

Understanding the World: People and communities, the world and technology. Practitioners should support children in experiencing a range of technologies – using cameras, photocopiers, CD players, tape recorders and programmable toys, in addition to computers.

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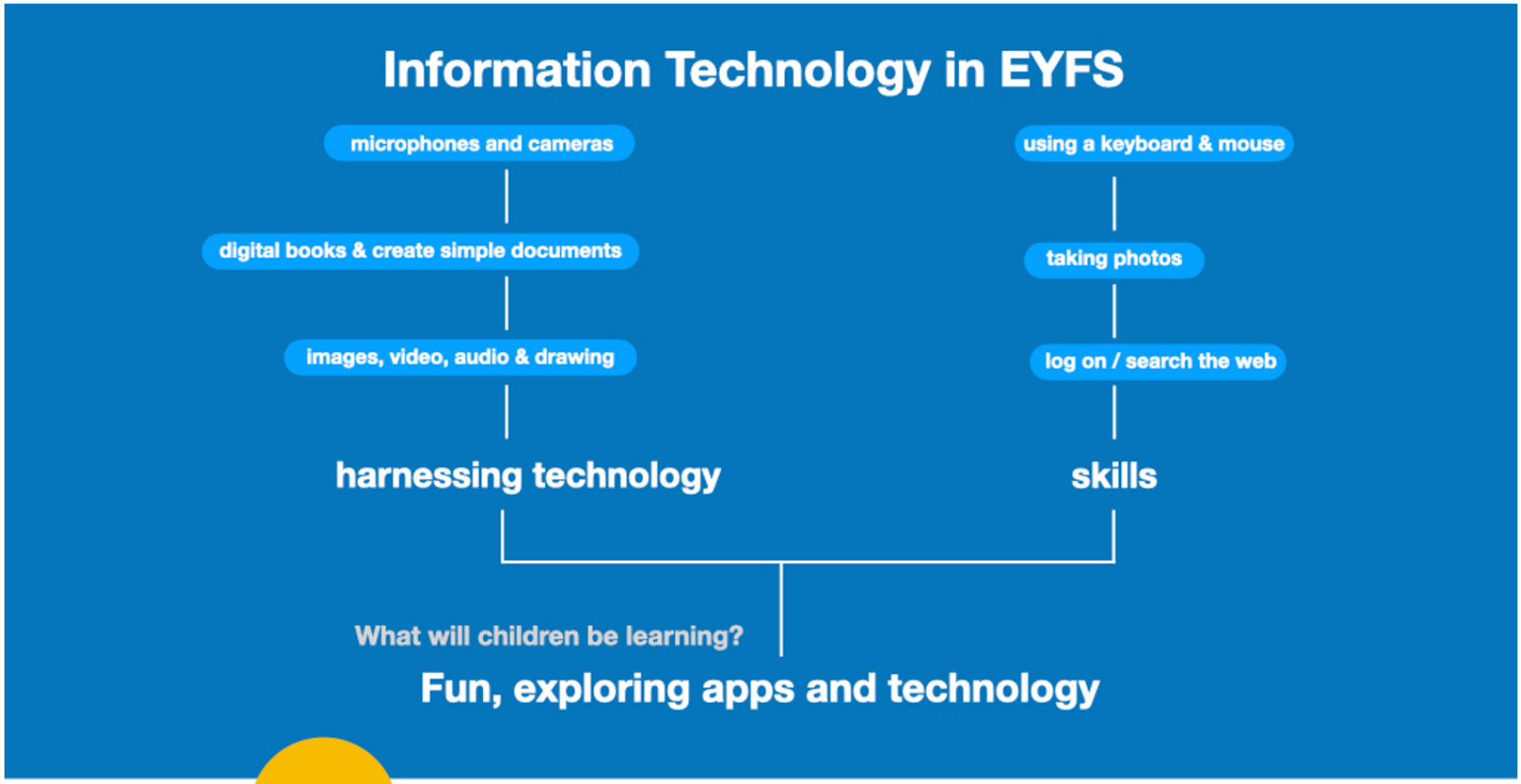

The children in our Early Years provision will be exploring how technology is an everyday part of their learning and world around them. The children are taught to use devices, equipment, software/apps confidently and introduce to the reasons why technology is used. They will learn about handling information, problem solving, taking photographs, video recording and

EYFS framework

Understanding the World: Understanding the World: People and communities, the world and technology. Practitioners should support children in experiencing a range of technologies – using cameras, photocopiers, CD players, tape recorders and programmable toys, in addition to computers.

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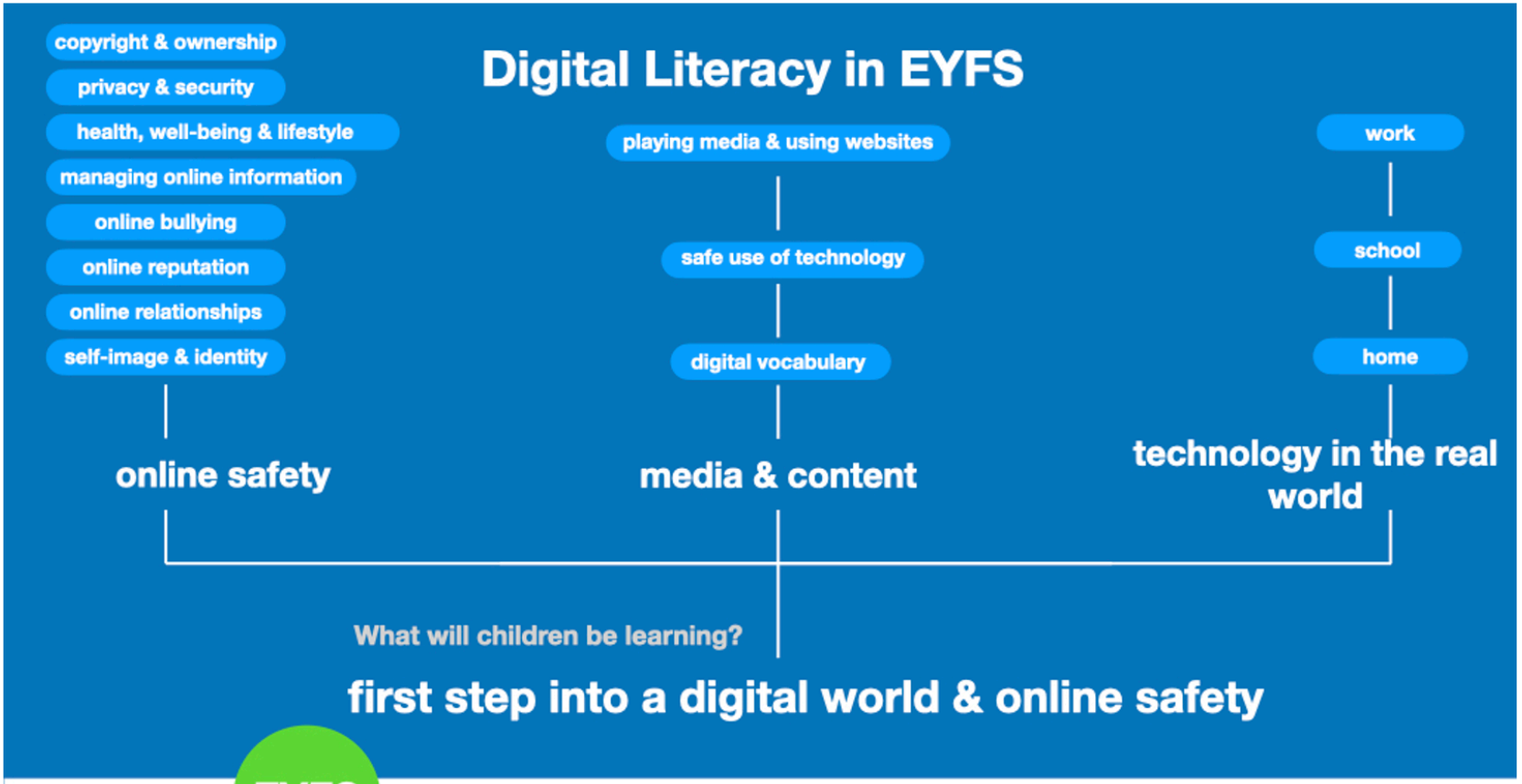

The children in our Early Years provision will be exploring internet safety, personal information and technology in the real world. Our teaching supports the key aims of the government's Internet Safety Strategy (Digital Literacy) of supporting children to stay safe and make a positive contribution online, as well as enabling teachers to develop effective strategies for understanding and handling online risks. The framework has been produced by the UK Council for Child Internet Safety (UKCCIS)

EYFS framework

Understanding the World: People and communities, the world and technology. Practitioners should support children in experiencing a range of technologies – using cameras, photocopiers, CD players, tape recorders and programmable toys, in addition to computers.

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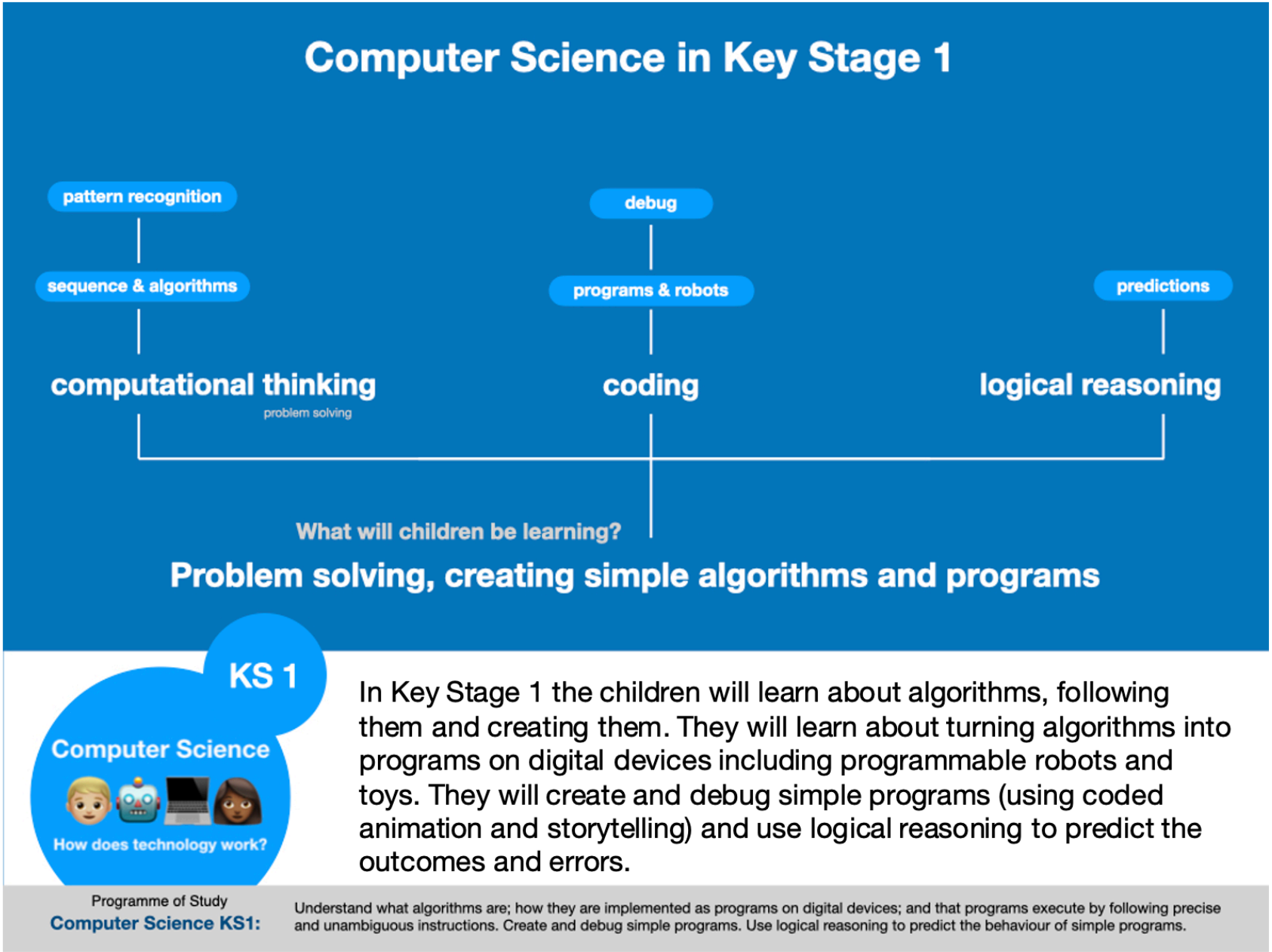

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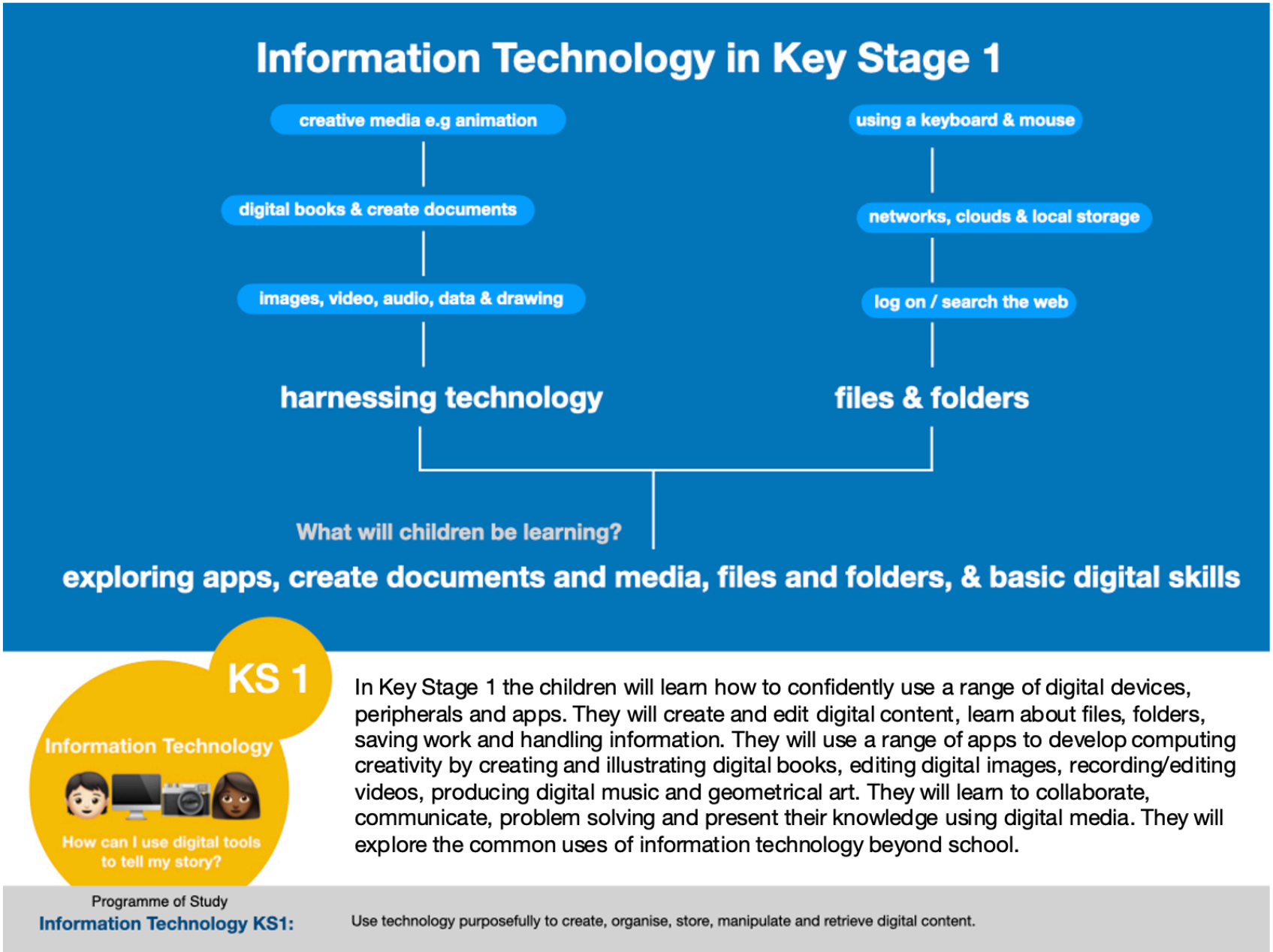

In Key Stage 1 the children will learn how to confidently use a range of digital devices, peripherals and apps. They will create and edit digital content, learn about files, folders, saving work and handling information. They will use a range of apps to develop computing creativity by creating and illustrating digital books, editing digital images, recording/editing videos, producing digital music and geometrical art. They will learn to collaborate, communicate, problem solving and present their knowledge using digital media. They will explore the common uses of information technology beyond school.

Programme of Study

Information Technology KS1: Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

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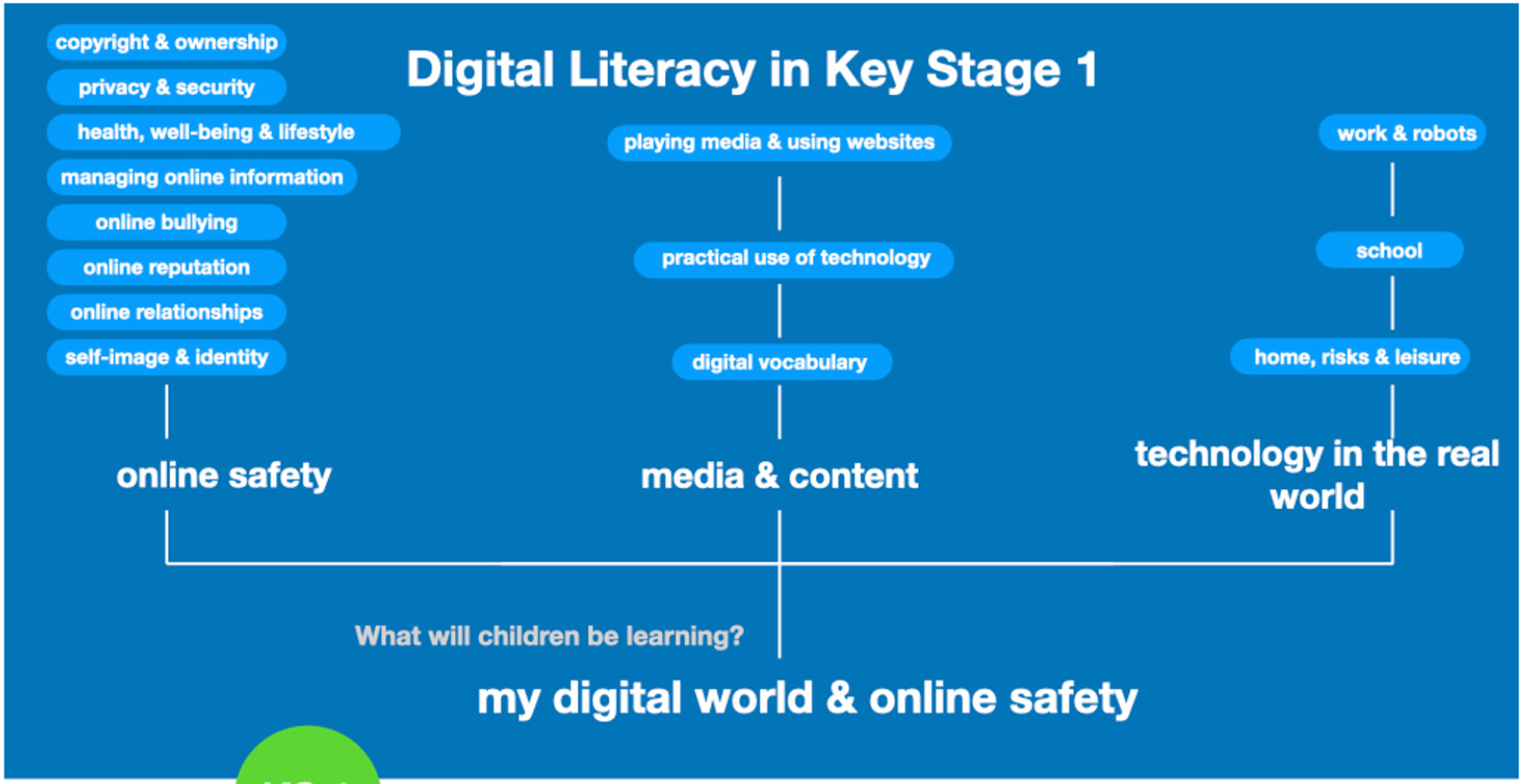

The children in Key Stage 1 will be exploring technology in the real world, internet safety, personal information and where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Our teaching supports the key aims of the government's Internet Safety Strategy (Digital Literacy) of supporting children to stay safe and make a positive contribution online, as well as enabling teachers to develop effective strategies for understanding and handling online risks. The framework has been produced by the UK Council for Child Internet Safety (UKCCIS).

Programme of Study	
Digital Literacy KS1:	Recognise common uses of information technology beyond school. 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.

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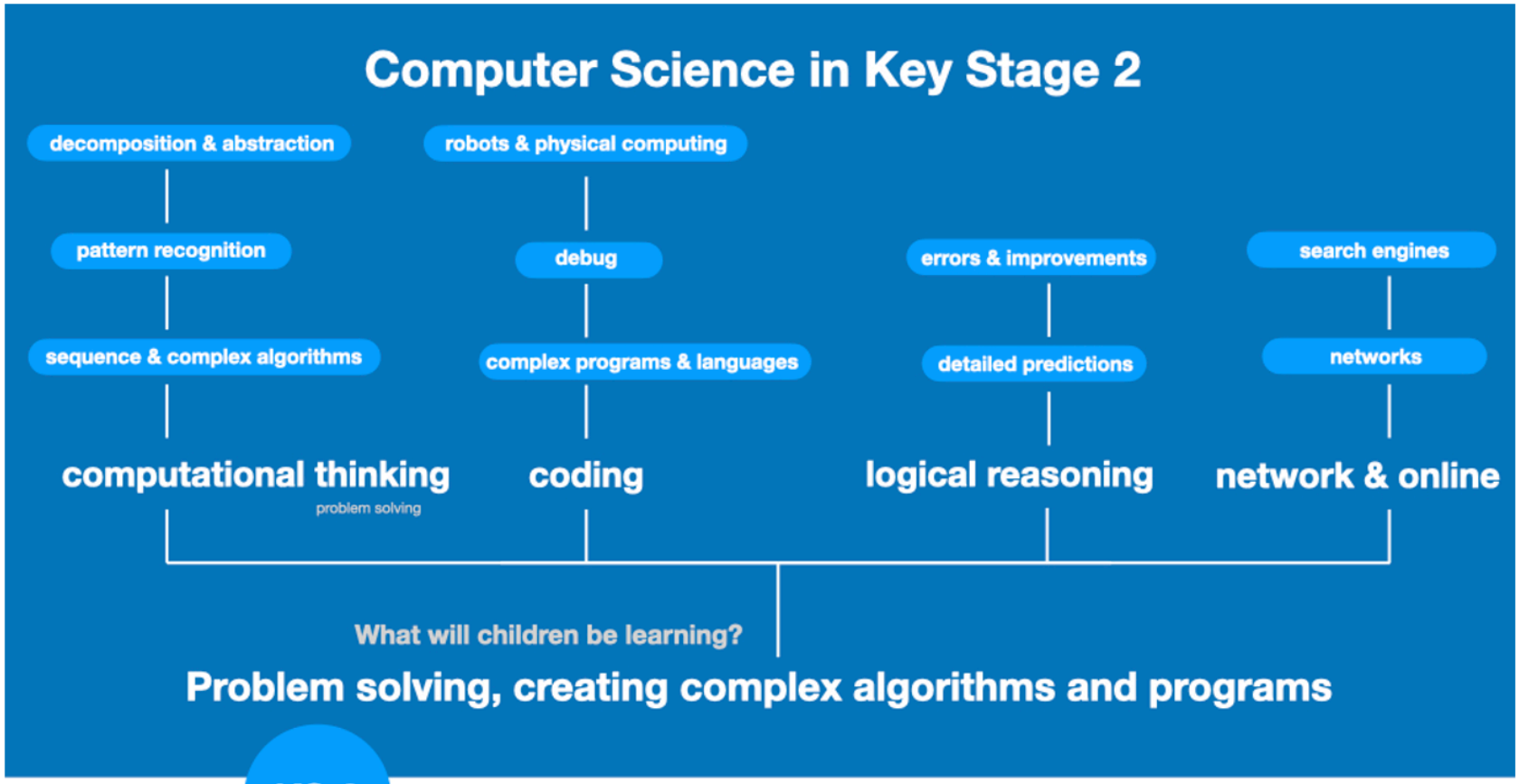

KS 2

Computer Science

How does technology work?

In Key Stage 2 the children will build on their knowledge and design skills to create and debug complex algorithms and programs, including controlling or simulating physical systems and create interactive toys. They will use a variety of programming apps, master visual programming and be introduced to text-based programming. They will use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple algorithms work and correct errors in algorithms and programs. They will be exploring how computer games work then develop interactive games and simple mobile apps. They will explore computational thinking at greater depth, which include algorithmic thinking, evaluation, decomposition, abstraction and generalisation. Children will be taught to understand computer networks, crack codes, how the internet works and the opportunities the web can offer for communication and collaboration. They will learn about using search technologies effectively, learn how search results are selected and ranked and how this can be manipulated.

Programme of Study
Computer Science KS2:

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

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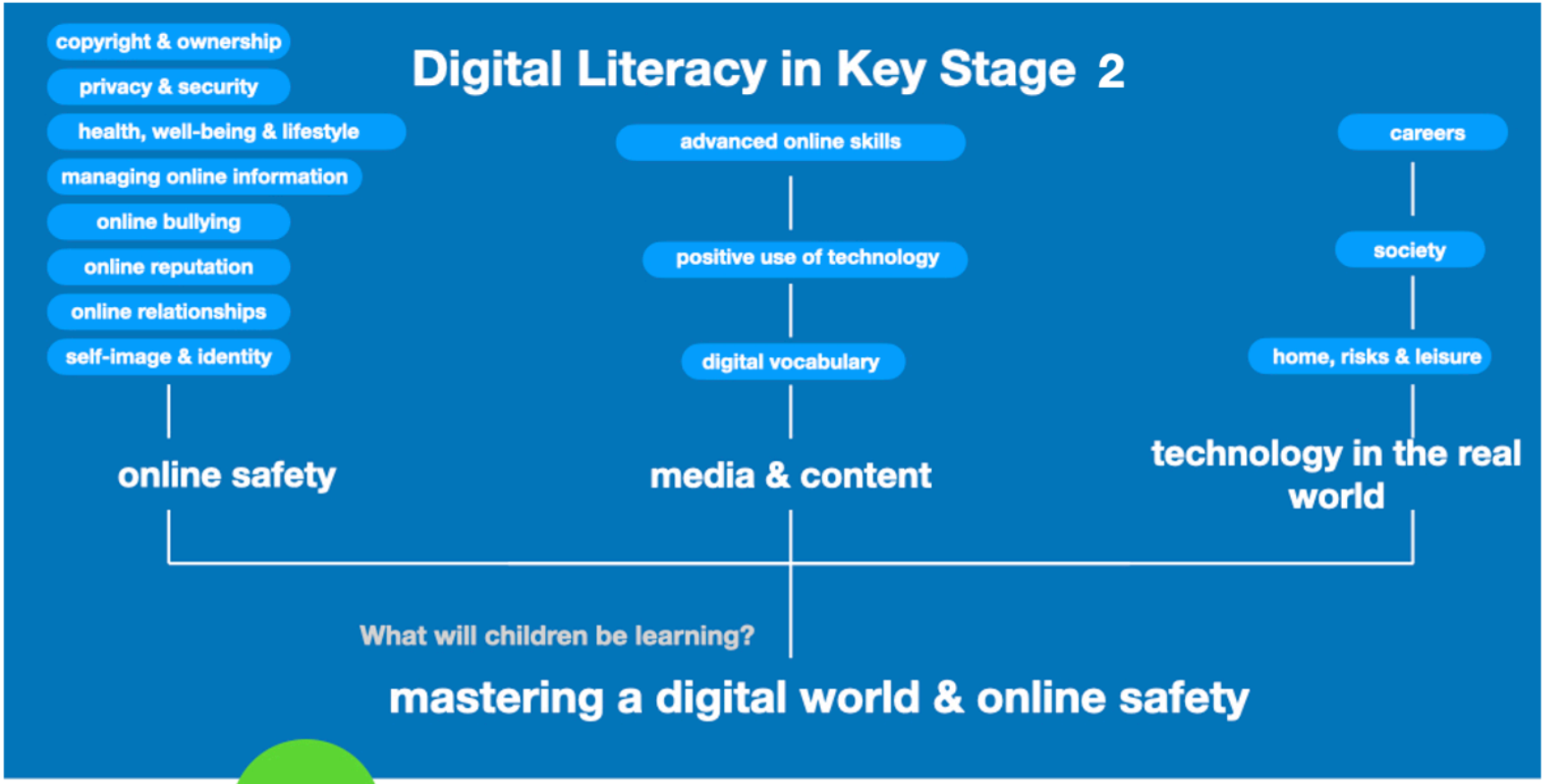

The children in Key Stage 2 will continue to explore at a deeper level the themes of; technology in society, internet safety, risks, personal information, help and support, digital content, digital communication, social media and a healthy balanced lifestyle. They will create online safety digital resources and learn about communication and collaboration by collectively creating content, use email, create and write online content. Our teaching supports the key aims of the government's Internet Safety Strategy (Digital Literacy) of supporting children to stay safe and make a positive contribution online, as well as enabling teachers to develop effective strategies for understanding and handling online risks. The framework has been produced by the UK Council for Child Internet Safety (UKCCIS).

Programme of Study	
Digital Literacy KS2:	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 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. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

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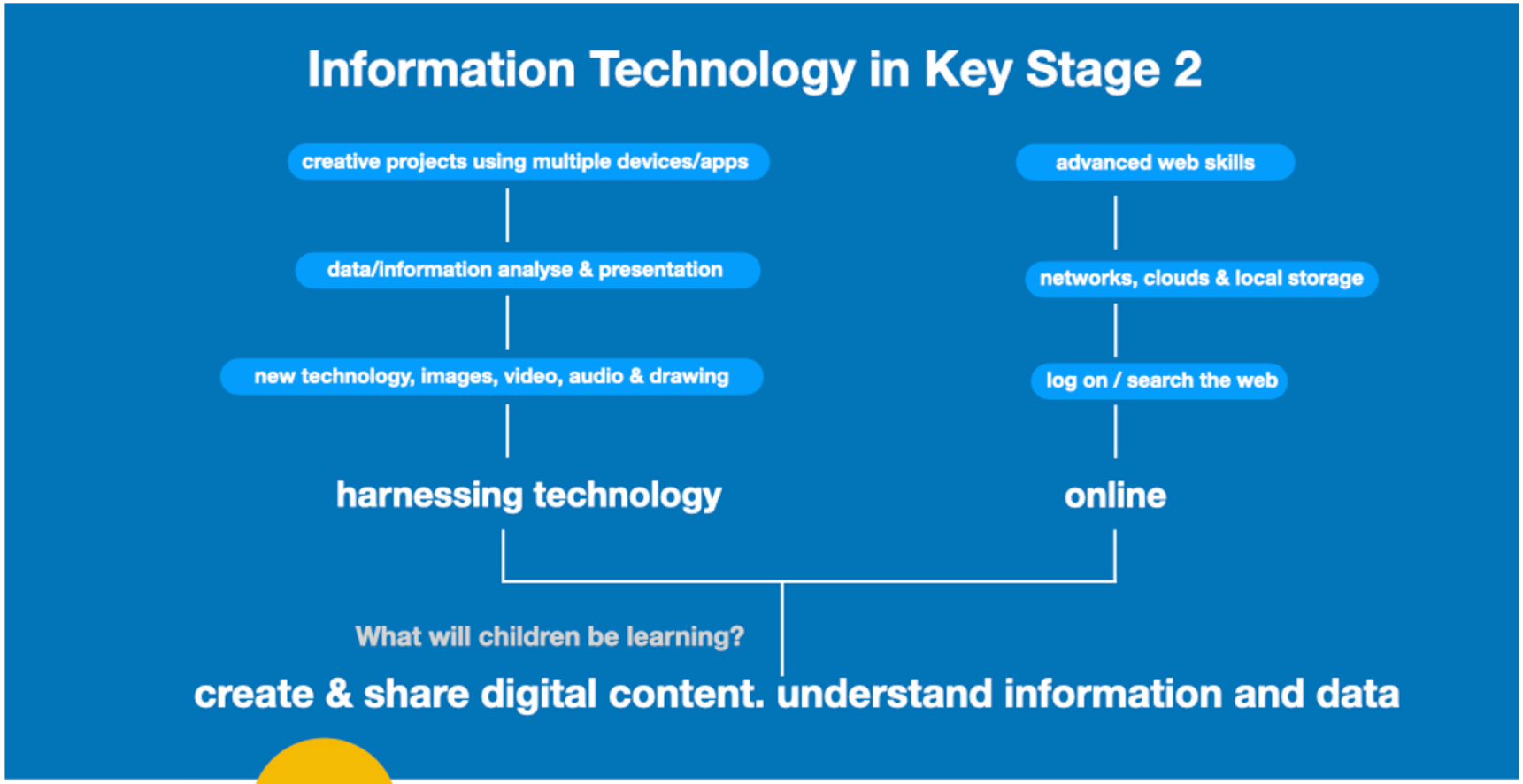

In Key Stage 2 the children will learn to express their creativity by planning and creating multimedia content and in doing so learn about combining software/apps (including internet services) and media types on a range of digital devices. They will learn advanced digital skills by creating video, manipulating images, publish on the web, content for mobile devices, how to present work, data handling and collaborate on project based activities. They will learn research skills and how to be discerning in evaluating digital content. They will learn about the latest technology trends and themes, learn about digital careers and develop project management skills. They will investigate computer networks (including school network), internet services and the Web.

Programme of Study

Information Technology KS2: 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.