SHIRELAND
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L4L Coverage Map: Technology

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Computing

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.
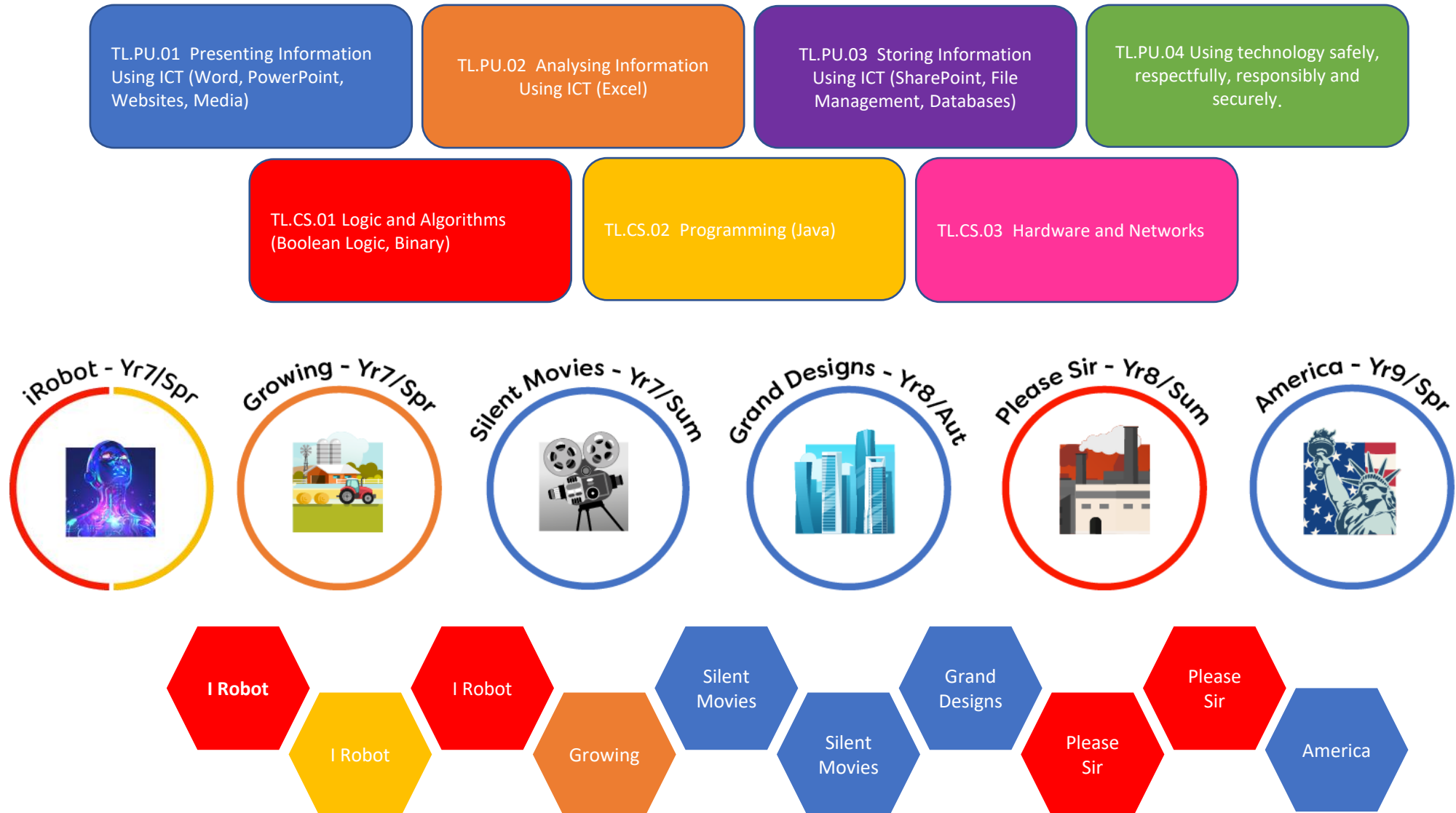
National Curriculum mapped to Competencies

The following slide shows how the skills from the National Curriculum connect to the competencies.

N.B. The KS3 Computing National Curriculum and Competency areas not covered in this document are delivered in Computing focus days outside of the L4L curriculum.

Competencies linked to the National Curriculum

Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.	**TL.CS.01 Logic and Algorithms (Boolean Logic, Binary).**
	TL.CS.02 Programming (Java)
	TL.PU.01 Presenting Information Using ICT (Word, PowerPoint, Websites, Media)
	TL.CS.03 Hardware and Networks
Can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems.	**TL.PU.02 Analysing Information Using ICT (Excel)**
Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.	
Are responsible, competent, confident and creative users of information and communication technology.	**TL.PU.04 Using technology safely, respectfully, responsibly and securely.**
	TL.PU.03 Storing Information Using ICT (SharePoint, File Management, Databases)

Technological Competencies and heat map demonstrating the distribution of technological competencies delivered in L4L.

TL.PU.01 Presenting Information Using ICT (Word, PowerPoint, Websites, Media)

TL.PU.02 Analysing Information Using ICT (Excel)

TL.PU.03 Storing Information Using ICT (SharePoint, File Management, Databases)

TL.PU.04 Using technology safely, respectfully, responsibly and securely.

TL.CS.01 Logic and Algorithms (Boolean Logic, Binary)

TL.CS.02 Programming (Java)

TL.CS.03 Hardware and Networks

iRobot - Yr7/Spr

Growing - Yr7/Spr

Silent Movies - Yr7/Sum

Grand Designs - Yr8/Aut

Please Sir - Yr8/Sum

America - Yr9/Spr

I Robot

I Robot

I Robot

Growing

Silent Movies

Silent Movies

Grand Designs

Please Sir

Please Sir

America

Technological competencies in L4L lessons

TL.PU.01 Presenting Information Using ICT (Word, PowerPoint, Websites, Media)	Silent Movies	The Language of Silent Movies and Storyboarding Editing
	Grand Designs	Web design
	America	Skyscrapers and Technology

TL.CS.01 Logic and Algorithms (Boolean Logic, Binary)	I Robot	4. Coding 10. Algorithms and choreography
	Please Sir	4. Victorian Inventors – George Boole 5. Charles Babbage, Binary and Coding

TL.PU.02 Analysing Information Using ICT (Excel)	Growing	4. Introduction to spreadsheets

TL.CS.02 Programming (Java)	iRobot	Algorithms and choreography

Not used

TL.PU.03 Storing Information Using ICT (SharePoint, File Management, Databases)

TL.PU.04 Using technology safely, respectfully, responsibly and securely.

TL.CS.03 Hardware and Networks