# Lammack Primary School    Computing Curriculum Overview

## KS1 Year A

**Information Technology**
*Use technology to organise, store, manipulate and retrieve digital content.*
Log on, typing skills, save work, mouse skills.
Word processing with a range of digital content – photos, text, sound (open existing file, edit and save).
Organise and retrieve data using a database.
[2Invesitigate, 2Sequence]
**Digital Literacy**
*Use technology safely and respectfully*
**Online safety**
Understand implications of inappropriate online searches.
Understand how things are shared electronically.

**Computer Science**
*Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.*
Beebots and probots (Algorithms, Programs, Debug and Predict behaviour of simple programs).
**Digital Literacy** *Keeping personal information private.*
**Online safety**
Develop an understanding of using email safely
[Purple Mash display board, 2Respond]
**digital Literacy**
*Keeping personal information private; identify where to go for help and support when they have concerns.*
**Online safety**
Know how to report inappropriate behaviours and content to a trusted adult.

**Computer Science**
*Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.*
Algorithms, Programs, Debug and Predict behaviour of simple programs.
[The Wrong Sandwich *or* Colouring in a Bird activity. Bubbles activity in 2Code. Debug Challenges: Chimp. *2Go Challenges.*]
**Digital Literacy**
*Keeping personal information private; identify where to go for help and support when they have concerns.*
**Online safety**
Know how to report inappropriate behaviours and content to a trusted adult.

## Year 3 Year A

**Digital Literacy**
Collect and present data and information
Power point, [2Publish], Green Screening
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Sharing information, Managing online information, [online display boards]
e.g. Green screening iPad app, Olympics.

**Digital Literacy**
*Data organising,* Collect, analyse, evaluate and present data and information
Spreadsheets (without formulae) [2Calculate]

**Digital Literacy**
**Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.**
**Online safety**
Current apps, appropriate behaviour.
Reporting inappropriate content and contact.
Online reputation

**Computer Science**
*Design, write and debug programs that accomplish specific goals.*
*Use sequence, selection and repetition in programs; work with variables and various forms of input and output.*
**Scratch**
Use logic to explain algorithms and detect errors in programs.
[*traffic light algorithm in* 2Code]
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Sharing information, password safety
[2Connect]

## Year 4 Year A

**Computer Science**
*Design, write and debug programs that accomplish specific goals.*
*Use sequence, selection and repetition in programs; work with variables and various forms of input and output.*
**Scratch**
Use logic to explain algorithms and detect errors in programs.
[*traffic light algorithm in* 2Code]
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Sharing information, password safety
[2Connect]

**Digital Literacy**
Collect and present data and information
Power point, [2Publish], Green Screening
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Sharing information, Managing online information, [online display boards]
e.g. Green screening iPad app, Olympics.

**Digital Literacy**
*Data organising,* Collect, analyse, evaluate and present data and information
Spreadsheets (without formulae) [2Calculate]

**Digital Literacy**
**Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.**
**Online safety**
Current apps, appropriate behaviour.
Reporting inappropriate content and contact.
Online reputation

## Year 5

**Computer Science**
*Design, write and debug programs that accomplish specific goals.*
*Use sequence, selection and repetition in programs; work with variables and various forms of input and output.*
Scratch 2
[2Code]
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Apps – location services
Online gaming
Online bullying
Online relationships
**Information Technology**
Email
[2Email]

**Information Technology**
*Present data and information*
Safe search
Use of search engines
Credible sources
Non-linear Power point presentation
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Current apps in use, acceptable use.
**Information Technology**
Email
**Online safety**
Email
[2Response, 2Email]

**Information Technology**
Email
[2Email]
*Analyse data and information*
Databases
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Body image – social perception
Email
[2Response, 2Email]

## Year 6

**Computer Science**
*Design, write and debug programs that accomplish specific goals.*
*Use sequence, selection and repetition in programs; work with variables and various forms of input and output.*
Lego
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Personal privacy
Mental wellbeing
Online reputation
Copyright, Permissions and Ownership

**Digital Literacy**
*Present data and information*
Safe search
Prezi –Victorian Times
Website design – Victorian school (Instagram account of Victorian child)
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Social media apps
Social perception
Health well-being and lifestyle
Managing online information
Password security – unique.

**Information Technology**
**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**
Blogging (Diary entry – comparison of Blackburn and Mayan)
[2Blog, display boards]
*Analyse data and information*
Networks
Spreadsheets with formula – Excel (designing a meal, supermarket websites)
Data logging (Temp at school compare to Mexican weather)
**Digital Literacy**
*Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.*
**Online safety**
Online gaming
Chatrooms
Reporting

# Lammack Primary School — Computing Curriculum Overview

| KS1 Year B | Lower KS2 Year B | Year 5 | Year 6 |
|---|---|---|---|
| **Information Technology** *Use technology to organise, store, manipulate and retrieve digital content.* Log on Typing skills Save work Mouse skills Word processing with a range of digital content – photos, text, sound (open existing file, edit and save). Sort, collate, edit and store simple digital content. *[Purple Mash* 2Quiz *example (sorting shapes),* 2Code *design mode (manipulating backgrounds) or using pictogram software such as* 2Count] **Online safety** Keeping username and passwords safe **Digital Literacy** *Use technology safely and respectfully, keeping personal information private* | **Digital Literacy** *Create* Paint.net Photographs – edit (link to evaluating digital content) **Digital Literacy** *identify a range of ways to report concern about content and contact.* **Online safety** Reporting Online gaming Online bullying Online relationships | **Computer Science** *Design, write and debug programs that accomplish specific goals. Use sequence, selection and repetition in programs; work with variables and various forms of input and output.* Scratch 2 [2Code] **Digital Literacy** *Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.* **Online safety** Apps – location services Online gaming Online bullying Online relationships **Information Technology** Email [2Email] | **Computer Science** *Design, write and debug programs that accomplish specific goals. Use sequence, selection and repetition in programs; work with variables and various forms of input and output.* Lego **Digital Literacy** *Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.* **Online safety** Personal privacy Mental wellbeing Online reputation Copyright, Permissions and Ownership |
| **Digital Literacy** *Recognise common uses of information technology beyond school* **Online safety** Modern technology Information technology beyond school **Digital Literacy** *Recognise common uses of information technology beyond school* Animation Make links between technology they see around them, coding and multimedia work they do in school. ['Safe Search Kids', 2Publish, animations] **Digital Literacy** *Use technology safely and respectfully, keeping personal information private* | **Digital Literacy** *Communication* introduce basic computer network hardware (CPU etc) **Digital Literacy** *Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.* **Online safety** e-mail password safety [2Email] | **Information Technology** *Present data and information* Safe search Use of search engines Credible sources Non-linear Power point presentation **Digital Literacy** *Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.* **Online safety** Current apps in use, acceptable use. **Information Technology** Email **Online safety** Email [2Response, 2Email] | **Digital Literacy** *Present data and information* Safe search Prezi –Victorian Times Website design – Victorian school (Instagram account of Victorian child) **Digital Literacy** *Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.* **Online safety** Social media apps Social perception Health well-being and lifestyle Managing online information Password security – unique. |
| **Term three:** **Digital Literacy** *Present* Dazzle Power point **Digital Literacy** *Use technology safely and respectfully, keeping personal information private* **Online safety** Ownership of work, save in private folder | **Information Technology** *Present* Safe search for information to store Branching databases Databases Use databases to search [2Questions, 2Respond, 2Graph] **Digital Literacy** *Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.* **Online safety** stay safe, conduct using 'safe search kids' using other search engines 'google' safely | **Information Technology** Email [2Email] *Analyse data and information* Databases **Digital Literacy** *Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.* **Online safety** Body image – social perception Email [2Response, 2Email] | **Information Technology** **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** Blogging (Diary entry – comparison of Blackburn and Mayan) [2Blog, display boards] *Analyse data and information* Networks Spreadsheets with formula – Excel (designing a meal, supermarket websites) Data logging (Temp at school compare to Mexican weather) **Digital Literacy** *Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour.* **Online safety** Online gaming Chatrooms Reporting |