

## **Computer, Curriculum Map – One-year Programme Year 7**

### Theme Key

|                                   |              |                    |                       |       |                        |                        |                            |
|-----------------------------------|--------------|--------------------|-----------------------|-------|------------------------|------------------------|----------------------------|
| Coding and computational thinking | Spreadsheets | Internet and Email | Media, Art and Design | Music | Databases and Graphing | Writing and Presenting | Communication and networks |
|-----------------------------------|--------------|--------------------|-----------------------|-------|------------------------|------------------------|----------------------------|

[Autumn 1](#)

[Autumn 2](#)

[Spring 1](#)

[Spring 2](#)

[Summer 1](#)

[Summer 2](#)

**Nurture, Believe, Achieve, Succeed**

\*Online Safety, will be covered in ICT across all the different topics, where applicable to all students and groups across the different pathways.

# ICT KS3 Formal

## Year 7 Autumn 1

### Overarching Topic: ICT and development

| Topic                                                                                                                                                                                                                                                                                                                               | Basic ICT skills                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Skills/Knowledge</b>                                                                                                                                                                                                                                                                                                             | Students will develop and apply essential digital literacy skills across the range of programmes and digital tools used in school. This will include accessing and opening documents, creating, saving and organising files, using basic editing and formatting tools, and developing effective word-processing skills. Students will apply these skills independently to support their learning and complete tasks across different subjects and topics. |
| <b>Stands Covered</b><br><b>Digital Literacy, Information Technology, Computer Science</b>                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Suggested activities for formal learners</b>                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>1. Opening Documents</b> <ul style="list-style-type: none"> <li><b>Activity:</b> Have students open a new or existing document in a word processing application. This can be done by navigating through the application's interface or using shortcut keys <a href="#">1</a>, <a href="#">2</a></li> </ul> <b>2. Saving Work</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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- **Activity:** Instruct students to save their work by using the 'Save' or 'Save As' function. They should practice saving documents in different formats and locations, such as on the computer, a USB drive, or cloud storage [3, 4](#)

### 3. Basic Editing and Word Processing Skills

- **Activity:** Assign tasks that require students to edit a given text by using cut, copy, and paste functions. They should also practice formatting text by changing font styles, sizes, and colours, and using bold, italics, and underline features [5, 6](#)

### 4. Inserting Images and Graphics

- **Activity:** Have students insert images into their documents and adjust the size and position of the images. They can also explore adding shapes, lines, and word art to enhance their documents [7, 8, 9](#)

### 5. Creating Lists and Organizing Information

- **Activity:** Ask students to create a list of items using bullets or numbers. They can also create a table to organize information, such as a schedule or a list of resources [10, 11](#)

### 6. Proofreading and Correcting Writing

- **Activity:** Provide students with a text containing deliberate errors and have them use spell check and grammar check tools to identify and correct the mistakes [12, 13](#)

### 7. Publishing and Sharing Documents

- **Activity:** Teach students how to print their documents and how to share them via email or cloud services. They should also learn to adjust document settings for different sharing options [14, 4](#)

### Suggested activities for semi-formal learners

Clicker

Matching activities, both plugged and unplugged

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## Wordwall activities

<https://wordwall.net/resource/36132310>

## ICT equipment

<https://wordwall.net/resource/36132011>

<https://wordwall.net/resource/12858908>

<https://wordwall.net/resource/97610525>

## Keyboard

<https://wordwall.net/resource/27421276>

<https://wordwall.net/resource/27421276>

## Mouse work

[Dragon Drop | Computer Mouse Practice Game for Kids](#)

[GeoBoard | Online Math Tool for Kids](#)<sup>0</sup>

<https://im-a-puzzle.com/share/fb4bfd550cd9c53>

More can be found in the following places.

## Resources

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# ICT KS3 Formal

## Year 7 Autumn 2

### Overarching Topic: ICT and development

| Topic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Advanced ICT skills                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Skills/Knowledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Students will move further with their ICT skills using different programs that we use in school. |
| <b>Stands Covered</b><br><b>Digital Literacy, Information Technology, Computer Science</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                  |
| <b>Suggested activities for formal learners</b><br><a href="https://teachcomputing.org/curriculum">https://teachcomputing.org/curriculum</a>                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                  |
| <b>1. Create a Multimedia Presentation</b><br><p>Students should learn to create engaging presentations by incorporating various multimedia elements.</p> <ul style="list-style-type: none"> <li><b>Activity:</b> Create a multimedia presentation on a chosen topic using Microsoft PowerPoint. Incorporate visual effects, photos, videos, and music to enhance the presentation <a href="#">1</a></li> <li>All about me presentation – using canvas for some templates or they can use PowerPoint. What can they do in terms of their skills?</li> </ul> |                                                                                                  |
| <b>2. Collaborative Presentations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                  |

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Encouraging collaboration helps students develop teamwork and communication skills.

- **Activity:** Work in groups to create a shared presentation. Each student can be responsible for different slides, and they can use cloud-based tools like Google Slides or Microsoft Powerpoint to collaborate in real-time [2](#)

### 3. Informational Graphics

Creating informational graphics helps student's present data and information visually.

- **Activity:** Design an infographic on a specific topic using PowerPoint. Students can use shapes, icons, and text to create a visually appealing and informative graphic [3](#)

## Spreadsheets/Google Sheets Activities

### 1. Basic Spreadsheet Skills

Students should start by mastering basic spreadsheet skills such as entering data, formatting cells, and using simple formulas.

- **Activity:** Utilize Google Sheets or Microsoft Excel to create a new spreadsheet. Practice navigating the Google Sheets or Microsoft Excel interface and customizing the spreadsheet for specific needs, such as modifying and formatting cells [4, 5](#)

### 2. Data Management and Analysis

Understanding how to manage and analyse data is crucial for many advanced ICT tasks.

- **Activity:** Complete common spreadsheet tasks in Google Sheets or Microsoft Excel, such as using formulas to produce data. This can include tasks like sorting, using the fill handle, and understanding functions [6, 5](#)

### 3. Creating Charts and Graphs

Visualizing data through charts and graphs helps students interpret and present data effectively.

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- **Activity:** Create charts and graphs from data in Google Sheets or Microsoft Excel. Students can enter data, use formulas, and then create various types of charts to represent the data visually [7](#)

#### 4. Budgeting and Financial Planning

Budgeting activities teach students practical financial skills and how to use spreadsheets for real-world applications.

- **Activity:** Create a budget in Google Sheets or Microsoft Excel. Students can list income and expenses, use formulas to calculate totals, and create charts to visualize their budget [8, 9](#)

#### 5. Conditional Formatting and Data Sorting

Advanced formatting and sorting techniques help students manage and analyse large datasets.

- **Activity:** Use conditional formatting to highlight specific data points in Google Sheets or Microsoft Excel. Students can also practice sorting data based on different criteria [10](#)

#### Suggested activities for semi-formal learners

[SharePoint Resources](#)

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## 1. Create a Simple Multimedia Presentation

Students should learn to create simple presentations by incorporating various multimedia elements.

- **Activity:** Create a simple presentation on a chosen topic using Microsoft PowerPoint or Canva. Incorporate basic visual effects and photos to enhance the presentation.

## 2. Collaborative Storytelling

Encouraging collaboration helps students develop teamwork and communication skills.

- **Activity:** Work in pairs or as a group to create a shared story using Microsoft PowerPoint or Canva. Each student could be responsible for different slides, and use the teacher's guidance to collaborate.

## 3. Simple Informational Graphics

Creating informational graphics helps students' present data and information visually.

- **Activity:** Design a simple infographic on a specific topic using PowerPoint or Canva. Students can use basic shapes and text to create a visually appealing and informative graphic.

## Spreadsheets/Google Sheets Activities

### 1. Introduction to Spreadsheets

Students should start by getting familiar with the concept of a spreadsheet.

- **Activity:** Show students a simple spreadsheet in Google Sheets or Microsoft Excel. Explain what rows, columns, and cells are.

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- **Unplugged Activity:** Draw a simple spreadsheet on a large piece of paper, explain what rows, columns, and cells are. See if students can copy this task include elements of labelling the rows, columns, and cells.

## 2. Simple Data Entry

Understanding how to enter data is a basic ICT task.

- **Activity:** Guide students to enter simple data (like favourite colours, food or song) into a Google Sheets or Microsoft Excel spreadsheet.
- **Unplugged Activity:** Using the spreadsheet created the week before, students could go around school or the classroom gathering and inputting data relating to their question.

## 3. Simple Charts Visualisation

Introduction to Charts Visualising data through charts helps students interpret and present data effectively.

- **Activity:** Show students a simple chart in Google Sheets or Microsoft Excel. Explain what the chart represents.
- **Unplugged Activity:** Using the data collected on the previous lesson or week, students will create a simple bar chart, graph or visualizer on paper. This can be done as a group activity or individual dependant on ability in the class.

## 4. Simple Charts Visualisation

Introduction to sorting techniques helps students manage and understand data.

- **Activity:** Show students how data can be sorted in Google Sheets or Microsoft Excel. Use simple data like a list of their favourite colours or favourite food.
- **Unplugged Activity:** Colour Sorting - provide students with a variety of coloured objects (like blocks, buttons, or beads). Ask them to sort these objects by colour into different containers. This activity will help students understand the concept of categorizing data based on a single attribute (colour).

Shape Sorting - provide students with a variety of objects of different shapes (like blocks, buttons, or beads). Ask them to sort these objects by shape into different containers. This activity will help students understand the concept of categorizing data based on another single attribute (shape).

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Size Sorting - provide students with a variety of objects of different sizes. Ask them to sort these objects by size into different containers. This activity will help students understand the concept of categorizing data based on yet another single attribute (size).

Alphabetical Sorting - write different words on cards. Ask students to sort these cards in alphabetical order. This activity will help students understand the concept of sorting data in a specific order.

Number Sorting - write different numbers on cards. Ask students to sort these cards in numerical order. This activity will help students understand the concept of sorting numerical data in a specific order.

Animal Sorting - provide students with pictures of different animals. Ask them to sort these pictures based on different criteria (like animals that fly and animals that don't, animals that live in water and animals that don't, etc.). This activity will help students understand the concept of categorising data based on multiple attributes.

Sorting Activity with Everyday Objects - ask students to bring an object from home. Collect all objects and ask students to sort them based on different criteria (like soft and hard, heavy and light, etc.). This activity will help students understand the concept of categorising real-world data based on multiple attributes.

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## ICT KS3 Formal

Year 7 Spring 1

| Overarching Topic: ICT in the real world |                                                                                                                                                                 |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Topic                                    | Technology around us<br>School-based                                                                                                                            |
| Skills/Knowledge                         | The students will learn what technology we have at school. They will learn how to use new equipment and secure their knowledge of using existing ICT equipment. |

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| <b>Stands Covered</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |
| <b>Digital Literacy, Information Technology, Computer Science</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| <b>Suggested activities for formal learners</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <a href="https://teachcomputing.org/curriculum">https://teachcomputing.org/curriculum</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
| <ul style="list-style-type: none"> <li>- Students can recognise a range of technologies used in school and in the world.</li> <li>- Research on how 1 technology was made, i.e. how the mobile phone was created.</li> <li>- Make a timeline of a piece of technology – look at how computers have changed.<br/>How to stay safe online and how to use ICT safely – through discussion and look at digital footprint.</li> <li>- Discussion about AI within schools and the uses for it.</li> </ul> <p><b>1. Recognising and Understanding ICT Around Us</b></p> <p><b>Activity: Identifying ICT in School</b></p> <ul style="list-style-type: none"> <li>• <b>Description:</b> Students will explore their school environment to identify different examples of information technology (IT) and discuss their purposes. (<a href="#">Activity can be found here in SharePoint</a>)</li> <li>• <b>Explanation:</b> This activity helps students recognise the various forms of IT they encounter daily, such as computers, interactive whiteboards, and tablets, and understand their uses in a school setting <a href="#">1 (activity can be found in SharePoint)</a></li> </ul> <p><b>Activity: Sorting ICT by Usage</b></p> <ul style="list-style-type: none"> <li>• <b>Description:</b> Students will categorise different IT devices based on their functions, such as communication, learning, or entertainment.</li> </ul> |  |

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- **Explanation:** This task enhances students' ability to differentiate between various IT devices and understand that some devices can serve multiple purposes [2](#) ([activity to help with this can be found here](#))

Activity – Creating your own iPad

- Activity can be found here

Activity – Benefits of using technology

- Activity can be found [here](#)

## 2. Digital Media Creation

### Activity: Digital Painting

- **Description:** Students will use digital painting tools to create artwork on computers or tablets.
- **Explanation:** This activity introduces students to digital art, allowing them to explore creativity using digital tools and understand the basics of digital media [3, 4](#)

Benefits of Technology around us

### Activity: Digital Writing

- **Description:** Students will use word processing software to write and format simple texts.
- **Explanation:** This lesson helps students develop basic typing and text formatting skills, fostering their ability to create and manipulate digital content [5, 6](#)

## 3. Programming and Robotics

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#### Activity: Moving a Robot

- **Description:** Students will learn to program simple robots to perform tasks, such as moving in specific directions.
- **Explanation:** This hands-on activity introduces students to basic programming concepts and the idea of giving instructions to digital devices to make things happen [7, 8](#)

#### Activity: Programming Animations

- **Description:** Students will create simple animations using beginner-friendly programming tools.
- **Explanation:** This activity encourages logical thinking and creativity as students learn to sequence instructions to create animated stories or scenes [9, 10](#)

### 4. Data and Information

#### Activity: Grouping Data

- **Description:** Students will collect and group data based on different criteria, such as colour, shape, or size.
- **Explanation:** This lesson helps students understand the concept of data organization and categorization, which is fundamental in computing [11](#)

#### Activity: Inside My Mobile

- **Description:** Students will build a paper model of a mobile phone to learn about its components.
- **Explanation:** This activity provides a tangible way for students to explore the internal parts of a mobile phone and understand how these components work together

### 5. E-Safety and Digital Citizenship

#### Activity: Smartie the Penguin

- **Description:** An e-safety story that teaches students about safe online behavior through the adventures of Smartie the Penguin.

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- **Explanation:** This story-based activity helps young students understand the importance of online safety and how to make safe choices when using the internet [13](#)

#### Activity: The Adventures of Kara, Winston, and the SMART Crew

- **Description:** An animation series that highlights the five SMART rules for safe internet use.
- **Explanation:** This engaging resource teaches students about digital citizenship and the importance of being safe and respectful online [14](#)

### 6. Exploring Technology Beyond School

#### Activity: Future Computers

- **Description:** Students will evaluate everyday tasks before and after the advent of the internet.
- **Explanation:** This activity helps students appreciate the impact of modern technology on daily life and understand how it has transformed various tasks [15](#)

#### Activity: Technology in Different Settings

- **Description:** Lessons exploring how IT is used in various non-school settings, such as supermarkets, banks, and libraries.
- **Explanation:** This lesson broadens students' understanding of the diverse applications of IT in different environments, highlighting its importance beyond the classroom [16](#)

### Suggested activities for semi-formal learners

#### 1. Recognising and Understanding ICT Around Us

Clicker activities that get the students to match

Wordwall activities

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Activity folder can be found [here](#)

<https://wordwall.net/resource/103893052>

Technology around us

[Handout - Is it technology.pptx](#)

### Identifying ICT in School

- **Activity:** Students will explore their school environment to identify different examples of ICT and discuss their purposes. Students can gather their findings by taking pictures of each form of ICT using an iPad.
- **Explanation:** This activity helps students recognise the various forms of IT they encounter daily, such as computers, interactive whiteboards, and tablets, and understand their uses in a school setting

### IT in Our Homes

- **Activity:** Students to list or draw the ICT devices they use at home and discuss their functions. If students are not able to draw, use images to play a pair game with devices found in the house mixed in with devices found in school. Once identified the pairs, discuss their usage and sort between school and home devices discussing any cross overs.
- **Explanation:** This activity helps students recognise the role of ICT in their daily lives at home, such as televisions, computers, gaming consoles, and smartphones.
- **Clicker 7 Activity:** Create a Clicker 7 matching set using devices found in their daily lives at home.

### IT and Communication

- **Activity:** Discuss with students how we use IT to communicate. Examples could include email, video calls, social media, and instant messaging.
- **Explanation:** This activity helps students understand how IT has transformed the way we communicate.

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## IT and Entertainment

- **Activity:** Discuss with students how we use IT for entertainment. Examples could include streaming movies and music, playing video games, and using virtual reality headsets.
- **Explanation:** This activity helps students understand how IT enhances our leisure activities

## 2. Digital Media Creation

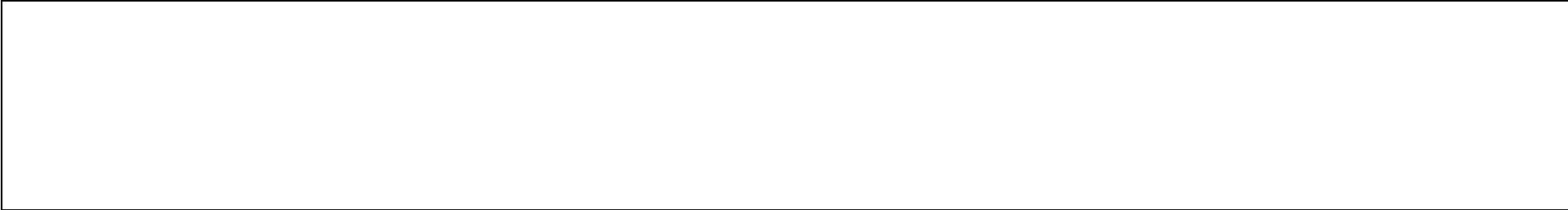
### Digital Painting

- **Activity:** Students will use digital painting tools to create artwork on computers or tablets. This activity introduces students to digital art, allowing them to explore creativity using digital tools and understand the basics of digital media.
- **Unplugged Activity**

**Pixel Art with Grid Paper** - this activity introduces the concept of pixels, which are the building blocks of digital images. Provide students with grid paper and coloured pencils or markers. Ask them to create an image using each square of the grid as a pixel.

**Texture Rubbing** - provide students with crayons and different textured materials (like leaves, coins, or textured fabric). Ask them to create texture rubbings by placing the paper over the material and rubbing the crayon over it.

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**ICT**  
**KS3 Formal**

Year 7 Spring 2

**Overarching Topic: ICT and Programming**

**Topic**

**Algorithms**

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Skills/Knowledge</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | The students will learn about cause and effect and an introduction to algorithms and commands with physical systems. |
| <b>Stands Covered</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                      |
| <b>Digital Literacy, Information Technology, Computer Science</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                      |
| <b>Suggested activities for formal learners</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                      |
| <a href="https://teachcomputing.org/curriculum">https://teachcomputing.org/curriculum</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                      |
| <p>Blindfolded follow my lead activities – such as guiding through a maze. Focus could be left or right.</p> <p>Lego - <a href="https://www.lego.com/en-gb/themes/classic/building-instructions">https://www.lego.com/en-gb/themes/classic/building-instructions</a></p> <p>Bee-Bots or other physical control objects, radio-controlled cars, track vehicles,</p> <p>Instructional work/following instructions.</p> <p>Simon online<br/>EChalk – Simon says<br/><a href="https://www.echalk.co.uk/amusements/Games/Simon/simon.html">https://www.echalk.co.uk/amusements/Games/Simon/simon.html</a></p> <p>Blind drawing – students to sit back-to-back. Can they give sentence instructions to draw the same as what they have done?</p> <p><b>Unplugged Activities</b></p> <ol style="list-style-type: none"> <li><b>Acting Like an Algorithm:</b> This activity helps students understand how algorithms work by symbolising the Google PageRank algorithm. It emphasises the importance of algorithms in optimising tasks and making calculations easier <a href="#">4</a> <b>THIS WORKS VERY WELL</b></li> <li><b>Barefoot Computing Unplugged Activity:</b> Students create their first algorithm through activities that encourage computational thinking, such as decomposition, logical reasoning, and simple debugging <a href="#">.5</a> <b>THIS WORKS VERY WELL</b></li> </ol> |                                                                                                                      |

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3. **Origami** – Students to work on their listening skills and following skills. Can they create some origami. Use this link [here](#) to get worksheets

<https://origami.guide/origami-instructions-for-kids/>

<https://www.youtube.com/watch?v=cZdO2e8K29o>

### Plugged Activities

1. **Bee-Bots:** Using Bee-Bots, students can create and debug simple programs, predict the behaviour of these programs, and explore various themed mats like the Gingerbread Man or Pirate-themed mats [8](#)
2. **ScratchJr:** This platform allows students to engage in various activities such as running a race, dribbling a basketball, or creating animated genres. These activities help reinforce literacy and mathematical concepts while teaching programming [9](#)

### Hands-On and Creative Activities

1. **Designing Algorithms for Robots:** Students can design algorithms to move a robot around a mat, identifying starting and finishing points and creating a program to achieve their goal [10](#)
2. **Creating Models and Instructions:** Using materials like Lego, students can build simple models and then create instructions (algorithms) for others to recreate their models. This activity emphasises the importance of clear and precise instructions [11](#)

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3. **Printable and Digital Activities:** These activities involve colouring pictures following an algorithm, ordering steps, identifying bugs, and writing their own algorithms. They serve as a crash course in understanding, writing, and decomposing algorithms [12](#)

### Suggested activities for semi-formal learners

Using the pecs symbols, can students do certain tasks

Making toast

Making a drink

Cleaning up

Folding up a piece of paper.

Collecting certain things from around the school.

Depending on the group, can they create an aeroplane

*Using Visual Aids and Flowcharts*

**Objective:** Simplify the understanding of algorithms through visuals.

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**Activity:** Teach students to create flowcharts for simple algorithms. Start with a familiar process, like deciding what to wear based on the weather. Use symbols and colors to make it engaging. This visual representation can help students grasp the concept of algorithms more easily and serve as a reference for future lessons 3

Blindfolded follow my lead activities – such as guiding through a maze. Focus could be left and right.

Bee-Bots or other physical control object, radio-controlled cars, track vehicles,

Instructional work/following instructions.

Simon online

EChalk – Simon says

<https://www.echalk.co.uk/amusements/Games/Simon/simon.html>

Blind drawing – students to sit back to back. Can they give sentence instructions to draw the same as what they have done.

## ICT KS3 Formal

### Year 7 Summer 1

| Overarching Topic: ICT for Pleasure, Leisure, and Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| Topic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ICT in my world                                                    |
| Skills/Knowledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The students will demonstrate their interest in using ICT at home. |
| <b>Stands Covered</b><br><b>Digital Literacy, Information Technology, Computer Science</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                    |
| <b>Suggested activities for formal learners</b><br><a href="https://teachcomputing.org/curriculum">https://teachcomputing.org/curriculum</a>                                                                                                                                                                                                                                                                                                                                                                                          |                                                                    |
| List the devices they use at home. Comment on what they do with this, games they play, what they watch, apps they use etc.<br>Creating a poster showcasing what they use at home and highlighting their interests <ul style="list-style-type: none"> <li>- Students can recognise a range of technology used in school and in the world.</li> <li>- Research on how 1 technology was made i.e. how the mobile phone was created.</li> <li>- Make a timeline of a piece of technology – look at how computers have changed.</li> </ul> |                                                                    |

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How to stay safe online and how to use ICT safely – through discussion and look at digital footprint.

1. **Digital Portfolio Creation:** Students can create a digital portfolio that highlights their skills and projects related to ICT. This could include coding projects, graphic design works, or multimedia presentations.
2. **Blogging or Vlogging:** Encourage students to start a blog or YouTube channel where they discuss their experiences with technology, share tutorials on software they've mastered, or review the latest gadgets and apps.
3. **Online Courses or Certifications:** Students can enrol in online courses related to ICT and document their learning journey. They can present certificates or badges earned as a result of their dedication.
4. **Home Automation Project:** Students can set up a home automation project using smart devices (if available) and document the process. They can create a video or presentation to demonstrate how they control devices through apps or voice commands.
5. **Coding Challenge:** Organise a coding challenge where students create a simple app or game. They can showcase the final product along with the coding process and challenges faced.
6. **ICT in Daily Life Presentation:** Students can prepare a presentation on how they use technology in their daily lives, highlighting various applications and tools that help them with studies, hobbies, or chores.
7. **Digital Art Creation:** Students can use graphic design software or apps to create digital art. They can showcase their artwork online or in a virtual gallery format.
8. **Social Media Campaign:** Students can design a social media campaign around an ICT-related topic, such as online safety, coding for kids, or the importance of digital literacy, and present their strategy and expected outcomes.
9. **Tech Tutorials:** Encourage students to create short video tutorials on how to use specific software, apps, or tools they are familiar with, sharing tips and tricks with their peers.
10. **Podcasting:** Students can start a podcast discussing the latest trends in technology, interviewing family members about their experiences with tech, or sharing insights on how ICT impacts their lives.

#### Suggested activities for semi-formal learners

Students to match technology around the school with each other.

Go around and take photos using the iPad of the equipment in school. Taking a picture of themselves using it. You are going to create a digital profile for yourself

Jigsaw - picture of technology, can they then match the correct bit of equipment? The teacher cuts up the picture using different sizes and numbers according to class ability.

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Internet or real-world sheet in SharePoint. Here

*Photo Collage Project*

**Objective:** Encourage self-expression and digital literacy.

**Activity:** Students can collect images (either printed or digital) that represent their interests or aspects of their lives. Using a simple photo editing tool or app, they can create a collage. This can be accompanied by a short written piece explaining their choices, which helps improve their writing skills while allowing them to express their identity. Do this either plugged or unplugged.

Using clicker 7, get the students to put the technology next to their names/picture.

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## KS3 Formal

### Year 7 Summer 2

| Overarching Topic: ICT and Creativity |                  |
|---------------------------------------|------------------|
| Topic                                 | ICT & Creativity |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Skills/Knowledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Showcasing skills that they have learnt over the last year, within a program of their choice. |
| <p style="text-align: center;"><b>Stands Covered</b></p> <p style="text-align: center;"><b>Digital Literacy, Information Technology, Computer Science</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                               |
| <p style="text-align: center;"><b>Suggested activities for formal learners</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                               |
| <p style="text-align: center;"><a href="https://teachcomputing.org/curriculum">https://teachcomputing.org/curriculum</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                               |
| <p>What have the students learnt this year? Thinking about the skills they have learnt. What have they learnt?</p> <p>What are they doing over the summer</p> <p>This will include presentations, leaflets, and poster design</p> <ol style="list-style-type: none"> <li><b>Digital Portfolio Creation:</b> Students can create a digital portfolio that highlights their skills and projects related to ICT. This could include coding projects, graphic design works, or multimedia presentations.</li> <li><b>Blogging or Vlogging:</b> Encourage students to start a blog or YouTube channel where they discuss their experiences with technology, share tutorials on software they've mastered, or review the latest gadgets and apps.</li> <li><b>Online Courses or Certifications:</b> Students can enrol in online courses related to ICT and document their learning journey. They can present certificates or badges earned as a result of their dedication.</li> <li><b>Home Automation Project:</b> Students can set up a home automation project using smart devices (if available) and document the process. They can create a video or presentation to demonstrate how they control devices through apps or voice commands.</li> <li><b>Coding Challenge:</b> Organise a coding challenge where students create a simple app or game. They can showcase the final product along with the coding process and challenges faced.</li> <li><b>ICT in Daily Life Presentation:</b> Students can prepare a presentation on how they use technology in their daily lives, highlighting various applications and tools that help them with studies, hobbies, or chores.</li> </ol> |                                                                                               |

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7. **Digital Art Creation:** Students can use graphic design software or apps to create digital art. They can showcase their artwork online or in a virtual gallery format.
8. **Social Media Campaign:** Students can design a social media campaign around an ICT-related topic, such as online safety, coding for kids, or the importance of digital literacy, and present their strategy and expected outcomes.
9. **Tech Tutorials:** Encourage students to create short video tutorials on how to use specific software, apps, or tools they are familiar with, sharing tips and tricks with their peers.
10. **Podcasting:** Students can start a podcast discussing the latest trends in technology, interviewing family members about their experiences with tech, or sharing insights on how ICT impacts their lives.

#### Suggested activities for semi-formal learners

Digital Painting – making shapes, using colours, draw yourself.

<https://teachcomputing.org/curriculum/key-stage-1/creating-media-digital-painting>

*Photo Journals from their first year at Ravenscliffe*

**Objective:** Encourage self-expression and reflection.

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**Activity:** Students can create a digital photo journal using tools like Canva or Google Photos. They can take pictures of their daily lives, favourite places, or activities and write captions or short reflections for each photo. This activity promotes creativity and helps them articulate their thoughts and experiences.

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