



**iMedia**

**Lite L2 iProgram – iFunction**

**KS1 PPA Cover Planning**

- **Work Schemes**
- **Learning Objectives**
- **Key Skills**

## **Lite Level 2**

### iFunction

Unit Length: 5 – 7 hours

iFunction looks at creating programs to solve real world problems.

Building upon their knowledge of 'Blockly' from level 1 they will apply it to create games, control solutions and other problems mimicking real application of programming. We will also introduce written programming languages and learn basic syntax.

### ***Apps Used Include: Tynker, Scratch Jnr. and Hopscotch***

#### **Learning Session 1:**

Refresh from Level 1 using Tynker – Space Cadet and Kodable

Students will recap over level 1 focusing on the basics of computer science and refresh their understanding of algorithms and programming.

#### **Learning Session 2:**

Making Shapes in Hopscotch.

Students will recap on making shapes within 'Hopscotch' focusing on loops, making coding shorter and the concept of 'making life easier' for the programmer.

#### **Learning Session 3:**

Recreating Pictures in Hopscotch

Continuing from the previous learning session students will continue to develop their understanding of algorithms and loops by implementing them in creative contexts to draw pictures within 'Hopscotch'.

#### **Learning Session 4:**

Intro to scratch Jnr. and creating storyboards

Students will learn more about computational thinking, developing their ability to create algorithms that can make choices: **'if'** this **'then'** that. Students will use the app 'Scratch Jnr' to develop understanding.

#### **Learning Session 5:**

Storytelling with Scratch Jnr.

Students will be tasked in creating their own story using 'Scratch Jnr.' This will require students to be creative in their programming and problem solve to learn how to make their characters interact and move around. Students will demonstrate their understanding to all key skills discovered within level 1 and level 2 by applying this knowledge to their stories.

#### **Learning Session 6:**

Storytelling with Scratch Jnr.

Students will continue with their stories before showcasing them to the class.

**Contingency:** Additional lesson plans are in place for less able students and higher ability students.

## iMedia

*Congratulations on booking your iMedia sessions with Junior Jam. In this document we will provide you with key information relating to the PPA cover that you have booked.*

### Secure Website

We have created a login for your school on our website where you can access key information. We have found this is a quick and easy way to provide you with all of the information you require. Using this login you can access all of our risk assessments and insurance documents, as well as a copy of each staff member's CRB with a photo attached. You can view these by clicking on the 'documents' tab at the top. The website address to access this information is below; please use the username and password details that are on your order confirmation.

**[www.juniorjam.co.uk/protected](http://www.juniorjam.co.uk/protected)**

### Space Requirements

Our iMedia lessons simply require the use of a classroom. Depending on the workshop type we may be required to move desks around to create a more effective space; the staff members will always return the classroom to the state it was found in. The iDesign and iFilm workshops may also utilise outdoor spaces to add to the childrens' learning; this will always be done with school permission prior to the session beginning. If a projector is available we ask to have access to it, as it is a great teaching aid.

### PPA Questionnaire

Before the first PPA cover session our leader will arrive 30 minutes early to fill in a quick question sheet relating to your school and the classes they will be teaching. If you could arrange for either yourself, a deputy or a class teacher to sit down with our leader to run through this questionnaire it would be of great benefit to the lessons they run.

### Media Uploads and Feedback

At the end of each iMedia level, the work that has been produced will be uploaded to our secure website. Your order confirmation contains the login details, simply click on the 'media uploads' tab to see the work that has been completed at the end of each half term. There is also a message board to communicate with the teaching staff at your school where they will be able to post feedback on how the sessions have gone.

## lite Level 2 iFunction Learning Objectives

The learning pathways for each iMedia subject are in line with the Curriculum 2014. The content is outlined below and matched to how it will be covered over this module. iMedia levels are topic-based so students will be learning beyond these attainment targets and in real life contexts.

### Curriculum 2014

#### Computing

- 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.
- 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.
- Use technology safely, respectfully and responsibly; know a range of ways to report concerns and inappropriate behaviour.
- Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

## Learning Session 1

### Learning Objectives

- Understand what algorithms are; how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions.
- Use technology safely and respectfully, keeping personal information private; know where to go for help and support when they have concerns about material on the internet.

Students will recap over level 1 focusing on the basics of computer science and refresh their understanding of algorithms and programming.

## Learning Session 2

### Learning Objectives

- Understand what algorithms are; how they are implemented as programs on digital devices and that programs execute by following precise and unambiguous instructions.
- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.

Students will recap on making shapes within 'Hopscotch' focusing on loops, making coding shorter and the concept of 'making life easier' for the programmer.

## Learning Session 3

### Learning Objectives

- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.

Continuing from the previous learning session students will continue to develop their understanding of algorithms and loops by implementing them in creative contexts to draw pictures within 'Hopscotch'.

## Learning Session 4

### Learning Objectives

- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

Students will learn more about computational thinking, developing their ability to create

algorithms that can make choices: **'if'** this **'then'** that. Students will use the app 'Scratch Jnr' to develop understanding.

## Learning Session 5

### Learning Objectives

- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.

Students will be tasked in creating their own story using 'Scratch Jnr.' This will require students to be creative in their programming and problem solve to learn how to make their characters interact and move around. Students will demonstrate their understanding to all key skills discovered within level 1 and level 2 by applying this knowledge to their stories.

## Learning Session 6

### Learning Objectives

- Create and debug simple programs.
- Use logical reasoning to predict the behaviour of simple programs.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.

Students will continue with their stories before showcasing them to the class.

## iFunction Contingency

- For the Contingency students will add more scenes to the story and include an alternate ending.
- Attempt the procedures levels of 'Lightbot jnr.'