



iMedia
Lite Level 1 iProgram –
iCode

KS1 PPA Cover Planning

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

Lite Level 1

iCode

Unit Length: 5 – 7 hours

Course overview: Students will use games to learn key coding skills. The sessions will start by looking at everyday tasks and thinking about the thought behind a series of problems within the app 'Kodable'. This will culminate in students learning how to use the coding language 'Blockly', the app 'Hopscotch' and using the word algorithm with ease.

Learning Outcome for the course: To learn to program simple shapes on the app Hopscotch. To understand how to write in steps and be able to demonstrate when writing code. To be able to use code to solve problems.

Keywords: Algorithm; Computer Science; Computer Scientist; Programming; Loops; Coding.

Apps Used Include: Tynker, Kodable and Hopscotch

Learning Session 1:

What is computer Science? Students will be introduced to computer science, looking at the history of computing and understanding what programming is and what it is used for. The lesson will concentrate on creating instructions.

Learning Session 2:

Algorithms: Students will begin their understanding of algorithms. The session will start by looking at everyday tasks and thinking about the thought behind a series of problems within the app 'Kodable'.

Learning Session 3:

Loops: Continuing from the previous learning session students will continue to grow their understanding of algorithms and loops will be introduced to show how to make code shorter, thus making life easier.

Learning Session 4:

Conditionals: Students will be taught about computational thinking, developing their ability to create algorithms that can make choices: **'if'** this **'then'** that.

Learning Session 5:

Programs: The session will begin by focusing on building programs. The aim will be to design a drawing program. Students will learn how to create a variety of shapes using the app 'Hopscotch'.

Learning Session 6:

Procedures: Students will look at procedures and pre-made code to assist in creating more interesting pieces of artwork.

Learning Session 7: This session will run either as part of a longer half term or a contingency for pupils or classes who have exceeded the lesson plans for the half term. During this lesson pupils will learn about variables and practise using them in code.

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

iMedia

In this document we will provide you with key information relating to our PPA Cover

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, insurance documents and relevant policies, as well as a copy of each staff member's DBS with a photo of them for identification purposes. The website address to access this information is www.juniorjam.co.uk/protected; please use the username and password details that are on your order confirmation.

OFSTED, Planning and Overview Documents

Shortly after booking the main contact will receive a planning document email; by clicking the links in this email you can view the planning, unit overviews and National Curriculum mapping for each level we are delivering. These documents are really important and vital, should OFSTED decide to Deep Dive into one of the subjects we are providing. Please forward this email to the relevant subject coordinator for their records. If OFSTED schedule a visit on a day we are in, please contact the office so we can brief our staff members.

Assessment

From September 2020 our staff will produce a Course Evaluation for each class they teach. This will directly link to the National Curriculum and will detail how the class has achieved key curriculum objectives. This will be done at the end of each half term and will be accessible via the secure section of our website. Junior Jam also offer Reporting & Assessing, where each child receives individual grades at the end of each half term - this is an optional extra and must be requested with your sales agent prior to the order starting. A written report for your students is outside the scope of your PPA Cover contact, however if you give our staff member time and resources within their PPA teaching time, they will endeavour to provide this for you – this time cannot be their lunch or during their break and should be requested via your sales agent. If no time is available within your PPA Cover, additional time can be requested from your Junior Jam sales agent.

Space Requirements

Our iMedia lessons simply require the use of a classroom with an interactive whiteboard. Depending on the activity 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 children's learning; this will always be done with school permission prior to the session beginning.

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 staff member to run through this questionnaire it would be of great benefit to the lessons they run.

iMedia Uploads

Several of our iMedia subjects have work from the students which we can upload 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 are some subjects where uploads are not produced due to GDPR and safeguarding; for more information on this please view our Digital Procedure Policy within the secure section of our website.

Lite Level 1 iCode: Curriculum links

The learning pathways for each iMedia subject are in line with the Curriculum 2014. Below outlines all the curriculum points hit during this unit. iMedia levels are topic-based so students will be learning beyond these attainment targets and in real-life contexts.

Curriculum 2014

Computing

- 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.
- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.
- Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

Lite Level 1 iCode: Learning Objectives and Lesson Outcomes

Learning Session 1

Learning Objective:

Today we will learn ' what a computer is'. We will also learn about the history of technology.

Learning Outcome:

By the end of the lesson;

All pupils will

- have completed Levels 1-5 of Sequence Sector.
- be able to identify a computer and say what it can be used for.

Most pupils will

- have completed Levels 6-10 of Sequence Sector.
- know that to be classed as a computer the electronic device has to follow INSTRUCTIONS.

Some pupils will

- have finished Sequence Sector and begun to explore Condition Canyon.
- be able to tell you that instructions are also known as Algorithms.

Learning Session 2

Learning Objective:

Today we will learn that instructions are called Algorithms. We will start to apply our thinking to everyday tasks.

Learning Outcome:

By the end of the lesson;

All pupils will

- know that instructions are also referred to as algorithms.
- have completed Sequence Sector and moved on to start Condition Canyon.

Most pupils will

- understand that your instructions must be detailed for your program to work correctly.
- have completed the first five levels of Condition Canyon.

Some pupils will

- be able to give adequately detailed instructions for a task.
- have completed Condition Canyon's ten levels.

Learning Session 3

Learning Objective:

Today we will continue to learn about how algorithms are used in everyday life and start to think about the length of our algorithms and how that could affect our programming.

Learning Outcome:

By the end of the lesson;

All pupils will

- know that algorithms should be as short as possible.

Most pupils will

- know how to condense a simple but lengthy algorithm.

Some pupils will

- be able to write instructions in the shortest form.

Learning Session 4

Learning Objective:

Today we will think about the sentence 'Can computers think?' When we have an answer to the question above, we will begin to use it in our programming and create some code using 'Loopy Lessons' on Kodable!

Learning Outcome:

By the end of the lesson;

All pupils will

- know that computers aren't capable of independent thought.

Most pupils will

- be able to explain that computers can only 'think' when you've given them information.

Some pupils will

- know how to use the word 'Conditionals' properly.

Learning Session 5

Learning Objective:

Today we will learn how to build our own code using IOS apps.

Learning Outcome:

By the end of the lesson;

All pupils will

- be able to write algorithms to achieve simple goals using a more advanced programming app.

Most

- be able to code a simple shape in Hopscotch utilising repeats where possible.

Some pupils will

- be able to find errors and debug their own work within the new app.

Learning Session 6

Learning Objective:

Today we will learn how to use repeats in our Code.

Learning Outcome:

By the end of the lesson;

All pupils will

- know that repeats can be used to make their algorithms shorter

Most pupils will

- be able to code using the Blockly form of repeats.

Some pupils will

- always look to make their code short by utilising repeats where ever possible.

Learning Session 7

Learning Objective:

Today we will learn the meaning of the word variables.

Learning Outcome:

By the end of the lesson;

All pupils will

- know what variables do to our code.

Most pupils will

- be able to explain certain situations where variables might be used.

Some pupils will

- be able to code using variables, if given prompt code.

Pupils of a lower ability will be encouraged to learn the basic skills that the class are learning. If it is too much for them to move on, they will stay on Tynker, but be encouraged to work to a higher level than the rest of the class did before they moved on.

Pupils of a higher ability will be able to move on to Keystage two work if they are ready. Should they not be ready for that jump they can work on more contingency work in Hopscotch provided to them by our instructors.