

Lesson plan template

makeblock

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| Cross curricular links: | Age group: 11-12 | Duration: 1 hour |
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| <p>Objectives: Students should:</p> <hr/> <ul style="list-style-type: none"> ● A basic understanding of what python code is and where it is used ● Edit a simple program using python ● Understand a few basic principles of Python coding ● Successfully run a short edited python code |
| <p>Resources:</p> <hr/> <ul style="list-style-type: none"> ● mblock 5 ● PC ● Python PowerPoint |

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| <p>Duration</p> <p>15 min</p> | <p>Mini lesson (introduction):</p> <p>Discuss with the class coding language. Ask them if they know what Python is. Write down any ideas they share. Provide them with a definition;</p> <p>Python is a general purpose scripting language, meaning it can be used to create almost anything like websites or desktop applications . It is so popular because it is easy to read.</p> <p>Ask the students if they know where Python is used. Write down what they share. Some examples are:</p> <ul style="list-style-type: none"> ● Youtube ● Instagram ● Google Apps ● Philips automation systems <p>Explain that today, students will learn how to convert a block based program (like Scratch) into Python code and learn some important principles along the way.</p> |
| <p>Duration</p> <p>40min</p> | <p>Main activity:</p> <p>Students should be able to follow the step by step guide with ease. You can complete the activity as a whole class but ideally, students would work in pairs on</p> |

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| | their own PC. It is worth following the PP yourself first to understand what the students should be able to achieve. |
| Duration 5 min | Conclusion: Ask students to share their experience of creating a Python script. The following questions can help: <ol style="list-style-type: none">1. What did you enjoy about it?2. What aspects were challenging?3. Can you explain the important principles you learned?4. Can you see the connection between block based programming and Python?5. Do you think it is a useful language to learn? Why?6. Would you like to learn more? |

Notes:

Opportunity to reflect: