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| **To learn the programming fundamentals of Python**   * + **Python Syntax and the console**   + **Variables**   + **Comments**   + **Data Types**   + **Lists**   + **Selection**   + **Iteration** | | | |
| **Lesson** | **Learning objectives** | **Learning Outcome** | **Activity** |
| 1 | * Learn what Python is and some of the applications it is used for * Run a simple Python program in Interactive mode using the input and print functions * Write, save and run a program in Script mode * Understand what a syntax error is and how to interpret an error message * Know the rules for variable names and use variables in a program * Understand the use and value of comments in a program * Use a while loop in a program * Use a function to generate a random number * Review the difference between syntax errors, run-time errors and logic errors * Learn techniques for debugging programs | Iteration-while loops, lists | Hansel and Gretal-trails plus random trails |
| 2 | * Use selection statements if, else and elif in a program * Know the rules for variable names and use variables in a program | Selection-if, elif and else | Jack Frost-change block below |
| 3 | * Use a for loop in a program | Iteration-for loops | Jack and the Beanstalk-beanstalks |
| 4 | * Use functions in a program. * Use indentation correctly to define a block of code | Functions | Sleeping Beauty-castles |
| 5 and 6 | * Use functions in a program. | Functions | Disco Floor |