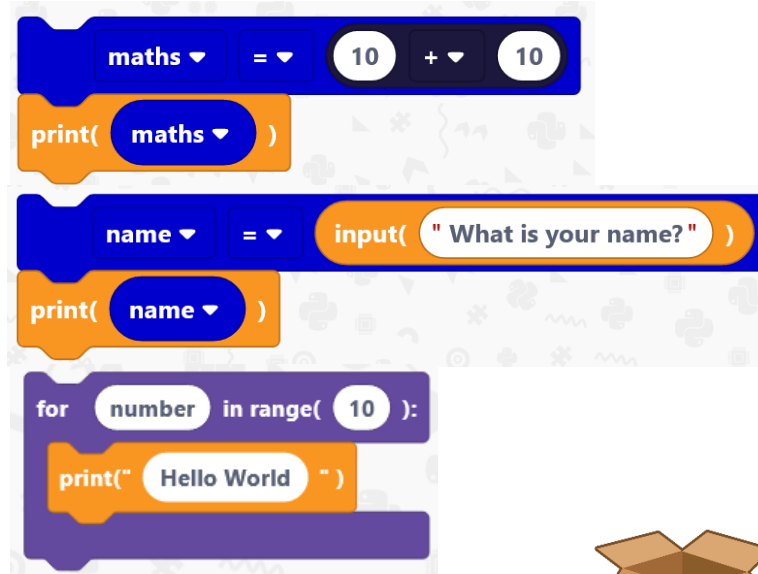


Key Vocabulary...

Term	Definition
GUI – Graphical User Interface	A visual interface that lets you interact with 'blocks' of programming code to make a program.
Variable	A value that can change while the program is running.
If	Used to make a decision. If a condition is met the program will do something.
For	Allows you to run some code, a set number of times. Also called a counting loop.
While	Used to run code 'WHILE' a condition is met. Can also be used for running code forever.
Function	An in-built program that can be used multiple times to do something.
Input	A function that asks the user to enter some data.
List	A variable that can store multiple items. This can be numbers, letters or words.
Print	A function that outputs data when the program is run.
String	A data type that stores text. For example, 'hello'.
Integer	A data type that stores whole numbers. For example, '24'.
Sequence	The order in which a set of instructions appear.



Picture This...



1. What is 10+ 10? 20
2. What is your name? John
3. "Hello World" is repeated 10 times



Always Remember...

Variables are like boxes. They store values.

Use the print function to output data, use the input function to enter data.

Use an 'if' statement to add a decision to your program.

Use a 'for loop' to run a program a specific number of times.

Use a 'while loop' to run a program multiple times (without specifying an end).

Use a list to store multiple values in one variable.

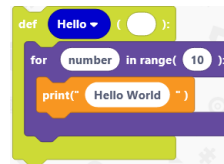


Questions

1. Define the term algorithm.
2. Define the term variable.
3. Define the term decomposition.
4. Which command is used to create a decision?
5. Which command is used to get an output?
6. Which command is used to create a loop?
7. Why should passwords not be shared?
8. Name two threats to a network.

Deeper Learning...

We have used a number of in-built functions already. However, you are also able to make your own functions in Python. This is a good idea if you have a piece of code that you need to run multiple times. It also tidies up your code as it removes repeated code.



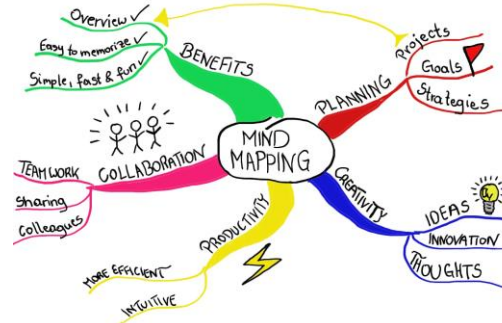
Activity- What is pseudocode and why is it useful in programming? Write in pseudocode that will work out the area of a rectangle, triangle and a circle.

Key Vocabulary...

Term	Definition
Target Audience	A particular group at which a product such as a film or advertisement is aimed.
Purpose	The reason for which something is done or created or for which something exists.
Artefact	An object made by a human being, typically one of cultural or historical interest.
Trustworthy	Able to be relied on as honest or truthful.
Usability	The degree to which something is able or fit to be used.
Recall	To remember bring a fact, event, or situation.
Mind map	A diagram in which information is represented visually, usually with a central idea placed in the middle and associated ideas arranged around it.
Cramming	Study intensively over a short period of time just before an examination.
Knowledge	Making use of information.
Long Term memory	The type of memory responsible for the storage of information for an extended period of time.
Revise	To revisit work done previously to enhance knowledge by remembering more over time.



Picture This...



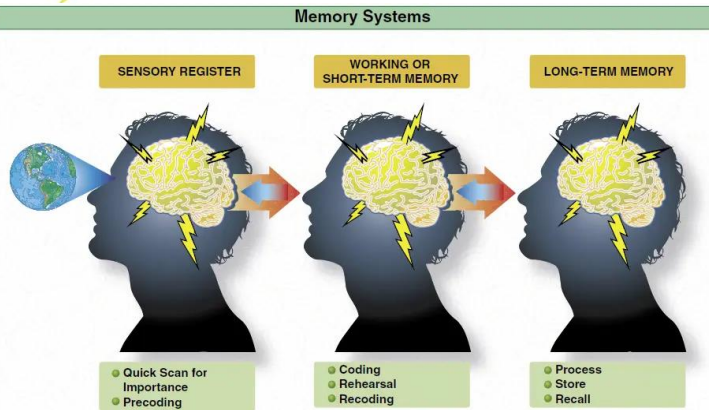
Always Remember...

Cramming is not a good revision technique because the information does not reach long term memory.

Sleep is an important part of learning. Those that do not sleep regularly, struggle to concentrate.

Energy drinks and sugary drinks dehydrate you and therefore focusing is difficult.

Eating a regular, balance diet helps the body repair and release energy slowly.



Questions

1. Define the term revision.
2. Explain how revision helps to remember more.
3. Give 2 methods of revision.
4. Name two threats to a network.
5. Name one way to remove malware.
6. Name three ways you can make a password stronger.

Deeper Learning...

Babies sleep a lot because they are always learning about the world around them. When they are asleep, they relive their day and therefore they move a lot in their sleep.

This continues to occur the old you get. In addition, sleep gives your body a rest and your mind can use this time to repair or recover from illness or stress.

- Primary school pupils need 9-11 hours of sleep.
- Teenagers need around 8-10 hours of sleep.
- Adults need 7-9 hours of sleep.



Activity – Research: How does exercise, fat and sugary drinks affect your ability to revise?