Queensway School- Knowledge Organiser

Computing – Coding - Year 2, Term 5

What will we learn?

- To create a computer program using an algorithm
- To understand ways that the collision detection event can be used in a program.
- To design a program that follows a timed sequence.
- To understand that different objects have different properties.
- To understand the function of button objects in a program.
- To understand the importance of testing and debugging.

Key questions

What is an algorithm? Why is it useful in coding?

An algorithm is a step-by-step set of instructions used to solve a problem or achieve an objective. A clear algorithm can help you to create code that does what it is supposed to do.

If you are good at coding, you don't need to debug. Is this true?

All coders need to debug to make sure that their program works correctly, and the code does what they intended. As you get better at coding, your programs will get more complex and debugging gets even more important.

Why is it important to know there are different object types?

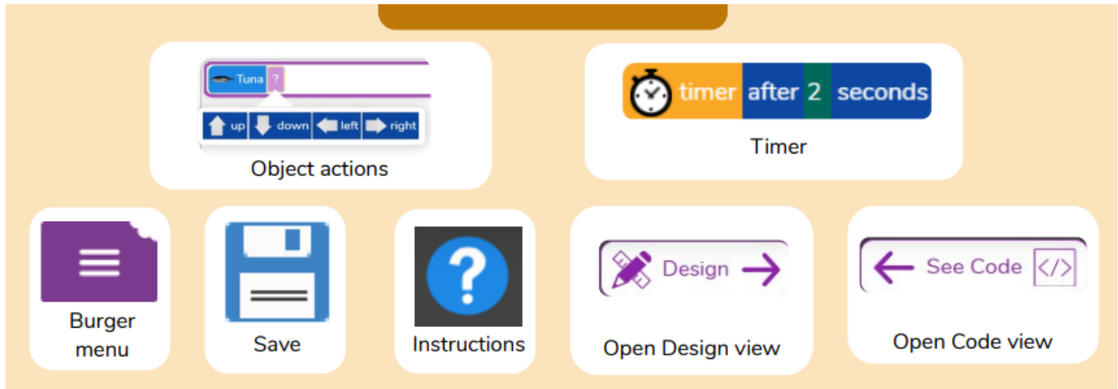
Different object types can do different actions. For example, in 2Code, an animal object can do actions such as up, down and stop. A turtle goes forward and backward in steps.

purple mash simple

Key Vocabulary

Algorithm: A set of instructions in order.	**Action**: The way that objects change when programmed to do so. For example, move.
Bug: A problem in a computer program that stops it working the way it was designed. Debugging enables you to fix the code that has errors.	**Event**: Something that happens in a program that causes a block of coder to be run.
Button object: A type of object in 2code that responds only to click events.	**Collision Detection:** An event command that detects whether two objects have touched each other.
Output: Information that comes out of the computer e.g sound.	**Program:** A set of instructions (an algorithm) that tells the computer what to do.

Key images



Code view