

COMPUTING: Code.org Course E

Summer

Year 6

Debugging Recipe

These debugging tips will help you keep moving when you get stuck!

Work to Avoid Mistakes

- Read the directions.
- What is the goal of the puzzle?
- Take it slow and go one step at a time.
- Can you talk about the problem in your own words?

- Were you given any code to start?
 - What does it do?
 - Why do you think it's there?

Debugging

- Look for problems each step of the way.
- Describe what was supposed to happen.
- Describe what is going wrong.
- Does the difference between what was supposed to happen and what did happen give you any clues?

- Fix one thing at a time, then describe how the result changed.
- Try leaving "breadcrumbs" in your program. You can put clues inside your code (like having your program "say" something) to let you know when each chunk runs.
- Try doing each task as its own chunk, then put all of the pieces together at the end so it is easier to see what each thing does.

- Talk to a friend. Maybe one of your classmates can help you figure out where your plan goes awry.
- Try at least three ways of fixing problems before you ask for help.

Key words	Explanation
bug	Part of a program that does not work correctly.
debugging	Finding and fixing problems in an algorithm or program.
program	An algorithm that has been coded into something that can be run by a machine.
programming	The art of creating a program.
loop	The action of doing something over and over again.
repeat	Do something again.
condition	A statement that a program checks to see if it is true or false. If true an action is taken. Otherwise the action is ignored.
conditionals	Statements that only run under certain conditions.
while loop	A loop that continues to repeat while a condition is true.
behavior	An action that a sprite performs continuously until it is told to stop.
sprite	A graphic character on the screen with properties that describe its location, movement and look.

Introduced code

- `set background color`
- `make new sprite`
- `set sprite property`