

# COMPUTING: Code.org CourseC

## Summer A

## Year 4

### 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
loop	The action of doing something over and over again.
repeat	To do something again.
event	An action that causes something to happen.

### Key Questions

- Can you identify the benefits of using a loop structure instead of manual repetition?
- Do you know how to differentiate between commands that need to be repeated in loops and commands that should be used on their own?
- Can you create a game using event handlers?
- Can you create an animated, interactive game using sequence and event-handlers?
- Do you know how to Identify actions that correlate to input events?
- Can you collect and record data about quantities of real objects, or characters on a screen?
- Do you know how to create a bar graph and pie chart to represent simple data?
- Can you make comparisons between data visualizations made by others and use them to make a prediction?
- Do you know how to use a planned design as a blueprint for creation.?
- Can you overcome obstacles such as time constraints or bugs?