

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
algorithm	A list of steps to finish a task.
bug	Part of a program that does not work correctly.
drag	Click your mouse button and hold as you move the mouse pointer to a new location.
drop	Release your mouse button to "let go" of an item that you are dragging.
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.
persistence	Not giving up. Persistence works best when you try things many different ways, many different times.
event	An action that causes something to happen.
loop	The action of doing something over and over again.
repeat	To do something again.

Key Questions

- How do loops help us to be more efficient?
- How can we use loops to create patterns?
- How are events used in online games?