



8. Troubleshooting Q2 That Didn't Work. Now What? (1-2 Class Periods)



8. Troubleshooting

8.Q2 That Didn't Work. Now What?

Overview of this thing: Welcome, young tech enthusiasts! Have you ever experienced the frustration of things going wrong with your computer at the most inconvenient moments? Well, fear not! We have a mission for you that will defy Murphy's Law and equip you with the skills to troubleshoot common computer problems. Get ready to become problem-solving superheroes as you embark on the four exciting quests ahead. Are you up for the challenge? Let's dive in! Thing Learning Objectives:

- 1. Know how to troubleshoot basic computer problems [Computational Thinker & Empowered Learner].
- 2. Understand basic computer and network troubleshooting [Empowered Learner].
- 3. Be able to create a flowchart demonstrating troubleshooting techniques [Empowered Learner].

This Quest: In this Quest, you'll explore a range of basic troubleshooting techniques that can help when your computer isn't working properly. You'll also create additional flowcharts using a graphic organizer site, such as Google Drawings, to solve specific computer problems step-by-step.

Quest Learning Objectives:

I Can:

- Create a graphic organizer to help me organize and plan my troubleshooting steps in a clear, logical way.
- Use my graphic organizer to build three different troubleshooting flowcharts that show step-by-step solutions for common computer problems.
- Follow a systematic approach to solve technology problems when simple fixes like power cycling don't work.
- Identify when to try different troubleshooting methods for various computer issues, like blank screens, frozen applications, or audio problems.
- Organize troubleshooting steps in a logical sequence that helps me and others solve problems more effectively.

Link to Vocabulary Quizlet





Vocabulary:

- Application: An application is a software that performs specific tasks.
- Flowchart: A flowchart is a step-by-step diagram with symbols.
- **Frozen**: When a computer or application is frozen, it is unresponsive and not working properly.
- Hardware: Hardware refers to the physical parts of a computer.
- Software: Software is a program that runs on a computer.
- **Solve**: To solve is to find the answer.
- Troubleshoot: Troubleshooting is the process of identifying and fixing problems.

Pre-Planning

For accommodation ideas, visit the Accommodations Page.

Introduction page: Students will review the Introduction Statement and Learning Objectives, and view the Quest 2 Now What Video (2:26) and the That Didn't Work.Now What? Video (2:19)

Vocabulary page: Students will review vocabulary words and then play the Quizlet Vocabulary Game

Steps page:

Students will reflect on: How will the troubleshooting terms you just learned on the prior page help you create clearer, more effective step-by-step solutions? Students will then create three flowcharts (<u>Troubleshooting Flowchart Worksheet</u>). Their teacher may have them use this worksheet to submit their work. Use a graphic organizer to show their steps for the following problems. (for ideas for graphic organizers, go to <u>Thing 2.Q1</u>)

- Problem 1 Murphy is moving the mouse on her desktop computer and nothing happens. The keyboard is working, but not the mouse. List all of the possibilities in flowchart form on how she would troubleshoot the problem.
- Problem 2 -Describe a real-life issue that you've encountered with a device, then create a flowchart to outline how you would troubleshoot the problem.
- Problem 3 Murphy tries to use the family computer. She pushes the power button on the computer, hears the fan turn on, and sees the indicator lights, but there is nothing on the LCD monitor. List the possibilities of what is wrong in flowchart form, and describe the steps you would take to eliminate the problem.





Decide if students will save their flowcharts in their Filespace or upload them to their online portfolio.

Teacher option: You might also consider incorporating an extension role-playing activity where students act as "tech support" and explain their troubleshooting steps for one of the problems to a peer or family member. This approach could reinforce understanding through verbal explanation and add an interactive element to the Quest.

Completing page: Students have completed this Quest when they can:

If students use the student portfolio, they will include hyperlinks to their graphic organizers & a screenshot of one of their graphic organizers in slide 5.

Videos and resources in this Quest. You must check that students have access to these resources on their devices.

21T4S Videos

- Now What? Intro Video (2:26)
- That Didn't Work. Now What? Video (2:19)

21T4S Documents & Quizzes

- Troubleshooting Flowchart Worksheet
- Vocabulary Quizlet

21T4S Webpages

21t4s Thing 2.Q1 Fire Rescue

Student Checklist 8.Q2 Student Checklist

Broken Link or Content Update Report

Please select this link or the broken link icon to report any broken links or content no longer applicable so that we can quickly update it. Thank you for your help.

Assessment Options:

Ideas for assessing student work for this Quest? Link to a rubric you create for this Quest, a quiz, and or a worksheet you create. See Rubric by Liz Kolb.





