

Troubleshooting

Textbook

Troubleshooting



"Drew and Morgan's Tech Troubles"

One afternoon, Drew was playing his favorite game on his tablet when suddenly—the screen went black! He tapped the screen, but nothing happened. "Uh-oh!" Drew said, turning to Morgan. "My tablet isn't working. What do I do?"

Morgan replied, "When something on a device isn't working, we can troubleshoot it. That's a word for figuring out what went wrong and fixing it!"

Drew looked confused. "Troubleshoot? What does that mean?"

Morgan explained, "It's like being a tech detective! We need to figure out what's causing the problem. For example, if the screen goes black, it might be because the tablet's battery is dead."

Drew thought for a moment. "So, if it's out of power, I just need to charge it?"

"Exactly!" Morgan said. "But sometimes there are other things we can check, like restarting the tablet or making sure the game is updated."

Drew nodded. "So troubleshooting is just figuring out what's wrong and fixing it?"

Morgan replied, "Yes! And if your tablet still doesn't work after you try those things, you can always ask an adult for help. That's part of troubleshooting too—getting the right help when you need it."

Think About It!

1. What happens when your favorite toy stops working?
2. What could you do to fix it?

You're already practicing troubleshooting when you try to figure out what went wrong!

Let's Learn More!

Troubleshooting is when we figure out what went wrong when something isn't working and then fix it. It's like being a detective for technology!

Here's how you can troubleshoot like a pro:

- **Check the Power:** Sometimes the problem is simple! The device might not be turned on, or the battery might be dead. Make sure everything is plugged in and charged.
- **Restart the Device:** Turning the device off and on again can fix many problems. It's like giving the device a break to get back to work!
- **Update Software:** Sometimes a device needs a new version of its software. Check if there are any updates waiting to be installed.
- **Ask for Help:** If you've tried everything and it still doesn't work, it's okay to ask an adult or a tech expert for help!

Taking Care of Your Devices

Prevention is the best troubleshooting! Here's how to keep devices working properly:

- **Keep food and drinks away:** Spills can damage the inside parts of computers and tablets.
- **Use clean hands:** Dirty hands can make screens and keyboards sticky or hard to use.
- **Carry devices properly:** Hold tablets with two hands and use cases when moving laptops.
- **Keep magnets away:** Magnets can damage computer hard drives and screens.
- **Handle gently:** Don't drop or throw devices - the parts inside are delicate.

Systematic Troubleshooting Steps

When something goes wrong, follow these steps:

1. **Observe:** What exactly is the problem? Is there no power? Is it frozen? Is there an error message?
2. **Check basics:** Is it plugged in? Is it turned on? Is the battery charged?
3. **Try simple fixes:** Restart the device, check connections, close extra programs.
4. **Test:** Did the simple fix work? If not, try the next step.
5. **Ask for help:** If you've tried the basic steps, get an adult to help.

Critical Thinking Questions

1. Why is it important to check the power when something doesn't work, like your tablet or computer?
2. Can troubleshooting always fix a problem, or are there times when you might need extra help?
3. What is the first thing you would check if your computer wasn't turning on? Why?

Sentence Stems

These sentence starters help us talk about troubleshooting:

1. "First, I checked the (blank), then I (blank)."
2. "If that didn't work, I (blank)."
3. "I asked an adult because (blank)."

Questions (5)

1. What should you check first if your tablet isn't working?

MULTIPLE CHOICE

Choose the correct answer:

- A. If it's plugged into the wall or charged
- B. If it's making a sound
- C. If it has a picture on the screen
- D. If the tablet is clean

2. What does it mean to "troubleshoot" a problem?

MULTIPLE CHOICE

Choose the correct answer:

- A. To wait until the problem goes away on its own
- B. To ignore the problem and play something else
- C. To figure out what went wrong and fix it
- D. To tell someone else about the problem

3. What can you do if your tablet still doesn't work after checking the power and restarting it?

MULTIPLE CHOICE

Choose the correct answer:

- A. Turn the tablet into a toy
- B. Ask for help from an adult
- C. Throw the tablet away
- D. Wait for the tablet to work by itself

4. Why is it important to restart a device when troubleshooting?

Choose the correct answer:

- A. It makes the device faster
- B. It gives the device a little break to start working again
- C. It changes the color of the screen
- D. It adds more games to the device

5. What might happen if your tablet needs an update?

Choose the correct answer:

- A. It will stop working forever
- B. It will make your tablet have more games
- C. It might fix the problem if it needs a new version of the software
- D. It will make your tablet slower

Games (3)

1. Troubleshooting Steps

Put the troubleshooting steps in order.

Full Screen

Audio

Instructions

Answer Key

Pause

Clear All

Check Matches

Attempts: 0

Ask for help

Restart the device

Check the power

Update software

2. Troubleshooting Typing Race


Full Screen

Audio

Instructions

Restart

Pause



0s100%

figure out what went wr

3. Troubleshooting Matching

Full Screen

Audio

Instructions

Answer Key

Pause

Clear All

Check Matches

Attempts: 0

Check the power

Restart device

Update software

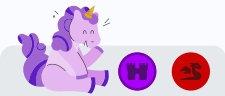
Battery might be dead

It's okay to get help from a tech expert

Gives the device a break

Ask for help

old versions can slow down the device



Blocks Challenges (5)

1. Uh-Oh, Something's Not Working!



Uh-Oh, Something's Not Working!

Use looks blocks to make your character explain 3 troubleshooting steps (like: "Check the battery," "Restart the device," and "Ask for help"). Add motion blocks to have your character move around as it talks.

1 → 6 3 1



Submit ↑



2. Let's Dance!



Let's Dance!

Your character was stuck, but now they fixed the problem—and it's time to celebrate with a dance!

Create a little dance using 6 different motion steps and Add a speech bubble at the start that says something fun like "Let's celebrate!"

1 → 6 1 1



Submit ↑



3. Follow the Path

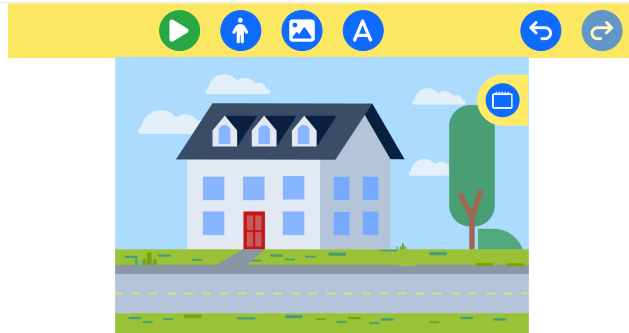


Follow the Path

Can you help your sprite walk a path across the screen using the right steps?

Select the field background. Create a simple movement path (forward, turn, forward). At the end, the sprite can say, "I made it!"

1 6 1 1



Submit ↑



4. Countdown to Summer!

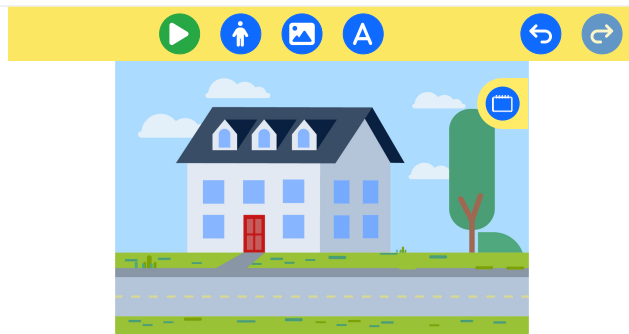


Countdown to Summer!

School is almost out and you can't wait for vacation! Use blocks to count down from noon until 3pm when school is out!

Select the clock background and place your sprite in the middle of the clock. Your sprite is the hand of the clock. Rotate the sprite, using the motion blocks to count down to 3pm. At the end have the sprite cheer using a looks block.

1 3 1 1



Submit ↑



5. Moving



Moving

Let's make your character show different movements using words and moves.

Make your character say 3 different things and move a different way for each one. (For example, Hi = hop, Go = move up, Bye = rotate left).



Submit ↑



Answer Keys & Solutions

Questions

1. What should you check first if your tablet isn't working?

MULTIPLE CHOICE

Correct Answer:

- A. If it's plugged into the wall or charged ✓ Correct
- B. If it's making a sound ✗ Incorrect
- C. If it has a picture on the screen ✗ Incorrect
- D. If the tablet is clean ✗ Incorrect

Explanation:

Think about what the tablet needs to work properly.

2. What does it mean to "troubleshoot" a problem?

MULTIPLE CHOICE

Correct Answer:

- A. To wait until the problem goes away on its own ✗ Incorrect
- B. To ignore the problem and play something else ✗ Incorrect
- C. To figure out what went wrong and fix it ✓ Correct
- D. To tell someone else about the problem ✗ Incorrect

Explanation:

It's like being a detective for technology!

3. What can you do if your tablet still doesn't work after checking the power and restarting it?

MULTIPLE CHOICE

Correct Answer:

A. Turn the tablet into a toy

✗ Incorrect

B. Ask for help from an adult

✓ Correct

C. Throw the tablet away

✗ Incorrect

D. Wait for the tablet to work by itself

✗ Incorrect

Explanation:

Sometimes you need a little extra help from someone who knows more.

4. Why is it important to restart a device when troubleshooting?

MULTIPLE CHOICE

Correct Answer:

A. It makes the device faster

✗ Incorrect

B. It gives the device a little break to start working again

✓ Correct

C. It changes the color of the screen

✗ Incorrect

D. It adds more games to the device

✗ Incorrect

Explanation:

Sometimes, turning it off and on again helps fix the problem.

5. What might happen if your tablet needs an update?

MULTIPLE CHOICE

Correct Answer:

A. It will stop working forever

✗ Incorrect

B. It will make your tablet have more games

✗ Incorrect

C. It might fix the problem if it needs a new version of the software

✓ Correct

D. It will make your tablet slower

✗ Incorrect

Explanation:

Updates can fix problems by giving your tablet new software.

1. Troubleshooting Steps

Correct Order:

1. Check the power
2. Restart the device
3. Update software
4. Ask for help

Scoring:

- Gold: 1 attempts or fewer
- Silver: 2 attempts or fewer
- Bronze: 3 attempts or fewer

Students must arrange items in the correct sequence.

2. Troubleshooting Typing Race

Typing game - no answer key needed. Students practice typing the provided content.

3. Troubleshooting Matching

Matching Game Solutions:

1. →
2. →
3. →
4. →

Students must drag items from the left to match with corresponding items on the right.