

LESSON 2 Identifying Preventive Technologies

Inspire your students to explore the unique types of technology that cybersecurity pros use to combat threats and keep us safe.

Objective

Students will synthesize research information to convey technological processes using domain-specific language in an informational presentation.

Time

45 minutes, plus time to develop presentations

Materials

- Know Your Protection activity sheet available at [scholastic.com/cybersmarts](https://www.scholastic.com/cybersmarts)

Instructions

1 Explain what preventive technology is and how it's the first line of defense against cybersecurity threats. Give an example (e.g., antivirus software), then ask students to share others they know of.

2 Provide students with a list of preventive technologies built and used by cybersecurity pros (e.g., firewalls, ad blocker apps, antivirus software, voice recognition software, virtual private network). Explain that different technologies safeguard against different types of threats.

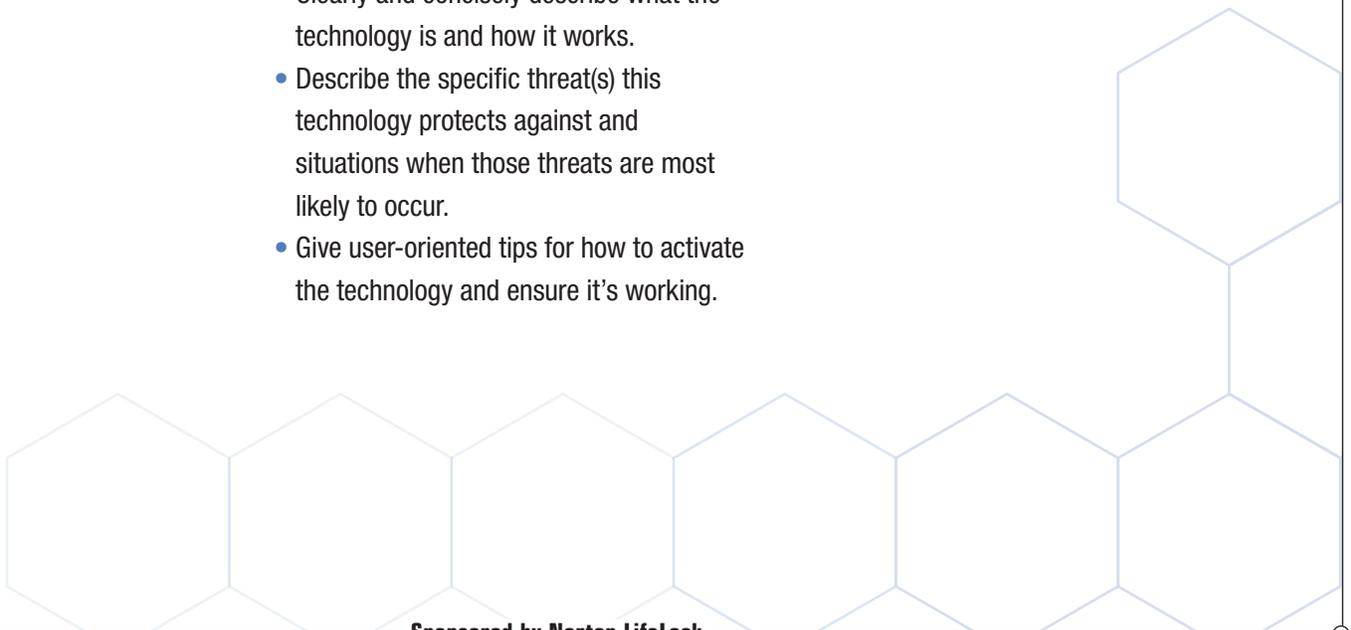
3 Divide students into small groups and assign each group a type of technology to learn more about (or have each group choose one). Download and distribute the Know Your Protection activity sheet. Give them the following research goals:

- Clearly and concisely describe what the technology is and how it works.
- Describe the specific threat(s) this technology protects against and situations when those threats are most likely to occur.
- Give user-oriented tips for how to activate the technology and ensure it's working.

4 Tell students they will present their research in a visual/interactive way. Provide these presentation options:

- **Option 1** Write and perform a skit, acting out a situation where personal data is at risk and how the assigned technology successfully protects the user.
- **Option 2** Write an interview/dialogue between a computer user and the assigned technology. Use role play to have the technology “come to life” and explain to the user how it works to keep people safe.

5 After the presentations, debrief by asking each group to share at least one thing they learned about a technology other than the one they researched.



Name _____

Know Your Protection

Learn the tools cybersecurity experts have developed to make sure you are not a target for hackers.

STEP 1: Choose one cybersecurity tool to research.

STEP 2: Compile research about the tool you selected.

- How does the technology work?

- In what situations are these threats most likely to occur?

- What tips should users follow to activate the technology and ensure it's working?

ACT IT OUT

Bring your research to life by demonstrating how the technology you researched works.



Option 1

Perform a skit, acting out a situation where personal data is at risk and how the technology protects the user.



Option 2

Create an interview/dialogue between a computer user and the assigned technology. Use role-play to have the technology explain to the user how it protects their safety.