

An Introduction to Malware

TOPIC: BASIC KNOWLEDGE OF COMPUTING SYSTEMS

GRADES 6-8, 9-12 (CAN BE MODIFIED, AS NEEDED)

LESSON DURATION: MULTIPLE DAYS (TEACHER DISCRETION)

SOFT SKILLS: COLLABORATION, COMMUNICATION, RESEARCH

Introduction:

- In this activity, students will learn the different types of malware. Malware is used in general terms to describe a wide variety of malicious software. Through self-guided research in a group setting, students will present information on the malware as well as prevention tips, when applicable. If more topics are needed, the teacher might expand into network-based attacks (Denial of Service, Man in the Middle, ARP/DNS poisoning)
-

Learning Outcomes:

- Through the completion of a small group project, students will learn the major types of malware, as well as prevention tips.
 - Students will practice professional presentation skills in presenting the findings to the class.
-

Materials:

- [List of malware \(teacher use\)](#)
 - Internet access for research purposes
 - [Student hand-out with guiding questions for research](#)
-

Activities:

1. This activity is designed as a small group research project with a presentation element. The teacher could easily modify the assignment as needed.
2. The teacher has access to background information above. This information gives a basic overview of the types of malware in existence. A simple google search could supplement or supply more information.
3. Students should be placed in small groups and assigned one of the malware topics. They should be given the student hand out above. Students will probably need 2-3 days to research and develop the presentation. The presentation could easily be modified into a video project, if desired.
4. Students should then present the information to classmates.

© 2018 Teach Cyber



This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Enrichment/Follow-up:

1. If no educational programs exist at the school, the teacher might consider having students develop a comprehensive hand-out with all the information on it. This hand-out could be given to all stakeholders in the school to help educate on malware and user safety tips.
2. If the school has networking security specialist, the teacher might consider inviting him/her/ them to the presentations to ask questions or offer comments about the different types of malware. They may be able to offer insight into what sorts of malicious activity they deal with on the school network, as well as be able to answer any career questions that students might have.

© 2018 Teach Cyber



This work is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/).