

Lesson #1: Information Security Basics

The focus of this lesson is upon the fundamental principles of information security. Topics include: Definition of information security, password protection, basic file management, online safety guidelines, discussion of kid-friendly search engines, and site credibility & evaluation.

Materials:

1. Five Steps to Becoming a Security Expert! (Tutorial):

This tutorial is targeted at an intermediate audience level (grades 4-8). It is available online as well as in a PDF form.

Teaching Tips: This tutorial can be used as an individual reading activity, an online resource, or could be incorporated as a classroom reading activity.

2. Follow-Up Activity:

This activity can serve as a teaching tool in a variety of ways. It focuses upon the basic principles of the tutorial.

Teaching Tips: A variety of techniques include:

---Use the handout as a traditional reinforcement activity to be completed independently or in groups.

---Cut the questions into strips of paper. Distribute them as discussion starters and assign them to individuals or groups of students. Have the students read the questions and their answers aloud. Discuss.

---Use the questions as the focus of a classroom bulletin board. Place large printed versions of a few of the questions on the board. Divide the class into small groups, assign each group a question. After discussing the question, have the groups write



their “final answer” on a large piece of paper and staple it to the bulletin board. Have each group review the question and answer for the class. Use the board as a daily reminder to be safe.

3. Case Study Collection:

This collection of case studies reinforces the principles of information security found in the tutorial. The case studies provide relevant situations in which average kids use infosec skills.

Teaching Tips: These case studies can be used in a number of ways including:

---Students can work independently on the case studies to practice their own individual security skills. A follow-up class discussion will help to clarify and reinforce the security principles.

---Divide the class into groups and assign each group a case study. Ask the groups to discuss and answer the questions at the end collectively. After all groups have finished, begin a class discussion focused upon the groups' responses.

---Use 1 case study per week to continually reinforce the principles of information security. By spreading the activity out over a period of time, the students will have an opportunity to practice their skills. These will also work as great “bell ringer” activities (also known as ‘anticipatory sets’).

---Encourage students to write their own case studies focusing upon the principles of information security. Have the students present the case studies to the class and continue the discussion of infosec ideas. (Feel free to send sample case studies to CERIAS!)

