U1Ch1L3: The Need For Addressing

Purpose: Students will learn how devices communicate with each other on a network.
Vocabulary: IP Address & Internet Protocol.

Journal: Imagine you were in a room with 5 other people, all with the same name as you. What might happen when you start communicating? How could you solve these problems?

Activity
This lesson has students completing the same activity three times. Each time students need to create a schedule for the week that allows them to see every other member of their group on one of the days. All intructions can be found on the handout.

- **Handout**: The Need for Addressing_U2Ch1L3

- **Week 1_"**Unplugged": This first unplugged run of the activity gives students a feel for how it runs. This will make sure that any confusion when they get to the Internet Simulator is caused by the lack of identifying information in the simulator.

- **Week 2_"**Internet Simulator": Login and join a room with your group mates. Once everyone is in the room complete Week 2 on the simulator only...No Talking! When done, on the back of the handout state the problems you faced and solutions you used.
    - Group Discussion: The group should agree on a set of rules they would like to try this time around for how to communicate. Write the rules in the section on the back of the handout.

- **Week 3_**"Internet Simulator": Login and join a room with your group mates. Once everyone is in the room complete Week 3 on the simulator only...No Talking!
    - Groups discuss if their rules were effective. Do they recommend any changes.
    - Groups do have the option of completing a Week 4.

Video: The Internet: IP Addresses and DNS. (stop at 3:23)

Show And Tell:
Show students the IP addresses of network linked hardware around the classroom.