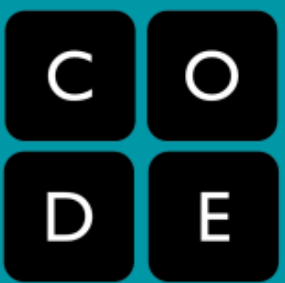
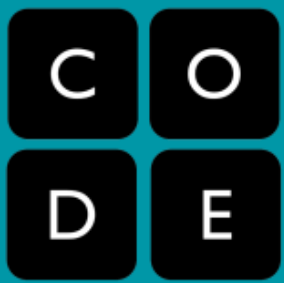


The Internet is for Everyone

Unit 1 Lesson 8 (U1L8)



So far in this class you have solved a few problems by creating and using small protocols for transmitting data over a wire to one other person.

But the Internet is obviously much bigger than a single wire connecting two people. It connects billions of people and even more billions of machines.

In the next several lessons, we're going to look at some of the technical issues involved with having lots of machines trying to communicate at the same time.

In other words, we're going to take a deep dive into the inner-workings of the Internet



Activity 1 – KWL The Internet (25 minutes)

You may already know a few things about how the Internet works. Maybe you feel like you don't know anything, but in that case you might have questions or be curious about how things work.

To get started learning more about the Internet we want to get out into the open what we know and what we want to know more about.

It's okay if you don't know the whole thing. We want to collect the bits and pieces that we do know, and over the course of the next few lessons we'll put it all together.

In your notes, create the following table:

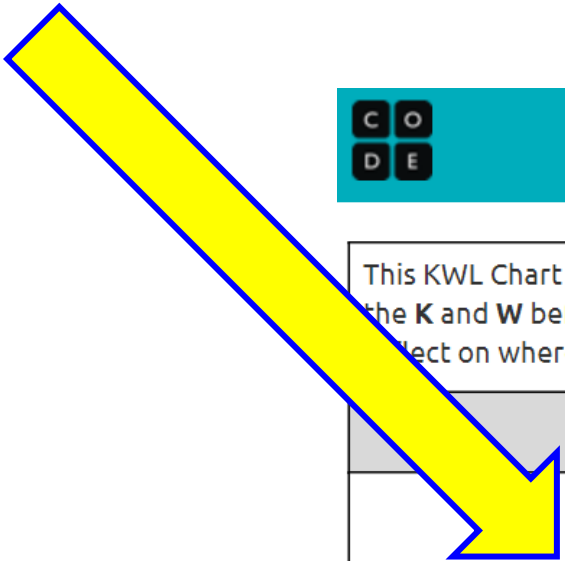


KWL Chart

<p>This KWL Chart tracks what you Know (K), Want to know (W), and Learned (L) about a topic. Complete the K and W before beginning your project and add to the W and L sections as you work. At the end, reflect on where you began and all that you have learned at each point during the project.</p>		<p>Topic:</p>
(K)now	(W)ant To Know	(L)earned

Thinking Prompt (2-minutes)

When you enter a web address in a browser and hit enter, what happens? At some point you see the web page in the browser, but what happens in between? What are all the steps? Write down the series of things that you think (or have heard) happen right after you hit Enter. What happens first, second, third and so on.



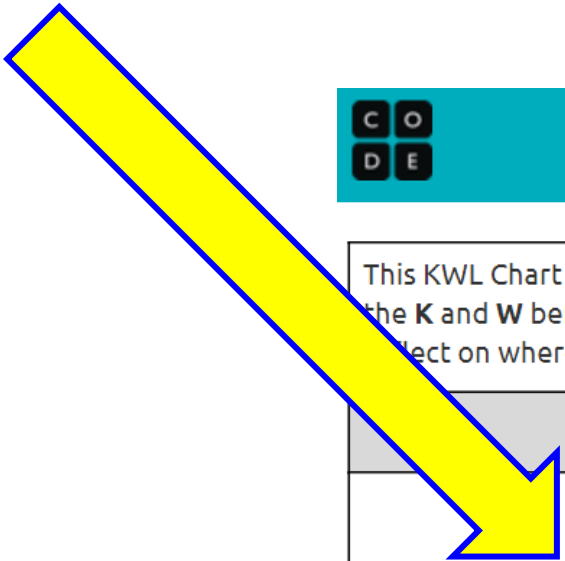
C O
D E

KWL Chart

This KWL Chart tracks what you Know (K) , Want to know (W) , and Learned (L) about a topic. Complete the K and W before beginning your project and add to the W and L sections as you work. At the end, reflect on where you began and all that you have learned at each point during the project.		Topic:
(K)now	(W)ant To Know	(L)earned

Compare and Discuss (4-5 minutes)

Speak with your partner first, and then your group of 4. Update your list with anything new that you now Know.



C O
D E KWL Chart

This KWL Chart tracks what you Know (K) , Want to know (W) , and Learned (L) about a topic. Complete the K and W before beginning your project and add to the W and L sections as you work. At the end, reflect on where you began and all that you have learned at each point during the project.		Topic:
(K)now	(W)ant To Know	(L)earned

Wants to Know (7 minutes)

With your group of 4, fill-in the “Wants to Know” column.

Some things to consider are the following:

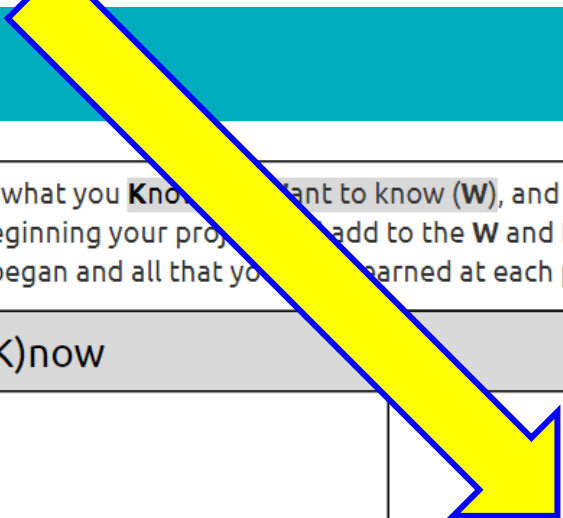
Who is in charge of the internet?

Does any country have its own Internet?

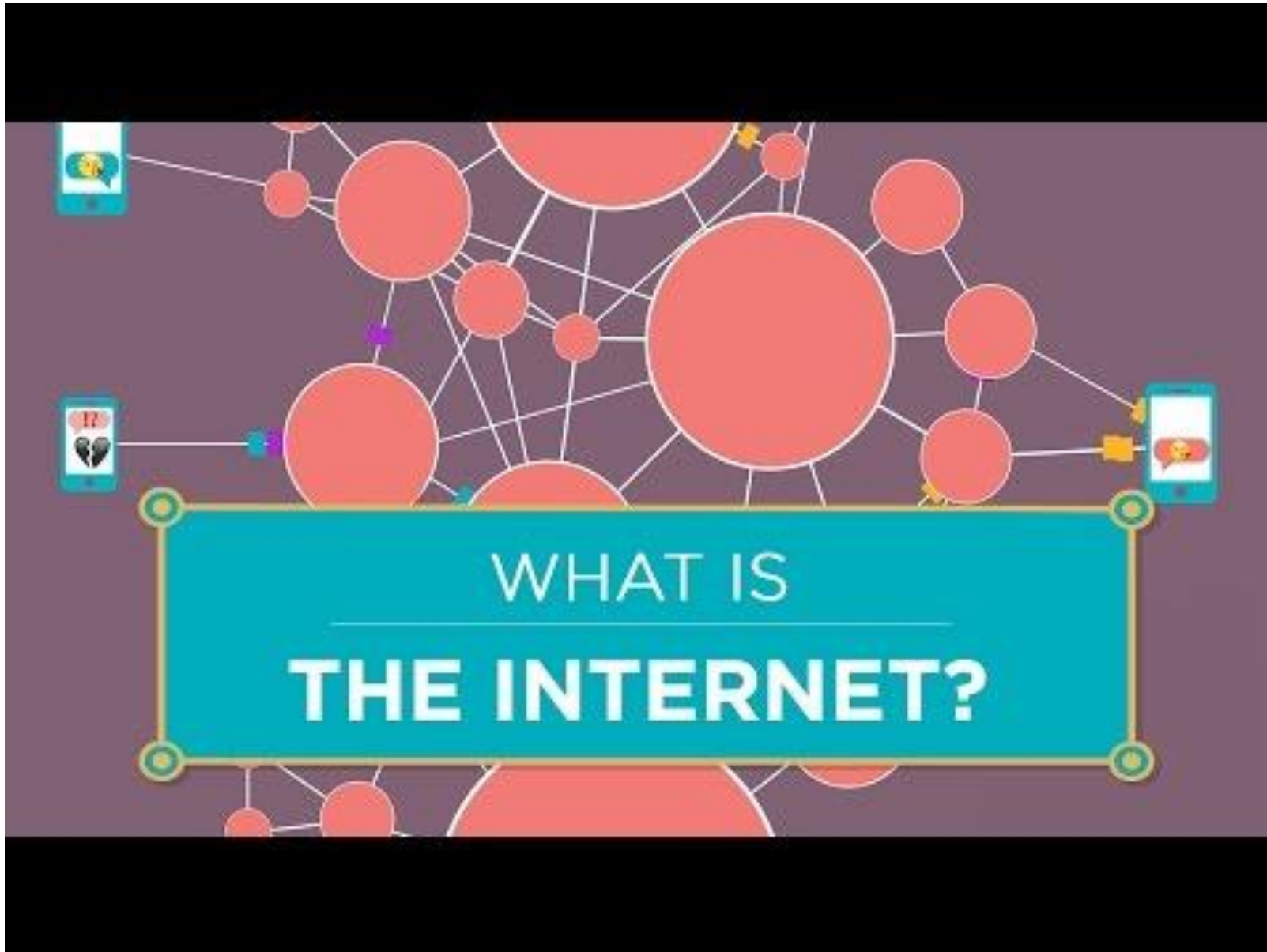
Are there parts of the internet you're not allowed to see?

Where/how would a hacker steal your identity?

C O D E			KWL Chart
This KWL Chart tracks what you Know , what you Want to know (W) , and Learned (L) about a topic. Complete the K and W before beginning your project. Add to the W and L sections as you work. At the end, reflect on where you began and all that you learned at each point during the project.		Topic:	
(K)now	(W)ant To Know	(L)earned	



What is the Internet
(3:44)



Activity – The Internet Is For Everyone

First...a little background about the text:

- After the terrorist attacks of Sept. 11, 2001, Vint Cerf was concerned about maintaining some of the principles of openness and access upon which the Internet was built and founded.
- He wrote a memo entitled **The Internet is for Everyone** as a plea to the the people who write and define standards (the IETF) to make sure the way the Internet is engineered maintained the philosophy that the Internet should be available and useable by everyone in the world, regardless of race, gender, creed, location, or wealth.
- In the memo, he lays out the state of the Internet and its usage in 2002, predicts the future, and then presents a series of nine challenges or threats to the idea that the Internet is for everyone. The last several paragraphs begin with the phrase: “Internet is for everyone - but it won’t be if...”

Your task:

1st: Review the 9 challenges that begin with “Internet is for everyone – but it won’t be if...”

2nd: In your notes, write down the 2 that are most meaningful to you, and why.

Be prepared to read the statement you choose: “Internet is for everyone - but it won’t be if....” and then explain in your own words what it means.

Explain why that particular challenge is meaningful to you or relates to some experience you've had.

Why learn about how the Internet works? As Vint Cerf Says: "You can't escape from contact with the Internet. So why not get to know it?" But you don't have to take Vint Cerf's word. Some of the largest issues facing society hinge on an understanding of how the Internet functions.

At the end of this unit you will do a Practice PT about one of these societal issues. You will research one of these modern issues and prepare a flash talk (a 2 minute presentation) that explains the technical aspects of the Internet that underlie that issue. As you go through these lessons keep your ears and eyes open for how things work.

Many of the issues are related to people taking advantage of the open protocols that make the internet function and present us with tricky dilemmas.




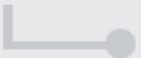


For example there are two major issues to think about:

- Net Neutrality is a raging legal debate about the principle that Internet service providers should enable access to all content and applications regardless of the source, and without favoring or blocking particular products or websites.
- Internet Censorship is the attempt to control or suppress of what can be accessed, published, or viewed on the Internet by certain people. This can be used to protect people (i.e. to not allow access to child pornography) but can also be used to limit free speech.

To have an informed opinion though it helps to understand the technical underpinnings of how the internet works.

Finally, a major issue that our society faces is that far too few people actually understand how the Internet works! We are going to change that over the next few lessons.

▼ Lesson 8: The Internet

-  1 Lesson Overview
-  2 What is the Internet?
-  3-6 Check Your Understanding
-  
-  7 Quick Check-In