

# GLOBAL DIGITAL DIVIDE

Digital Divide  
Lesson 3 of 4

## Overview

Despite many groundbreaking communication technologies emerging almost regularly, Internet access is not equally available to everyone, especially in rural and remote areas worldwide. Nowadays, we do almost everything using the Internet, from remote working (e.g., Work meetings on Zoom) to online education (e.g., Google classroom), online shopping (e.g., Amazon), and online entertainment (e.g., Netflix, YouTube). A lack of access to the Internet for someone today means they lack access to many critical online services ranging from economic opportunities to healthcare and education.

Generally, the digital divide refers to the Internet-access disparity among different socio-economic and demographic groups at various levels - international, national, and local. A complex combination of factors like the economics of the Internet, government policies, the geography of terrains, population density, and population demography causes, perpetuates and influences the existence of the digital divide.

We provide a gentle introduction to the digital divide and its ramifications for the students in this lesson.



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## Standards

Standards are based on fifth-grade learning standards unless otherwise specified.

Computer Science
CSTA 2-DA-07 AZ 5.NI.NCO.1 CSTA 1B-IC-18
CSTA Standards: <a href="https://www.csteachers.org/page/standards">https://www.csteachers.org/page/standards</a> AZ Computer Science: <a href="https://www.azed.gov/sites/default/files/2018/10/Arizona%20Computer%20Science%20Standards_3_5_Final%2006.24.2019.pdf?id=5bc90a611dcb2510102f55b8">https://www.azed.gov/sites/default/files/2018/10/Arizona%20Computer%20Science%20Standards_3_5_Final%2006.24.2019.pdf?id=5bc90a611dcb2510102f55b8</a>

Social Justice
JU.3-5.14 DI.3-5.8
Learning for Justice: <a href="https://www.learningforjustice.org/sites/default/files/2021-11/LFJ-2111-Social-Justice-Standards-Anti-bias-framework-November-2021-11172021.pdf">https://www.learningforjustice.org/sites/default/files/2021-11/LFJ-2111-Social-Justice-Standards-Anti-bias-framework-November-2021-11172021.pdf</a>

English Language Arts
AZ 5.RI.2
AZ English Language Arts: <a href="https://www.azed.gov/sites/default/files/2016/12/5th%20Grade%20ELA%202016%20Final.pdf?id=585aa90eaadebe12481b8443">https://www.azed.gov/sites/default/files/2016/12/5th%20Grade%20ELA%202016%20Final.pdf?id=585aa90eaadebe12481b8443</a>

Math
AZ 5.MD.A.1
AZ Math: <a href="https://www.azed.gov/sites/default/files/2016/12/Math%20Final%2005Fifth%20Grade%20Standards%204_2_2018.pdf?id=58546f66aadebe13008c1a31">https://www.azed.gov/sites/default/files/2016/12/Math%20Final%2005Fifth%20Grade%20Standards%204_2_2018.pdf?id=58546f66aadebe13008c1a31</a>

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## Social Science

AZ 5.G1.1  
AZ 5.E4.2

AZ History and Social Studies:

<https://www.azed.gov/sites/default/files/2018/10/3-5%20Grade%20Band%20Standards%20at%20a%20Glance%206.10.19.pdf?id=5bd772a61dcb250b94e916ef>

## Learning Outcomes

By the end of this lesson, students will be able to:

- Describe how the Internet is useful for people
- Express what digital divide is
- Explain how digital divide might affect people in their lives
- Identify reasons behind a place being affected by the digital divide

## Background

- Even though it is very important for many things we do today, many people do not have access to the Internet and this is called the Digital Divide
- The Digital Divide can prevent people from learning about new things, connecting with friends and family, and sharing about their culture
- The Digital Divide happens when there are no Internet routes to a place OR there are only a small amount of Internet routes

## Pre-Lesson Prep for Teachers

Read [“Life without the Internet”](#)

Read <https://www.pewtrusts.org/en/trust/archive/summer-2019/americas-digital-divide>

Watch <https://www.youtube.com/watch?v=Zx-z1wsl3-0>

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## Lesson Plan

Total time: **40 minutes**

Time	Teacher is...	Students are...	Materials needed
7 minutes	<p>Leading students in a exploratory talking circle by asking the following questions:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <i>What do people use the Internet for?</i></li> <li><input type="checkbox"/> <i>Why is it so frustrating when the Internet does not work?</i></li> </ul>	<p>Answering the teacher's questions and building on each other's responses.</p> <p>Possible responses:</p> <ul style="list-style-type: none"> <li>• Use the Internet to do remote schooling</li> <li>• Play games</li> <li>• Talk to friends</li> <li>• Watch YouTube videos</li> <li>• Find information</li> </ul>	<p>A space for students to sit in a circle</p>
10 minutes	<p>Introducing students to the concept of the Digital Divide by having them read: "Digital Divide"</p> <p>The teacher can decide how they want to break up reading. Popcorn read? Break into reading groups? Teacher reads aloud while students follow along.</p>	<p>Reading "Digital Divide"</p>	<p>A space for students to sit in a circle</p> <p>Or breaking students into groups to work on reading together</p>
10 minutes	<p>Guiding students through a reflection on the Digital Divide reading</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> <i>Can you think of any times when you or someone you know had a hard time <b>accessing</b> the Internet?</i></li> </ul>	<p>Listening and answering teacher's questions</p>	<p>A space for students to sit in a circle</p>

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	<input type="checkbox"/> <i>Do you think it was because of the <b>digital divide</b>? Why or why not?</i>		
10 minutes	<p>Guiding students to start reflecting on the digital divide in the context of the Internet lesson they worked on yesterday.</p> <p><i>If we were to draw a picture of Internet access in places that are impacted by the digital divide using the picture of the Internet we started drawing last week (Figure 1), what would data links to homes that experience the digital divide look like?</i></p>	Working with the teacher to modify Figure 1	A white board
3 minutes	<p>Posting a question to Nearpod for students to respond to:</p> <input type="checkbox"/> <i>In your opinion, is access to the Internet something that people need to have? Or something that is just nice to have? Why or why not?</i>	Responding to Nearpod prompt	Nearpod

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## Figures

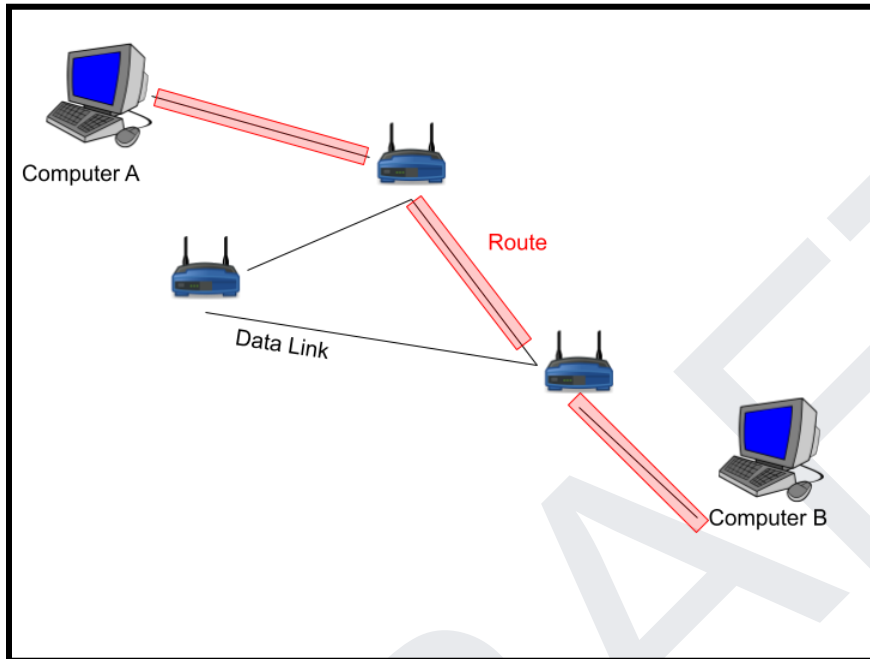


Figure 1. Example of the Internet. You can change this to represent the Digital Divide by having no link from the last router to Computer B. **You can integrate information from Week 1: Day 2 by changing the data links connecting routers to each other to be thick links that represent fiber optic cables (light technology) and using a really skinny line to represent a connection from the router to Computer B (radio technology).**

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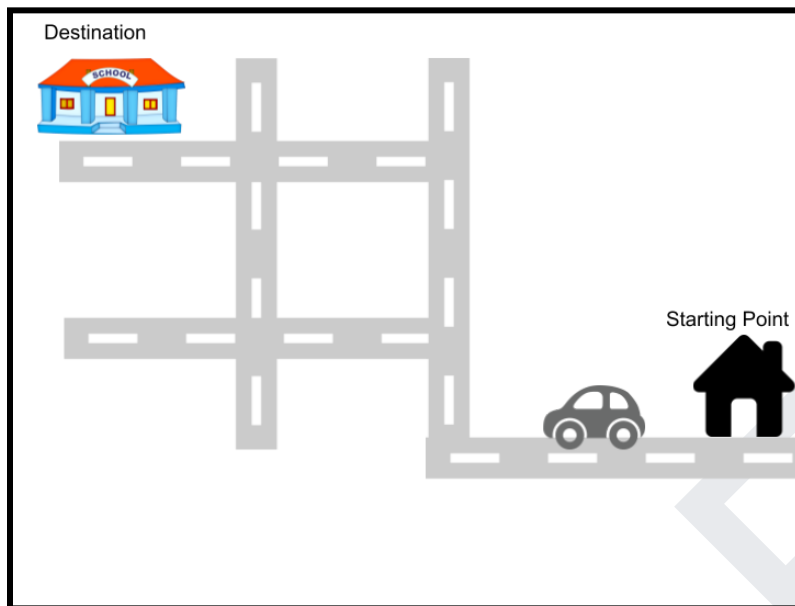


Figure 2. Roads have starting and ending points. There can be multiple routes between them. Routers in the internet are like intersections in roadways.

**You can modify this figure to show a digital divide analog to students by removing roads that get to the house (no road to the home is like no data link going to the home). Or you can draw the road to the home as being like a thin dirt road that people have to drive very slowly to (analog to slower data links being the only way to connect).**

## Assessment Ideas

### Quiz Questions and Answers

Use these questions in whatever format you use in your class to check for understanding, including Kahoot, iClicker, or Google Classroom quizzes.

**Q:** Why do you think the Internet is useful for us?

**A:** We can learn new things from the Internet, keep in touch with friends and family, buy necessary things from online stores, etc.

**Q:** What might help someone to understand if the digital divide exists somewhere in the US?

**A:** The FCC broadband map.

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**Q:** Do you think the FCC broadband map is always accurate?

**A:** No.

**Q:** The digital divide is -

- A. When a place or area does not have very good Internet connection compared to nearby places or areas
- B. When there is no Internet connection in a remote area
- C. When Internet is more expensive for people living in an area
- D. All of the above
- E. Only option A
- F. Options A and B
- G. None of the above

**Ans:** Option D

## Reflection Questions

You can use these in whatever format you use in your class for reflection, including science journals, Near Pods, exit tickets, or in Exploratory Talking Circles.