CyberSafe:
Privacy Prodigy

EDUCATOR GUIDE

This Educator Guide includes:

- Getting Started
- Educational Standards
- Theme Overview
- Lesson Activities
- Visual Glossary

Introduction

Personal data identifies who we are, where we live, and how family, friends, and others can find us. We need to be thoughtful about when we share this information and with whom we are sharing this information with. To support these key components of better understanding our personal data and acceptable people and places to share this information with, we invite you to play CyberSafe: Privacy Prodigy!

CyberSafe: Privacy Prodigy has been designed as a fun and creative introduction to personal data and privacy. This one-hour experience will provide students, ages 8-18, with fundamental principles of personal data and demonstrate how they can be responsible and intentional with their data. Students will learn what personal data is, who should have access to their data, when it is acceptable to share their data, and how to manage their personal data.

Our goal is to empower students to control their information. Students should have the ability to control their data, along with the ability to make clear and meaningful choices on how their data is used. Minecraft: Education Edition alongside Xbox values, protects, and supports data privacy.

Interested in learning more about family settings? Check out the Xbox Family settings app!

How to Get Started

Prepare:

- Learn about Privacy Prodigy with this video
- Use *this* Educator Guide and supporting slide deck to help you guide your class.
- Play through CyberSafe: Privacy Prodigy to get a better understanding of the lesson and how to navigate through the Minecraft world.

Not a teacher? No problem! We want you to help support data privacy too! Use the Family Toolkit to find a different version of these materials, intended to support a more community-focused conversation.

Educational Standards

United States

Keep login information private and log off of devices appropriately **1A-IC-18 (CSTA)**.

Discuss real-world cybersecurity problems and how personal information can be protected.
1B-NI-05 (CSTA)

Work respectfully and responsibly with others online.
1A-IC-17 (CSTA)

Explain how physical and digital security measures protect electronic information.
2-NI-05 (CSTA)

Australia

Considering ways of managing the use of social media to maintain privacy needs
ACTDIP013

Discussing digital citizenship rules and behaviours for participating in an online environment
ACTDIP013

Making ethical decisions when faced with reporting inappropriate online behaviour or acknowledging digital products created by others.
ACTDIP013

Applying safe practices while participating in online environments
ACTDIP022

Developing a set of 'rules' about appropriate conduct, language and content when communicating online, and using these rules as a basis for resolving ethical dilemmas
ACTDIP022

United Kingdom

Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.
Computing: Key Stage 1

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.
Computing: Key Stage 2

Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.
Computing: Key Stage 3

CyberSafe: Privacy Prodigy— Theme Overview

While the Internet has brought great efficiency and benefits to how we are able to live, work, and play, it has also created the need for additional considerations around privacy and safety. Although the Internet is usually regarded as a positive experience, it can be tricky to navigate at times. Our goal is to empower individuals to respect privacy, safeguard data, and enable trust.

Through the CyberSafe: Privacy Prodigy experience, students will participate in meaningful game play that will afford them opportunities to learn about common

and relevant situations when personal data is used and how they can best manage their data.

What is personal data?

Our world is filled with information. Some of this information classifies as personal data. **Personal data** is information about you that can be used to make a connection to you in real life. Whether you are interacting with others online or in real life, it's important to consider what kind of information you are sharing.

CyberSafe: Privacy Prodigy Game Play

This privacy journey will start at Home Sweet Hmm, where players will be greeted by the Trusted Adult. The Trusted Adult should be perceived as an individual who is closest to the player and is responsible for their safety and wellbeing. Depending on the player, this could translate into a parent, grandparent, aunt, uncle, adult-age sibling, or whomever is their primary caretaker.

As an instrumental part of this experience, the Trusted Adult is embedded throughout game play. Students should always feel confident to engage with the Trusted Adult anytime they may need help.

The Trusted Adult will explain the objective of the game and then lead players into a tutorial sequence on how to play the game.

Privacy Prodigy is divided into two distinct sections of the game.

Part 1: Learning About Your Personal Data

Privacy Prodigy is a Minecraft map divided into four streets: the green street, the blue street, the yellow street, and the red street. In this first part of the game, the learning goal is for students to learn about their personal data. The personal data are located on the green, blue, and yellow streets. The red street is an additional street where players will be able to learn even more information about data privacy in Part 2 of game play.

Players will start at their house (which is known as "Home Sweet Hmm"), which is the building on the green street {shown below} on this map.

Understanding the Streets

Green Street	The first street is the green street. The green street contains your most important and private data, such as your password and your passcode. This data should only be shared with your Trusted Adult.
Blue Street	The second street is the blue street. This street contains personal data, such as your medical history, your student ID number, and your school grades. This data should stay within this street to remain safe and protected.
Yellow Street	The third street is the yellow street. The yellow street contains certain pieces of personal data that are okay to share with certain individuals, if you feel comfortable and want to share this personal data. These data bytes should stay in their street to stay protected.
Red Street	The fourth street is the red street. The red street is different than the other streets. Although there are red data bytes here, these data bytes are just helpful tips and information about privacy.

Meet the Data Bytes!

To better understand the concept of data, there are physical representations of data called “data bytes”. The data bytes are special entities found exclusively

within this Minecraft map. The data bytes should remain on their colored street to stay safe in the game.

Password  secret string of letters, symbols, and numbers that you use to gain access into an account	**Passcode**  secret string of numbers to unlock something (i.e., cell phone, bank card, house alarm, etc.)	**Medical History**  official record of your health (includes information like immunizations, allergies, surgeries, etc.)	**Student ID**  unique numeric code used to identify you as a student	**School Grades**  information (shown often as a letter or percentage score) on your academic performance
Email Address  unique identifier in which you can send and receive electronic letters (known as email)	**Phone Number**  numbers (0-9) that are combined in a specific order to create your unique phone number	**Personal Photos**  a picture made using a camera; personal photos contain images of people or personal data (identifiable information)	**Current Location**  real-time location information as to where you are; this information is provided by location services on a cell phone	**Home Address**  pieces of information (street number, street name, city, country, postal code, etc.) to articulate your location

The goal is for students to learn about their personal data, but also to understand when it is appropriate for their data to be shared with certain individuals! Students will be tasked with answering questions from each of the NPCs (non-player characters) on the green, blue, and yellow streets. A tracker will be displayed on their screen in the game to show the player's progress.

The student will interact with an NPC. The NPC will ask a question. If the player answers the question correctly, they will receive a memory card from the NPC. The memory card will automatically appear in their hand; the player will then need to "read" the memory card. A player can read the memory card by tapping on the memory card (touch device) or right-clicking (keyboard/mouse).

When the player opens the memory card to be read, they will see an image and a specific piece of information corresponding to a specific data byte.

The player will need to take the memory card to the correct data byte and select the “give card” button.

Part 2: Protecting Your Personal Data

After answering the NPC questions, players will spawn onto the Red Street. They will complete a brief tutorial, which will start off by helping them to collect gear from the vending machine.

Then, they will learn about their personal Privacy Prodigy map. Players will learn how to use their map to identify the location of “escaped” data bytes. The data bytes are fun and free! They do not understand that they are supposed to stay on their colored street—You must help them! Using your map, you will see when a data byte has wandered off and has become compromised (i.e., your data is on the wrong-colored street). They will need to rescue the data byte by sending it back to its original location (i.e., colored street).

When data bytes are on the wrong-colored street, hostile mobs will attack the data bytes. Players should use their swords or bow/arrows from the vending machine to ward off the mobs and protect the data bytes.

It is important to locate the escaped data bytes and save them! If a player does not save the data byte in time, the data byte will perish.

A notification on your screen will pop up.	Use your map to identify where the data byte is located.	Travel to the location of the escaped data byte; The escaped data byte will have a red exclamation over them.	Interact with the data byte and then select the “save” button to send them back to their correct street.
			

Helpful Hint

It is easier to play with the map in your off hand. To place the map into the other hand, you should:

Open your inventory by pressing “E”.	Select the map in your hotbar.	Drag and drop the map into this area shown below.
		

During this part of game play, students should work on the following tasks:

Upgrade gear from the Vending Machine	Explore inside each of the locations on the streets	Talk to the red data bytes	Travel to the Dark Web Portal	“Save” the data bytes if they go outside of their designated street
				

How do you win the game?

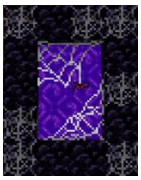
The goal of this Minecraft map is to achieve the ranking of Privacy Prodigy. Players can achieve the ranking of Privacy Prodigy by collecting 3500 tickets.

Privacy Rankings

Ranking	Number of Tickets
Privacy Scout	> 875
Privacy Protector	875 – 1749
Privacy Expert	1750 – 2624
Privacy Hero	2625 – 3499
Privacy Prodigy	3500+

How can players earn tickets in Privacy Prodigy?

Players can earn tickets throughout the game in several different ways.

Answering NPC questions correctly	Finding hidden chests	Talking to the red data bytes	Slaying hostile mobs	"Saving" data bytes	Entering the Dark Web portal
					

Lesson Activities

Overview of the Activities

Note: This is intended to correspond with the EDU Classroom Presentation.

Introduction Activate Knowledge (Slides 1-6)	Introduce the lesson, Privacy Prodigy, by sharing the title of the Minecraft map and reviewing the learning objectives. Then, use Slides 3-6 to start a discussion about data. Students will participate in a Think-Pair-Share to activate their background knowledge about what they know about data.

Introduction "What is data?" (Slide 7-11)	Use Slides 7-9 to explain what personal data and public data is. On Slide 10, you will check for students' understanding of personal and public data by a quick sorting activity. Slide 11 will provide the answers to the sorting activity. NOTE: There are animations on Slide 11 to reveal the answers.
Data Sharing (Slides 10-14)	Explain to students that in certain situations, it is acceptable (and even necessary!) to share personal data with others. Use Slides 13-14 to showcase examples of data sharing. Articulate what data is being shared, who it can be shared with, and why it is acceptable for this data to be shared.
Explanation of Privacy Prodigy (Slides 15-23)	Before starting game play, it is important to provide context of what the students will be seeing and experiencing. The goal is for students to, "STOP and THINK, before you SHARE." In the Privacy Prodigy map, there are 4 different streets: green street, blue street, yellow street, and the red street. On each of the streets, there are specific locations **AND** data who roam freely. The data bytes are physical representations of their personal data. Showcase each of the colored streets; explain what locations, NPCs, and data bytes they will find on each of the colored streets.
At this time, you should log into Minecraft: Education Edition and navigate to the CyberSafe: Privacy Prodigy lesson. The next several slides will be used to showcase a demo of the tutorial sequence.	
Tutorial Sequence (Slides 24-35)	The player will start at their Home Sweet Hmm. They will start the tutorial sequence by talking to their Trusted Adult. The Trusted Adult will introduce them to colored streets to help orient them to the Minecraft map. Then, the Trusted Adult will start testing their knowledge about data. The Trusted Adult will give a question to answer.

	If the player answers the question correctly, they will receive a memory card from the NPC. The memory card will automatically appear in their hand; the player will then need to "read" the memory card. A player can read the memory card by tapping on the memory card (touch device) or right-clicking (keyboard/mouse). When the player opens the memory card to be read, they will see an image and a specific piece of information corresponding to a specific data byte. The player will need to take the memory card to the correct data byte and select the "Give Card" button. The data byte will complete a fun dance and continue to roam around its colored street.
Helpful Information Slides 36-42	After the players answer all of the NPC questions (i.e., there are 10 questions in total), they will interact with their Trusted Adult again. The player will spawn onto the Red Street and then experience a mini tutorial to explain how to collect gear from the vending machine, use their map to locate escaped data bytes, defend their data bytes from hostile mobs, and "save" the data bytes by sending them back to their correct color street. Before releasing students to begin playing, remind students that there are two parts of the game play: **Part 1**: Test their knowledge on data by answering the NPC questions. **Part 2**: Collect tickets to become a Privacy Prodigy! They can collect tickets by: • Talking to red data bytes • Eliminating hostile mobs • Finding hidden chests • Saving escaped data bytes • Traveling to the Dark Web Portal

Completing CyberSafe: Privacy Prodigy

After students have completed the activities within the game, they will return to their Home Sweet Hmmm and experience the ending sequence of CyberSafe: Privacy Prodigy. The Trusted Adult will reveal their Privacy Prodigy certificates.

Reflection & Celebration

After game play has finished, gather students back together to recap their learning and to discuss the reflection questions. (**Slides 44-45**)

Extend the Learning

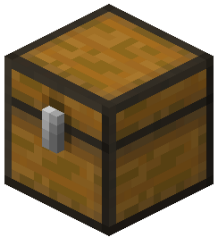
Students should then be encouraged to extend their learning about data and how they can responsibly manage their data. (**Slide 46**)

- Create a build in Minecraft of who is included in your Rectangles of Trust
- Collaborate with your peers to create a "Top Tips for Data Privacy" tips poster
- Use the book & quill to create a book or poem about the data blobs
- Use the data byte template to create a privacy pledge.

MINECRAFT VISUAL GLOSSARY

Chest

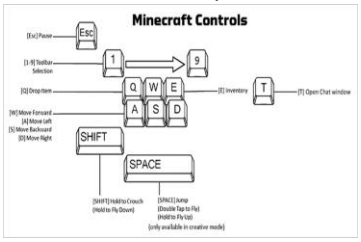
item that will hold blocks and items outside of a player's inventory



Controls

(keyboard)

keyboard buttons that help you move around and complete tasks



Controls

(touch)

the touch pad that helps you move around and complete tasks

Data Byte

physical representations of your personal data

Dialog

a written conversational exchange between the player and NPC

Hotbar

selection bar that appears on the bottom of the screen

Immersive Reader

a tool to help players in reading or translating in-game text

Map

tracks your location and shows the land around you; it will also show you the locations of the data bytes and Dark Web

Minecraft Education

a game-based learning platform

NPC

non-player character

Spawn Point

the location where a player begins game play

Trusted Adult

the NPC character who you have a good relationship with