GUIDED NOTES

What Cybersecurity Is

Name: _____ Date: _____

Fill in the blanks as we go. Each day has its own word bank, and every answer is in it.

WHAT YOU ALREADY KNOW

A computer stores files and runs programs. A phone, a laptop and a tablet can all go online. A password is a secret word that proves who you are.

Day 1 — Cybersecurity Protects Data, Devices and Networks

Today you will learn what it protects. You will also learn how it differs from information assurance.

Word bank asset · attack · Cybersecurity · Data · device · Information assurance · network · Risk

Cybersecurity

It keeps data and networks safe.

_____ means protecting computers, networks and data. It guards them from attacks, damage and access without permission.

An _____ is an action that tries to harm an asset. It can mean stealing data or breaking a website.

Assets

Assets are the things we protect.

An _____ is anything worth protecting. These include data, a device, a network or a person's work.

_____ is information stored on a computer or phone. Names, photos and grades are data.

A _____ is a machine that stores or uses data. A laptop, phone or tablet is one.

A _____ is a group of devices linked so they can share data. A school's Wi-Fi is one example.

Information assurance

It makes sure information can be trusted.

_____ means protecting information and systems. It keeps information available, correct and private. It also checks who people are and keeps proof of who did what.

It uses rules, plans and checks.

It covers paper files, too.

Cybersecurity stops attacks on computers, networks and data.

_____ is the chance that an asset will be harmed. It also means how bad the harm would be.

Rules, plans and checks lower risk.

REMEMBER

Cybersecurity protects data, devices and networks from attacks. Information assurance uses rules, plans and checks. They let people trust their information.

Day 2 — How Information Security Grew into Cybersecurity

Today you will learn how it grew. You will also learn how the internet sped up the change.

Word bank CISA · cloud · Information security · internet · password · web · Wi-Fi · worm

Before the internet

Security started with paper and locks.

_____ means protecting information in any form. It can be on paper or on a device.

Workers kept paper files in locked cabinets. Only people with a key could open them.

A _____ is a secret word that proves who you are.

In the early 1960s, a shared computer at MIT used some of the first computer passwords.

Programs that spread

Networks let programs travel.

In 1971, an early program named Creeper moved from computer to computer on ARPANET, an early network.

A _____ is a harmful program. It usually copies itself from computer to computer by itself.

The _____ is a huge network that links computers and networks around the world.

In November 1988, the Morris worm spread across the early internet and slowed many computers.

People go online

The internet put more people and more data online.

The _____ is the system of linked pages that people open in a web browser. It is also called the World Wide Web.

In 1993, CERN let anyone use the web's software for free.

_____ is a way for devices to join a network by radio waves. It needs no cables.

The first wireless network standard came out in 1997. It was later named Wi-Fi.

The _____ means computers in data centers that store data and run programs. People use them online.

In 2006, Amazon Web Services started renting cloud storage.

In January 2007, Apple introduced the iPhone.

Cybersecurity today

The internet sped up change.

After the web, big changes came closer together.

Attacks can now reach people and places all over the world.

_____ is the Cybersecurity and Infrastructure Security Agency. It is a US agency that helps protect the country's networks.

The government created CISA in 2018 as part of the Department of Homeland Security.

REMEMBER

Information security began with locked paper files and passwords. It grew into cybersecurity when the internet, the web, Wi-Fi, phones and the cloud put people online.

Day 3 — Quiz: What Cybersecurity Protects and How It Grew

Today you will review the big ideas. Then you will show what you know on the quiz.

Word bank asset · Cybersecurity · Data · Information assurance · Information security · internet

What cybersecurity protects

It protects assets.

_____ means protecting computers, networks and data. It guards them from attacks, damage and access without permission.

An _____ is anything worth protecting. These include data, a device, a network or a person's work.

_____ is information stored on a computer or phone. Names, photos and grades are data.

Two jobs

Each job works in its own way.

_____ means protecting information and systems. It keeps information available, correct and private. It also checks who people are and keeps proof of who did what.

Cybersecurity stops attacks on computers, networks and data.

How it grew

Going online changed security.

_____ means protecting information in any form. It can be on paper or on a device.

The _____ linked computers around the world. Then attacks could spread faster and farther.

REMEMBER

Cybersecurity protects data, devices and networks from attacks. It grew out of information security when the internet put people online.