

Computer Friends: How Our Tech Tools Work

Lower Elementary IT Fundamentals — Grades K–2

Tech for Everyone

CHAPTER 1

What Is a Computer?

Computers are machines that follow instructions.

You see computers every day. Let's find out what they really are, and how they help us!

1.1 — Machines That Help Us

A machine is a tool that does work for us. A bike is a machine. It helps us go fast. A can opener is a machine. It helps us open cans.

A computer is a very special machine. It does not open cans. It does not roll down the street. A computer works with **words, pictures, numbers, and sounds**.

A computer can show you a story. It can play your favorite song. It can help you draw a rainbow. It can count faster than anyone you know!

Computers help us **learn, play, and make things**. But a computer is not magic. It is a machine, just like a bike. It needs people to tell it what to do.



Try It

Computer or Not? Play a quick game! A grown-up names a thing — a spoon, a tablet, a teddy bear, a phone. You shout "Computer!" or "Not a computer!" Remember the secret: a computer is a machine that follows instructions.

1.2 — Kinds of Computers

Computers come in many shapes and sizes. Let's meet four kinds:

- A **tablet** is flat like a book. You touch its screen with your finger.
- A **laptop** folds open and closed, like a clamshell. It has a keyboard.
- A **desktop** stays on a desk. It has a big screen and does not move around.
- A **phone** is small. It fits in a pocket, and it is a computer too!

They look different. But inside, they are all the same kind of friend. They all show pictures. They

all make sounds. They all follow instructions.

Kinds of Computers

 Tablet Flat — touch the screen	 Laptop Folds open and closed
 Desktop Stays on a desk	 Phone Fits in a pocket

Different shapes — but they ALL follow instructions!

The four kinds of computers we see every day are tablets, laptops, desktops, and phones.

Try It

Look around the room. Do you see a tablet, a laptop, a desktop, or a phone? Point and say its name!

Helper Tip

You Are the Boss. Computers only do what people tell them. If a computer does something silly or wrong, it is not being mean — it just followed an instruction. Tell a grown-up, and they can help fix it. People are always in charge!

1.3 — Computers Follow Instructions

Here is the most important secret about computers: **they only do what people tell them to do.**

An instruction is a small job. "Show this picture." "Play this song." "Add these numbers." A

computer waits for instructions. Then it follows them very, very fast.

When you tap a picture on a tablet, you are giving an instruction! You are saying, "Open this, please." The tablet listens and opens it.

Computers do not think like people. They do not have feelings. They cannot decide what is kind or fair. That is **our** job. The computer just follows the steps that people give it.

So who is the boss? **People are.** People like you!



In the News

Computers in Cars! New cars have lots of hidden computers inside. Some help the car stop safely. Some warn the driver if another car is too close. You cannot see them, but they are working the whole ride!

Talk about it: What hidden computer have you found at home?

1.4 — Computers Are Everywhere

Some computers hide! They live inside other machines and do quiet jobs all day.

- A **car** has a hidden computer. It helps the car run safely.
- A **washing machine** has one. It counts the time and spins the clothes.
- Some **toys** have tiny computers. They make the toy talk or beep!
- A **microwave** has one too. It counts down and goes *ding!*

These hidden computers do not have big screens. But they still follow instructions, just like a tablet does.

Hidden Computers Are All Around Us



No big screens — but they still follow instructions!

Hidden computers live inside cars, washing machines, toys, and microwaves.

Once you know the secret, you will spot computers everywhere you go!

How You Feel

Computers can seem big and mysterious. It's okay to wonder how they work! Being curious is how every computer expert started. You do not have to know everything today. Ask questions, look closely, and learn one little thing at a time. You've got this!

Key Concepts Checklist

- ☐ I know a computer is a machine that follows instructions
- ☐ I can name four kinds of computers (tablet, laptop, desktop, phone)
- ☐ I know computers only do what people tell them
- ☐ I know people are the boss of computers
- ☐ I can find hidden computers, like in a car or a washing machine

CHAPTER 1 · ACTIVITY

Activity: Computer Hunt

What Is a Computer?

Part 1

With a grown-up, walk around your home or school. Look for computers! Look for the ones you can see, like tablets and laptops. Look for hiding ones too, like the one inside the microwave.

Part 2

Pick your **three favorite** computers from your hunt. Say each one's name out loud. Is it a computer you can see, or a hiding one?

Part 3

Draw your three computers on paper. Color them! Show your drawing to a friend or grown-up and tell them what each computer does.

What We Learned

- A **computer** is a machine that follows instructions from people.
- Computers come in kinds: **tablet**, **laptop**, **desktop**, and **phone**.
- Computers only do what **people** tell them to do — people are the boss!
- Computers do not think or have feelings like people do.
- Some computers **hide** inside cars, washing machines, toys, and microwaves.

CHAPTER 1

Chapter Review

What Is a Computer?

Show What You Know

1. What is a computer? (Hint: it is a machine that follows...)
2. Name two kinds of computers you can see.
3. Who tells a computer what to do?
4. Where is one place a computer hides?

Words to Know

Word	What It Means
Computer	A machine that follows instructions from people
Machine	A tool that does work for us
Instruction	A small job we tell a computer to do
Tablet	A flat computer with a screen you touch