



CHAPTER 1

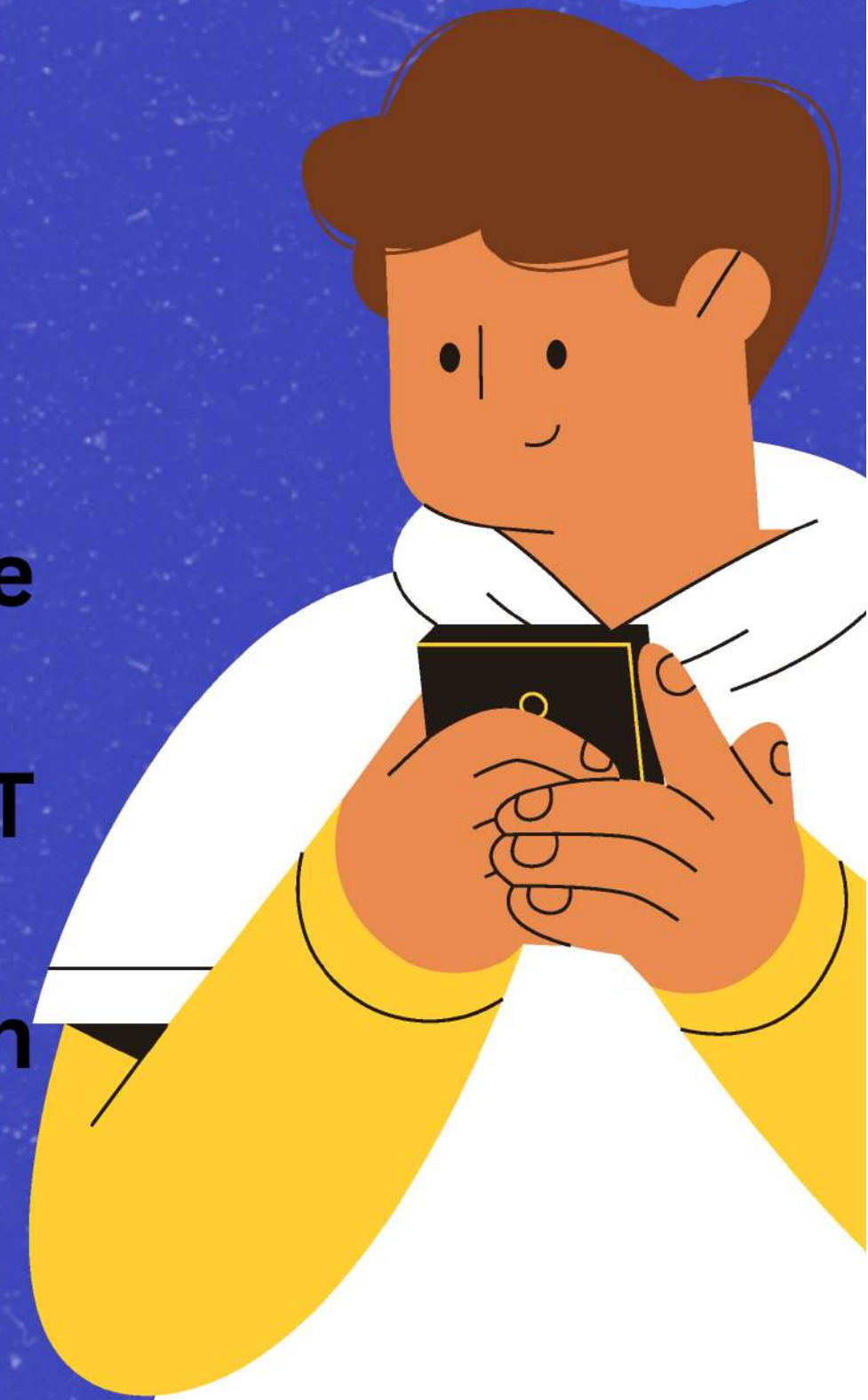
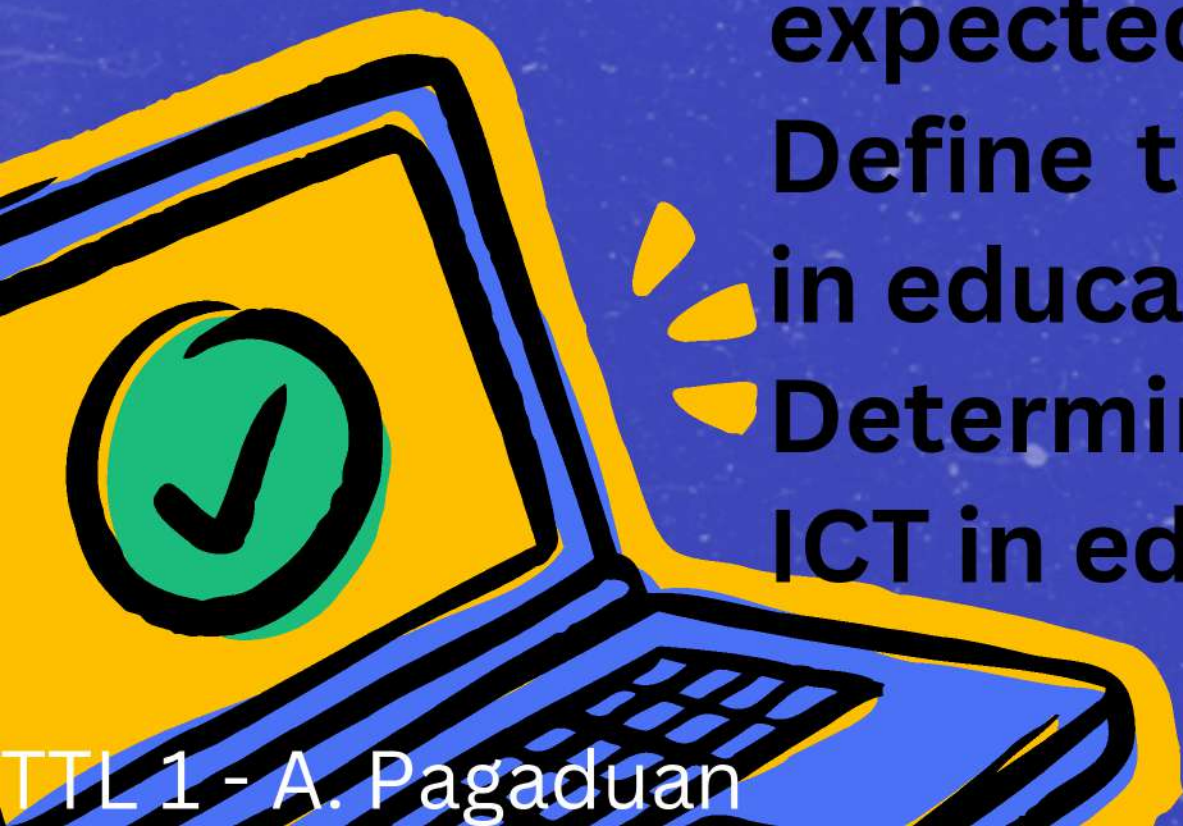


ICT: BASIC TERMS AND CONCEPTS

At the end of the lesson, the students are expected to:

- Define the concepts in understanding ICT in education; and

- Determine the interrelation of concepts in ICT in education.



LIST OF CONTENTS



Technology

Information &
Communication
Technology

Educational
Technology

Instructional
System

Technology Tools





TECHNOLOGY

“Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is most important.” – Bill Gates –

-refers to methods, processes, and devices used for practical purposes. It includes instruments from pencil and paper to modern electronic gadgets and tools for the practical task.



TECHNOLOGY


The New Book of Knowledge (2007)

Greenwood Dictionary of Education (2003)

Newby et al. (2000)



ICT (INFORMATION & COMMUNICATION TECHNOLOGY



-is the use of digital technology, communication tools and networks to access, manage, integrate, evaluate, create and communicate information (Guro 21, 2011).

Anderson, 2010
UNDP, 2001
UNESCO, 2011
RA 10844, 2016
TESDA, n.d.
Florencio & Andong, 2008



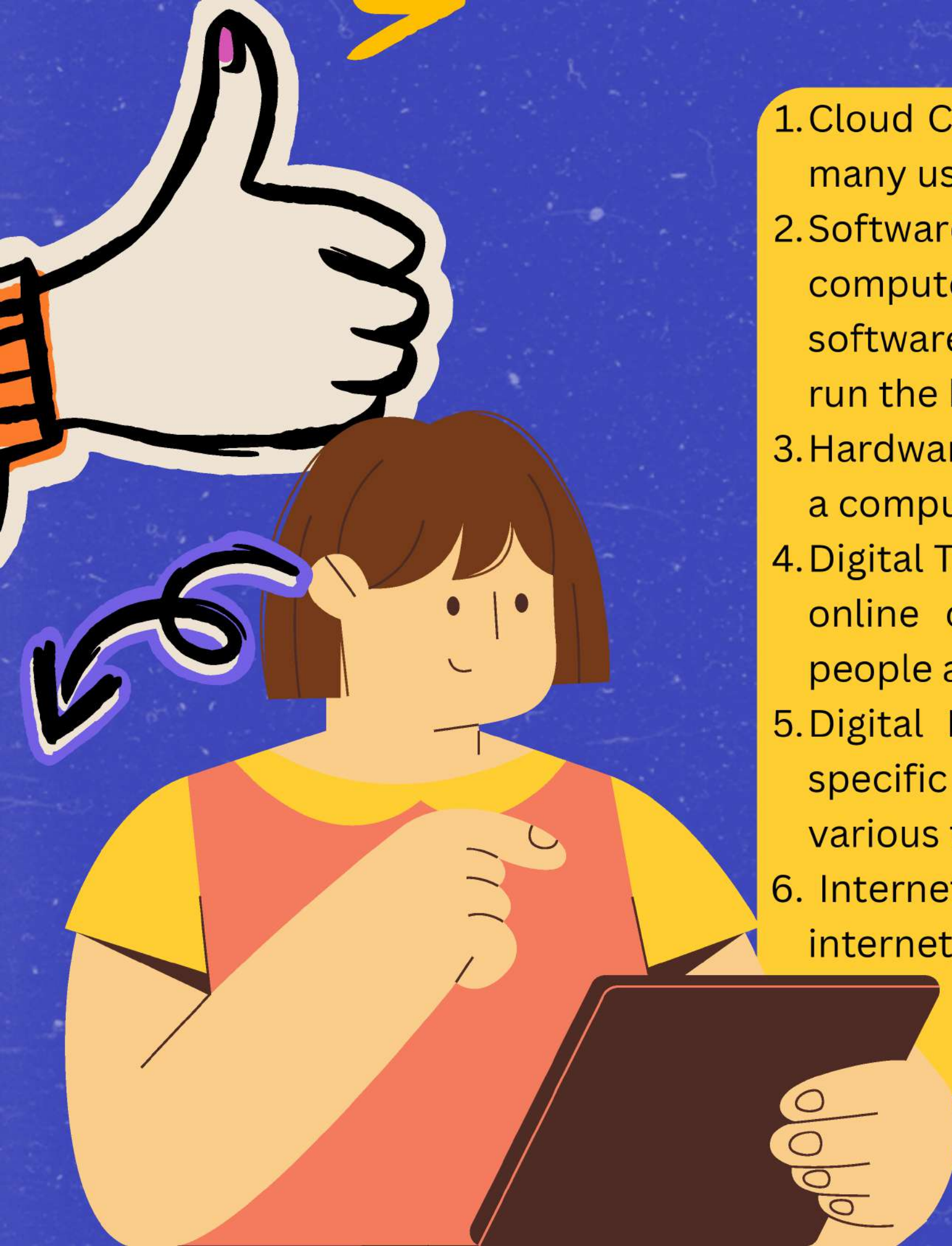
THERE ARE 6 COMPONENTS OF ICT:

**1. CLOUD
COMPUTING**
2. SOFTWARE

3. HARDWARE
**4. DIGITAL
TRANSACTIONS**

5. DIGITAL DATA
**6. INTERNET
ACCESS**





1. Cloud Computing. The term describes data centers available to many users over the internet.
2. Software. This refers to applications used to do tasks in computer. The two main categories of software are application software, used for a specific need, and system software, used to run the hardware.
3. Hardware. The term refers to the physical elements comprising a computer or electronic system.
4. Digital Transactions. This can be broadly defined as “paperless,” online or automated transactions that take place between people and organizations.
5. Digital Data. This term refers to other forms of data using specific machine language systems that can be interpreted by various technologies.
6. Internet Access. This refers to the process of connecting to the internet using technology gadgets.



EDUCATIONAL TECHNOLOGY



INSTRUCTIONAL SYSTEM



TECHNOLOGY TOOLS



DEFINITION:



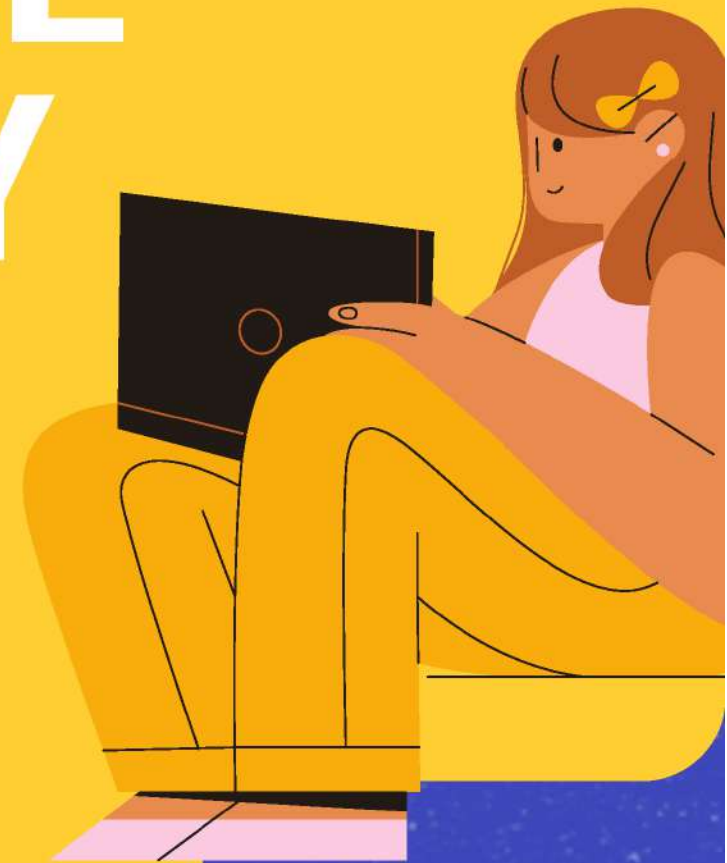
EDUCATIONAL TECHNOLOGY

the practice of using methods and resources to facilitate the learning process

(Lucido, 1997)

UNESCO, 1974

AECT, 2008



INSTRUCTIONAL SYSTEM

-methods or strategies to make way for students to learn the lesson easily, utilizing appropriate instructional materials.

General steps involved in the procedures are:

1. defining learning objectives;
2. determining specifications for a system that would meet the objectives;

General steps involved in the procedures are:

3. designing a system based on the specifications;
4. developing the system
5. system debugging
6. system implementation and evaluation.



TECHNOLOGY TOOLS

Technology tools are software used to develop or support online course content. Chalk, posters, and overhead projectors were considered technology tools before. Technology tools include all tools that enhance the delivery of instruction.

Categories:

1. DATA / CALCULATION TOOLS: include electronic databases and spreadsheets
2. DESIGN TOOLS: include computer-aided designs
3. DISCUSSION TOOLS: include blogs, forums, and video conferencing
4. COMMUNICATION TOOLS: include e-mail
5. HANDHELD DEVICES: include palmtops and digital cameras
6. INSTRUCTIONAL TOOLS: include instructional softwares
7. INTERACTIVE TOOLS: include interactive websites
8. PUBLISHING / VISUAL TOOLS: include digital cameras, scanners, and graphics software used for imaging
9. MULTIMEDIA TOOLS: include presentation tools incorporating texts, sounds, and graphics; and
10. WRITING TOOLS: include word processing softwares

An illustration on a dark blue background with a starry pattern. In the center, the words "THANK YOU" are written in large, white, bold, sans-serif capital letters. Above the text is a large, stylized white arrow with a thick black outline, pointing downwards. To the right of the arrow is a glowing yellow lightbulb with a black filament. On the left, a girl with brown hair in pigtails, wearing an orange dress, holds a pink tablet. Below her, a girl with short brown hair, wearing a yellow shirt with a red vest, holds a black tablet. In the bottom center, a blue laptop is open, displaying a green checkmark on its screen, with small yellow and pink starburst effects around it. To the right of the laptop, a boy with short brown hair, wearing an orange sweater, holds a black smartphone. Further right, a girl with short brown hair, wearing a teal shirt, holds a black smartphone. The overall style is flat and colorful, with a focus on digital technology and gratitude.

THANK
YOU