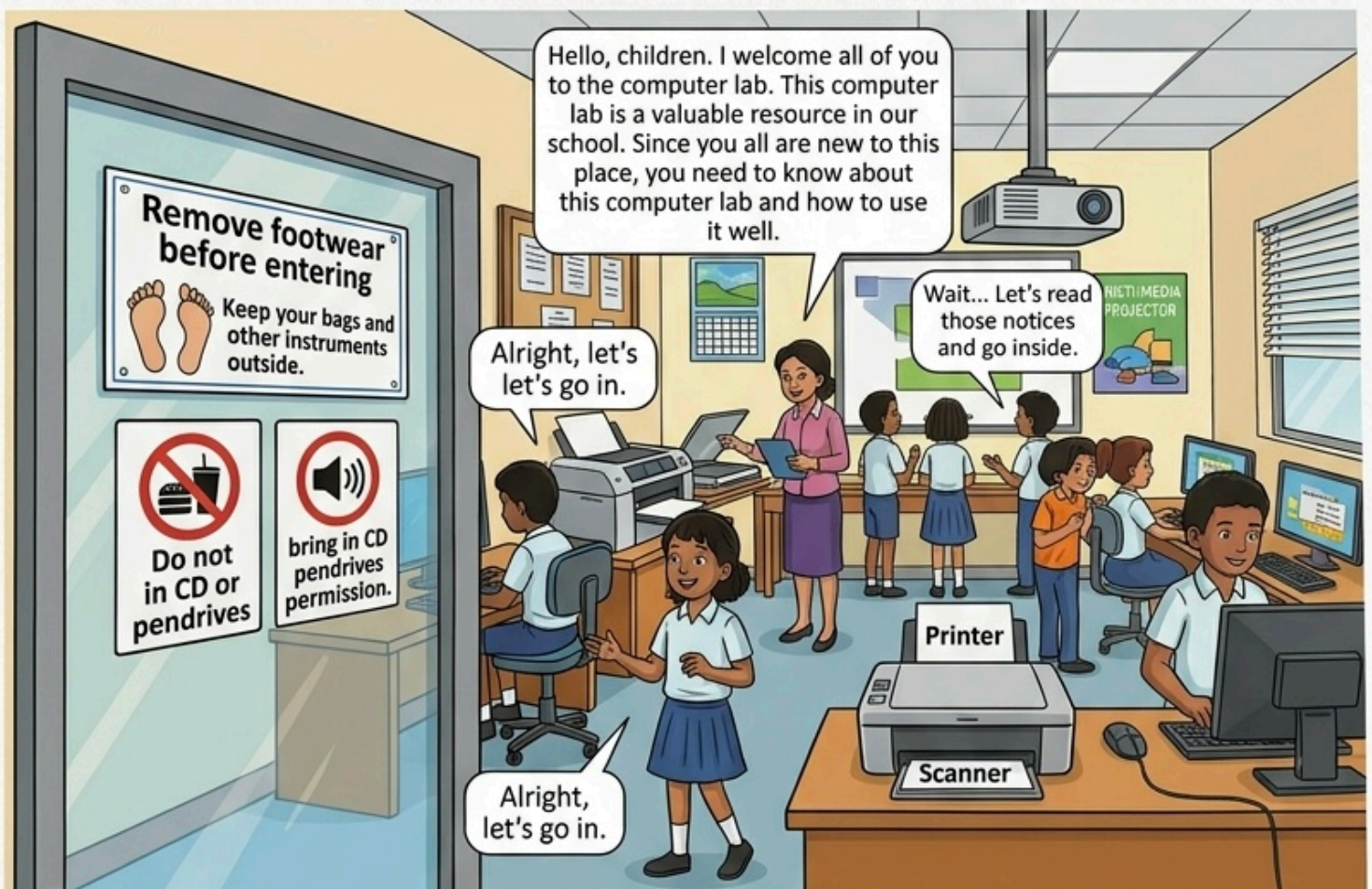


# GRADE 6:

# INTRODUCTION TO THE COMPUTER LABORATORY



**OPERATING THE  
COMPUTER**



**ETHICS &  
PASSWORDS**



**CORRECT  
POSTURES**



**E-WASTE  
MANAGEMENT**  
(Reduce, Reuse, Recycle)

**For free distribution**

# Lesson: Introduction to the Computer Laboratory

## 1. Laboratory Rules and Safety

Computers and their accessories (printers, scanners, projectors) are valuable and expensive resources. It is everyone's responsibility to handle them with care.

For Your Personal Safety	For the Safety of the Devices
Be careful when touching wires and electrical sockets.	Do not plug in or supply power without a teacher's instruction.
Know where the fire extinguishers and exit doors are located.	Keep the laboratory and all equipment clean and dust-free.
Avoid running or playing inside the computer lab.	Remove footwear and leave it outside the lab.
Do not bring food, water, or liquids into the lab.	Turn off all equipment properly after use and return it to its place.
Wash and dry hands before handling equipment.	Always scan external drives (like pendrives) for viruses before opening.

## 2. Operating the Computer

Operating a computer incorrectly can shorten its lifespan. Always follow these standard steps unless your teacher or specific hardware (like a laptop) requires otherwise.

### How to Turn On the Computer:

1. Turn on the main wall switch connected to the computer.
2. Turn on the Uninterrupted Power Supply (UPS), if available.
3. Switch on the System Unit (the computer tower).

4. Turn on the monitor.

### **How to Shut Down the Computer:**

1. Close all open programs and windows.
2. Click the "Shutdown" command in the operating system.
3. Switch off the monitor's power button once the screen goes dark.
4. Turn off the UPS.
5. Turn off the main wall switch.

### **3. Computer Ethics**

Just as we have rules for good behavior in real life, we have ethics for the digital world.

When using the computer laboratory, you must adhere to the following guidelines:

- Work quietly without disturbing others.
- Never attempt to hack or interfere with others' computer activities.
- Do not use or copy pirated software (software that should be paid for).
- Refrain from accessing another person's computer or files without permission.
- Never attempt to repair computer devices without proper instruction.
- Only access the internet under the direct supervision of a teacher.
- Do not install, uninstall, change, or delete programs without permission.

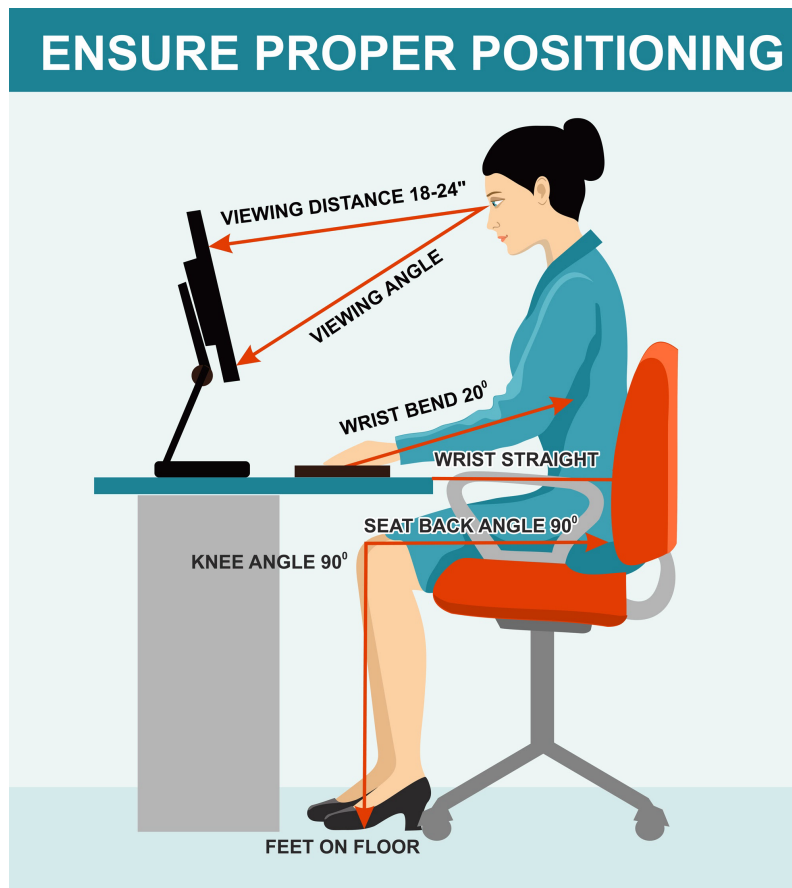
### **4. Maintaining Correct Posture**

Using computers constantly with bad posture can cause long-term health issues like eye strain, backaches, and muscle tension.

#### **Guidelines for Healthy Computer Use:**

- **Eyes:** Keep the screen at eye level or slightly below. Maintain a distance of 18 to 28 inches between your eyes and the screen to prevent eye strain.
- **Back:** Sit straight and lean back against the support of your chair to avoid spine and back pain.
- **Feet:** Keep your legs vertical and place your feet flat on the ground to avoid foot strain.

- **Arms:** Keep the keyboard and mouse at the level of your elbows.
- **Screen Settings:** Adjust the brightness and contrast of the monitor to suit the lighting in the room.
- **Rest:** Look away from the screen frequently to give your eyes a break.



## 5. Managing Electronic Waste (E-Waste)

Discarded computer hardware is known as electronic waste. Improper disposal is dangerous to both the environment and human health because electronics contain harmful metals.

### Harmful Metals in E-Waste:

- **Lead:** Damages the brain, kidneys, and blood circulation.
- **Barium:** Causes brain swelling, muscle weakness, and heart damage.
- **Mercury:** Damages kidneys and the nervous system.
- **Beryllium:** Can cause lung cancer.

### The 3R System for Safe Disposal:

- **Reduce:** Maintain your equipment well so it lasts longer. You do not need to buy new devices constantly if the current ones can be repaired.
- **Reuse:** If you buy a new device, donate or sell the old one if it still works. Broken parts (like an old monitor casing) can sometimes be repurposed creatively.
- **Recycle:** If equipment cannot be repaired or reused, hand it over to a certified electronic waste recycling company so the materials can be safely broken down and transformed into new products.

## 6. Protecting Computers with Passwords

While locking the lab protects the physical computers, passwords provide logical protection for the data stored inside them.

### Rules for a Strong Password:

- Use a minimum of 8 characters.
- Include a mix of uppercase/lowercase letters (A-Z), numbers (0-9), and symbols (@, #, \$).
- Avoid using easily guessable personal information (like your name or birthday).
- Set up a password hint or a recovery email address in case you forget your password.