WEEK 2 LESSON: SAFE WORKING HABITS

I. Introduction

Technical Drawing involves the use of precision instruments like T-squares, compasses, dividers, sharp pencils, rulers, set squares, and sometimes even blades for trimming. These tools are valuable and can cause harm if not used properly.

Just like in a science laboratory or engineering workshop, there are **important safety practices** students must follow while working in the **technical drawing room**. This is referred to as **"Safe Working Habits."**

II. What Are Safe Working Habits?

Safe working habits refer to:

"The regular and consistent actions or behaviors adopted to ensure that work is done in a way that prevents accidents, avoids injuries, and promotes a healthy and productive environment."

These habits include being **orderly**, **disciplined**, **attentive**, **cautious**, and **clean** while handling tools and working in a shared space.

In technical drawing, the habits affect **how you sit**, **how you handle your instruments**, **how you store materials**, and even **how you relate to your classmates and environment**.

III. Why Are Safe Working Habits Important in Technical Drawing?

1. **To prevent injuries:** Drawing tools like compasses and dividers are sharp and can pierce skin.
2. **To avoid accidents:** Scattered tools or slippery paper can cause falls or cuts.
3. **To maintain order and focus:** A clean workspace promotes a clearer mind and accurate work.
4. **To protect equipment:** Drawing instruments are expensive. Misuse or carelessness leads to damage.
5. **To instill professionalism:** Technical drawing is a core of engineering and architecture. Professionals must observe high safety standards.

IV. Examples of Safe Working Habits

🔹 **A. Personal Safety Habits**

These relate to your personal hygiene, discipline, and behavior:

- Sit **upright** and not slouched or leaning while drawing.
- **Avoid eating or drinking** around drawing materials to prevent spills.
- **Keep your hands clean** to avoid smudging your work or damaging tools.
- Do not **run or play** in the drawing room.
- Always focus on your task — avoid distractions.

🔹 **B. Handling Tools Safely**

Each tool in technical drawing must be treated with care:

- **Hold compasses by the knob**, not the point.
- **Sharpen pencils carefully** — never point sharpeners or knives at yourself.
- **Do not throw instruments or tap them on surfaces**.
- Pass sharp tools with the **point facing down** or away from others.
- Never use tools like rulers or set squares as toys.

🔹 **C. Workspace Safety Habits**

These ensure that the drawing room is neat and accident-free:

- Keep your **drawing board clean**.
- Use **clips or masking tape** to secure paper so it doesn't slide.
- Sweep pencil shavings and eraser crumbs immediately.
- Place unused tools back into the **instrument box or shelf**.
- Do not **block walkways** with bags or chairs.
- Use **proper lighting** — don't work in dark areas or under strong glare.

🔹 **D. Electrical and Fire Safety (if applicable)**

Some drawing rooms use electrical devices like **plotters, scanners, lightboxes, or sharpeners**:

- Never use wet hands on any electrical appliance.
- Plug and unplug devices **safely** and never force cords into sockets.
- Know where **fire extinguishers** and **emergency exits** are.

V. Dangers of Ignoring Safe Working Habits

Unsafe Practice	**Possible Outcome**
Playing with a compass	Eye injury, piercing the skin
Not storing tools properly	Missing or broken instruments
Leaving eraser waste on the table	Slippery surface, dirty drawings
Not securing paper	Poor-quality work due to shifting lines
Running in the drawing room	Collision with furniture or injury
Drawing with a broken tool	Inaccuracy or injury
Not reporting damaged tools	Puts others at risk when they unknowingly use them

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VI. Teacher's Demonstration/Practical Ideas

Teachers can show:

- Correct posture while working.
- Safe way to pass a compass or sharpener.
- How to organize a drawing toolbox.
- Real examples of damage caused by careless tool handling.
- Mock accident scenarios (without injury) to teach reactions.

VII. Real-World Relevance

Engineers, architects, and designers work with **costly tools** and **detailed drawings**. In industry, failing to observe safe practices can:

- Result in loss of materials worth thousands.
- Cause injuries that halt projects.
- Damage credibility and career progression.

VIII. Summary of Key Safety Rules

1. Always organize your workspace before and after drawing.
2. Handle sharp instruments with care.
3. Avoid distractions while working.
4. Wear neat, comfortable, and safe clothing.
5. Report any faulty or broken instrument to your teacher immediately.
6. Keep your tools clean and in good condition.
7. Never play with your instruments or with your classmates during drawing time.