

RATIONALIZED PRE-TECHNICAL STUDIES GRADE 7 NOTES

Strand 1: FOUNDATION OF PRE-TECHNICAL STUDIES.

1.1 Introduction to Pre-technical studies

Pre-technical studies is a series of learning areas written to provide practical experiences that support the acquisition of skills in technical areas derived from computer science and business studies.

Components of Pre-technical studies.

Pre-technical studies is a technical learning area comprising of:

Pre-technical studies – a learning area that involves acquiring practical skills and experience in technical area.

Computer science the study of computers and how computer technology can be used to solve problems.

Business study involves study of activities that involves production, distribution and consumption of goods and services aimed at making profits.

The role of Pre-technical studies in day today life.

- It gives learners the skills they need to think critically and solve problems as well as preparing them for a technical & digital future.
- Facilitates development of appropriate skills and knowledge gained from the learning areas such as computer science and business studies.
- Offers a wide range of careers in Pre-technical area such as in safety and material handling, in computer science such as programmers, software engineering and in business studies such as accountant, traders, manager, bankers and shopkeeper.
- Pre-technical studies promotes independence and self-learning through various skills enhancing chances of creating employment opportunities and self-employment in individual.
- It equips learners with skills to use when observing personal safety and safety in working environment.

1.2 - Safety in the work environment.

• What is safety?

Safety is a situation where one avoids causing harm, discomfort or sickness to self and to others when carrying out the daily activities.

Examples of safety measures include:

- ~ Wearing face mask to prevent spreading of airborne diseases or breathing in dirty air.
- ~ Buckling a safety belt while in a vehicle to avoid falling off the seat in case of emergency brakes.
- ~ Wearing hand gloves when working to avoid injury and dirt to the hands when working.
- ~ Wearing gum boots to protect the feet from injury when working in areas with mud or sharp objects.
- ~ Wearing an overall to guard against soiling clothes.

Potential safety threats in a work environment.

- Potential safety threats in work environment can either be physical or online.

Physical threats at workplaces.

- Physical safety threats include:

- ~ Sharp edged tools and objects that can easily cut or poke someone.
- ~ Disarranged rooms where one can easily tumble and fall.
- ~ Naked electric wires that can easily cause electric shock.
- ~ Poorly lit rooms where one can easily know oneself against objects.
- ~ Poorly stored items on the shelves where they can easily fall off and hit someone.
- ~ Working without protective gear where one can easily be hurt or injured.
- ~ Rooms with wet slippery floors where one can easily slip and fall.

Online threats at a workplace.

- Every online user should ensure they stay safe online by protecting themselves and others from online threats.
- **Examples of online threats at work place include:**
 - ~ Malware/virus attack.
 - ~ Hacking.
 - ~ Data theft.
 - ~ Cyberbullying.
 - ~ Friend requests from unknown people.
 - ~ Phishing attacks.
 - ~ Ransomware-attempts to encrypt data and calling for ransom to release it or unlock code