

BTVTED / TLE specialization.

 INDUSTRIAL ARTS (PART 1: 1-100)

1. **LOTO (Lock-Out, Tag-Out):** Mandatory before any electrical repair.
2. **Class A Fire:** Wood, paper, cloth (Use Water/ABC).
3. **Class B Fire:** Flammable liquids like oil/gas (Use CO2/ABC).
4. **Class C Fire:** Electrical fires (Never use water).
5. **Class D Fire:** Combustible metals.
6. **$V = I \times R$:** Ohm's Law (Voltage = Current $\times$ Resistance).
7. **$P = V \times I$:** Power Law (Watts = Voltage $\times$ Amps).
8. **Series Circuit:** One path; if one bulb breaks, all go out.
9. **Parallel Circuit:** Multiple paths; used in household wiring.
10. **Continuity Test:** Checking if a circuit is "closed" or "open."
11. **Multimeter/Avometer:** Measures Amps, Volts, and Ohms.
12. **Soldering:** Joining metals using a filler at low temp.
13. **Brazing:** Joining metals at a temperature above 450°C.
14. **Flux:** Prevents oxidation during soldering.
15. **Tinning:** Coating the soldering iron tip with solder.
16. **Cold Solder:** A dull, brittle joint caused by insufficient heat.
17. **Resistor:** Limits current flow.
18. **Capacitor:** Stores charge; unit is Farads (F).
19. **Diode:** One-way valve for current.
20. **Anode:** Positive side of a diode.
21. **Cathode:** Negative side of a diode.
22. **LED:** Light Emitting Diode.
23. **Transformer:** Changes AC voltage levels.
24. **Rectifier:** Converts AC to DC.
25. **Inverter:** Converts DC to AC.
26. **AWG:** American Wire Gauge (Higher number = Thinner wire).
27. **Conduit:** Pipe used to protect electrical wires.
28. **Junction Box:** Where wire connections are made.
29. **Circuit Breaker:** Resettable safety device.
30. **Fuse:** One-time safety device (melts when overloaded).
31. **Ball Peen Hammer:** For metalwork and rivets.
32. **Claw Hammer:** For driving/pulling nails.
33. **Sledge Hammer:** For heavy-duty breaking.
34. **Cross-cut Saw:** Cuts across wood grain.
35. **Rip Saw:** Cuts along wood grain.
36. **Back Saw:** Used for fine cuts and miters.
37. **Coping Saw:** Used for cutting curves in thin wood.
38. **Hacksaw:** Used for cutting metal.
39. **Compass Saw:** For cutting holes in wood panels.
40. **Plane:** Tool for smoothing wood surfaces.
41. **Jack Plane:** General-purpose smoothing plane.
42. **Block Plane:** For end-grain smoothing.

43. **Chisel:** For carving or cutting away wood/metal.
44. **Bevel:** Slanted edge of a tool.
45. **Try Square:** For checking 90-degree angles.
46. **Miter Box:** Guide for cutting 45 or 90-degree angles.
47. **Level:** Checks horizontal flatness.
48. **Plumb Bob:** Checks vertical straightness.
49. **Vernier Caliper:** High-precision linear measurement.
50. **Micrometer:** Measures very thin materials (thousands of an inch).
51. **Feeler Gauge:** Measures gaps between parts.
52. **Torque Wrench:** Measures bolt tightness.
53. **Allen Wrench:** For hex-socket screws.
54. **Pipe Wrench:** For gripping cylindrical pipes.
55. **Vise:** Holds workpieces stationary on a bench.
56. **C-Clamp:** Holds materials together temporarily.
57. **Drill Bit:** The cutting part of a drill.
58. **Countersink Bit:** For making screw heads flush.
59. **Pilot Hole:** Prevents wood splitting.
60. **Lathe:** For cylindrical turning.
61. **Chuck:** Holds the drill bit or workpiece in place.
62. **Sandpaper:** Graded by "Grit" (60 = Rough, 220 = Fine).
63. **Varnish:** Synthetic clear finish.
64. **Shellac:** Natural clear finish (from lac bugs).
65. **Lacquer:** Fast-drying finish.
66. **Primer:** Undercoat to help paint stick.
67. **Enamel:** Hard, glossy paint.
68. **Thinners:** Solvent used to dilute paint/clean brushes.
69. **GI Sheet:** Galvanized Iron (zinc-coated).
70. **Soldering Copper:** The bit used to transfer heat.
71. **Butt Joint:** Simplest wood joint.
72. **Lap Joint:** One piece overlaps another.
73. **Mortise and Tenon:** Very strong "hole and peg" joint.
74. **Dovetail Joint:** Interlocking joint used in drawers.
75. **Miter Joint:** Joint made at a 45-degree angle.
76. **Plywood:** Layers of wood veneer glued together.
77. **MDF:** Medium Density Fiberboard.
78. **Hardboard:** Compressed wood fibers (Masonite).
79. **Softwood:** From cone-bearing trees (Pine/Cedar).
80. **Hardwood:** From broad-leaved trees (Narra/Mahogany).
81. **Seasoning:** Removing moisture from wood (Air or Kiln).
82. **Checking:** Cracks in wood due to uneven drying.
83. **Warping:** Bending or twisting of wood.
84. **Knots:** Imperfections where branches grew.
85. **Kerf:** The slot made by a saw.
86. **Orthographic:** Top, Front, Side views.

- 87. **Isometric:** 30-degree angle 3D drawing.
 - 88. **Oblique:** 45-degree angle 3D drawing.
 - 89. **Perspective:** Drawing with a vanishing point.
 - 90. **T-Square:** For drawing horizontal lines.
 - 91. **Set Squares:** 30/60 and 45-degree triangles.
 - 92. **Compass:** For drawing circles.
 - 93. **Divider:** For transferring measurements.
 - 94. **Protractor:** Measures angles.
 - 95. **Border Line:** Thickest line in a drawing.
 - 96. **Hidden Line:** Dashed line for unseen parts.
 - 97. **Center Line:** Long-short-long dashed line.
 - 98. **Dimension Line:** Shows length/size.
 - 99. **Scale:** Relationship between drawing size and actual size.
 - 100. **CAD:** Computer-Aided Design.
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HOME ECONOMICS (PART 2: 101-200)

- 101. **Needs:** Essentials (Food, Water, Shelter).
- 102. **Wants:** Desires (Jewelry, Designer bags).
- 103. **Budget:** Financial plan for a specific period.
- 104. **Fixed Expense:** Stays the same (Rent).
- 105. **Variable Expense:** Changes (Electricity/Food).
- 106. **Resources:** Human (Skills) vs. Material (Money/Tools).
- 107. **Management:** Planning, Organizing, Controlling, Evaluating.
- 108. **Decision Making:** Choosing between alternatives.
- 109. **Consumer:** Person who uses goods/services.
- 110. **Consumer Rights:** Right to safety, choice, information.
- 111. **Nutrients:** Carbs, Protein, Fats, Vitamins, Minerals.
- 112. **Carbohydrates:** Main source of energy (Rice/Bread).
- 113. **Protein:** For body building/repair (Meat/Eggs).
- 114. **Fats:** Concentrated energy; insulation.
- 115. **Vitamins:** Organic compounds for health.
- 116. **Vitamin A:** For eyesight (Carrots).
- 117. **Vitamin C:** For immunity (Citrus).
- 118. **Vitamin D:** For bones (Sunlight).
- 119. **Minerals:** Inorganic (Calcium/Iron).
- 120. **Iron:** Prevents Anemia.
- 121. **Iodine:** Prevents Goiter.
- 122. **Calcium:** Prevents Osteoporosis.
- 123. **Malnutrition:** Imbalance in nutrient intake.
- 124. **Obesity:** Excessive body fat.
- 125. **Anorexia:** Self-starvation.
- 126. **Bulimia:** Binge-eating followed by purging.
- 127. **Danger Zone:** 40°F - 140°F (5°C - 60°C).
- 128. **Mise en Place:** Preparation of ingredients.

- 129. **Cross-Contamination:** Pathogens moving from one food to another.
- 130. **Salmonella:** Bacteria common in raw chicken/eggs.
- 131. **E. coli:** Bacteria common in undercooked beef.
- 132. **Al Dente:** "To the tooth" (firm pasta).
- 133. **Boiling:** 212°F (100°C).
- 134. **Simmering:** Just below boiling.
- 135. **Steaming:** Cooking with vapor.
- 136. **Sautéing:** Cooking quickly in little fat.
- 137. **Baking:** Dry heat in an oven.
- 138. **Roasting:** Cooking meat/veggies in an oven.
- 139. **Braising:** Searing then slow-simmering.
- 140. **Blanching:** Brief boil, then ice bath.
- 141. **Poaching:** Gentle cooking in liquid.
- 142. **Julienne:** Matchstick cut.
- 143. **Dice:** Small square cuts.
- 144. **Chop:** Irregular small pieces.
- 145. **Minced:** Very fine pieces (Garlic).
- 146. **Yeast:** Leavening agent for bread.
- 147. **Baking Powder:** Chemical leavener (needs moisture).
- 148. **Baking Soda:** Chemical leavener (needs acid).
- 149. **Kneading:** Working dough to develop gluten.
- 150. **Gluten:** Protein that gives bread structure.
- 151. **Roux:** Flour and fat thickener.
- 152. **Stock:** Liquid from simmering bones/veggies.
- 153. **Mother Sauces:** Bechamel, Velouté, Espagnole, Tomato, Hollandaise.
- 154. **Table Setting:** Fork (Left), Knife/Spoon (Right).
- 155. **Russian Service:** Server plates the food.
- 156. **French Service:** Prepared tableside.
- 157. **Family Service:** Food in large bowls on the table.
- 158. **Blue Plate Service:** Plated in the kitchen.
- 159. **Buffet:** Self-service.
- 160. **A la Carte:** Ordered item by item.
- 161. **Table Skirting:** Decorating the table edges.
- 162. **Napkin Folding:** For aesthetics/hygiene.
- 163. **Sewing Machine:** Lockstitch machine is most common.
- 164. **Bobbin:** Holds the lower thread.
- 165. **Presser Foot:** Holds fabric against feed dogs.
- 166. **Feed Dogs:** Moves fabric forward.
- 167. **Tension Regulator:** Controls thread tightness.
- 168. **Balance Wheel:** Manually moves the needle.
- 169. **Thimble:** Protects finger from needle.
- 170. **Pinking Shears:** Zig-zag cut to prevent fraying.
- 171. **Tape Measure:** For body measurements.
- 172. **Emery Bag:** Sharpens needles/pins.

- 173. **Seam Ripper:** Removes unwanted stitches.
 - 174. **Basting:** Temporary stitches.
 - 175. **Seam:** Where two pieces of fabric are joined.
 - 176. **Hem:** The finished edge of a garment.
 - 177. **Dart:** V-shaped fold for fitting.
 - 178. **Facing:** Fabric used to finish raw edges (neckline).
 - 179. **Natural Fibers:** Cotton, Silk, Wool, Linen.
 - 180. **Synthetic Fibers:** Nylon, Polyester, Acrylic.
 - 181. **Cotton:** From seeds (breathable).
 - 182. **Silk:** From cocoons (luxury).
 - 183. **Wool:** From sheep (warmth).
 - 184. **Linen:** From flax.
 - 185. **Parenting Styles:** Authoritative (Best), Authoritarian, Permissive, Uninvolved.
 - 186. **Erikson's Stage 5:** Identity vs. Role Confusion (Adolescence).
 - 187. **Piaget's Stage 4:** Formal Operational (Abstract thought).
 - 188. **Nuclear Family:** Parents and children.
 - 189. **Extended Family:** Includes relatives (grandparents/uncles).
 - 190. **Blended Family:** Step-parents/step-children.
 - 191. **First Aid:** Initial care for injury.
 - 192. **RICE:** Rest, Ice, Compression, Elevation.
 - 193. **CPR:** Cardiopulmonary Resuscitation.
 - 194. **Home Nursing:** Caring for sick at home.
 - 195. **Hygiene:** Personal cleanliness.
 - 196. **Sanitation:** Environmental cleanliness.
 - 197. **Ergonomics:** Designing workspace for safety/efficiency.
 - 198. **Textiles:** Any cloth or goods produced by weaving.
 - 199. **Pattern:** Template for cutting fabric.
 - 200. **Filing:** Systematic arrangement of records.
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ICT LITERACY (PART 3: 201-300)

- 201. **Hardware:** Physical parts.
- 202. **Software:** Programs/Instructions.
- 203. **CPU:** The brain of the computer.
- 204. **ALU:** Arithmetic Logic Unit (Math).
- 205. **RAM:** Temporary/Volatile memory.
- 206. **ROM:** Permanent/Non-volatile memory.
- 207. **Bit:** 0 or 1.
- 208. **Byte:** 8 bits.
- 209. **Kilobyte (KB):** 1024 bytes.
- 210. **Input:** Keyboard, Mouse, Scanner.
- 211. **Output:** Monitor, Printer, Speaker.
- 212. **Storage:** HDD, SSD, Flash drive.
- 213. **Motherboard:** Main circuit board.
- 214. **Operating System (OS):** Windows, Linux, macOS.

- 215. **Application Software:** Word, Excel, Photoshop.
- 216. **Utility Software:** Antivirus, Disk cleanup.
- 217. **Internet:** Global network of networks.
- 218. **WWW:** World Wide Web.
- 219. **HTTP:** Protocol for transferring web pages.
- 220. **HTTPS:** Secure version of HTTP.
- 221. **URL:** Uniform Resource Locator (Address).
- 222. **IP Address:** Unique ID for every device online.
- 223. **ISP:** Internet Service Provider.
- 224. **Modem:** Connects PC to ISP.
- 225. **Router:** Distributes internet within a house/office.
- 226. **LAN:** Local Area Network.
- 227. **WAN:** Wide Area Network.
- 228. **Cloud Computing:** Storing data online (Google Drive).
- 229. **Firewall:** Blocks unauthorized network access.
- 230. **Malware:** Malicious software.
- 231. **Virus:** Spreads by attaching to files.
- 232. **Worm:** Spreads without human help.
- 233. **Trojan:** Disguised as useful software.
- 234. **Phishing:** Fake emails to steal data.
- 235. **Spyware:** Secretly monitors activity.
- 236. **Spam:** Junk email.
- 237. **Encryption:** Coding data for security.
- 238. **Digital Footprint:** Your permanent online record.
- 239. **Netiquette:** Manners on the internet.
- 240. **Cyberbullying:** Online harassment.
- 241. **MS Word:** Word processing.
- 242. **MS Excel:** Spreadsheet.
- 243. **MS PowerPoint:** Presentation.
- 244. **MS Access:** Database.
- 245. **Cell:** Intersection of Row and Column.
- 246. **Range:** Group of cells.
- 247. **Formula:** Math calculation in Excel.
- 248. **Function:** Built-in formula (SUM, AVG).
- 249. **Absolute Reference:** A1 (doesn't change).
- 250. **Relative Reference:** A1 (changes when copied).
- 251. **Alignment:** Left, Right, Center, Justify.
- 252. **Font:** Style of text.
- 253. **Bold:** Ctrl + B.
- 254. **Italic:** Ctrl + I.
- 255. **Underline:** Ctrl + U.
- 256. **Copy:** Ctrl + C.
- 257. **Paste:** Ctrl + V.
- 258. **Cut:** Ctrl + X.

- 259. **Undo:** Ctrl + Z.
 - 260. **Save:** Ctrl + S.
 - 261. **Print:** Ctrl + P.
 - 262. **Select All:** Ctrl + A.
 - 263. **Find:** Ctrl + F.
 - 264. **Hyperlink:** Link to another file/site.
 - 265. **Header:** Top of page.
 - 266. **Footer:** Bottom of page.
 - 267. **Margin:** Space around text.
 - 268. **Portrait:** Vertical page orientation.
 - 269. **Landscape:** Horizontal orientation.
 - 270. **PDF:** Portable Document Format.
 - 271. **JPEG:** Image file.
 - 272. **PNG:** Transparent image file.
 - 273. **MP3:** Audio file.
 - 274. **MP4:** Video file.
 - 275. **Database Table:** Stores data in records/fields.
 - 276. **Record:** Row in a database.
 - 277. **Field:** Column in a database.
 - 278. **Primary Key:** Unique ID for a record.
 - 279. **Query:** Asking the database for info.
 - 280. **Peripheral:** External hardware (Printer).
 - 281. **Driver:** Software that lets OS talk to hardware.
 - 282. **Browser:** Chrome, Edge, Safari.
 - 283. **Search Engine:** Google, Bing.
 - 284. **Social Media:** Platforms for interaction (FB, X).
 - 285. **Blog:** Personal online journal.
 - 286. **Vlog:** Video blog.
 - 287. **E-commerce:** Buying/selling online.
 - 288. **Desktop:** Main screen area.
 - 289. **Icon:** Visual symbol for a program.
 - 290. **Taskbar:** Bottom bar in Windows.
 - 291. **BIOS:** First software run on startup.
 - 292. **Cache:** High-speed temporary memory.
 - 293. **Resolution:** Clarity of screen/image.
 - 294. **Pixel:** Tiny dot on a screen.
 - 295. **Bitrate:** Data speed in audio/video.
 - 296. **Uploading:** Sending to the web.
 - 297. **Downloading:** Getting from the web.
 - 298. **Bandwidth:** Network capacity.
 - 299. **Cookies:** Data stored by websites to remember you.
 - 300. **E-waste:** Discarded electronic devices.
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**AGRICULTURE & FISHERY (PART 4: 301-400)**

- 301. **Agronomy:** Science of soil and crop production.
- 302. **Horticulture:** Science of garden plants (Fruits/Flowers).
- 303. **Olericulture:** Study of vegetables.
- 304. **Pomology:** Study of fruits.
- 305. **Floriculture:** Study of flowers.
- 306. **Soil:** Top layer of earth for growth.
- 307. **Loam:** Best soil for farming (Mix of sand, silt, clay).
- 308. **Sandy Soil:** Good drainage, poor nutrients.
- 309. **Clay Soil:** Holds water, poor drainage.
- 310. **pH Level:** 7 is neutral; most crops like 6.0 to 7.0.
- 311. **Erosion:** Wearing away of soil.
- 312. **Terracing:** Plowing across hills to stop erosion.
- 313. **Contour Plowing:** Plowing along the slope.
- 314. **Crop Rotation:** Changing crops per season.
- 315. **Monoculture:** One crop only (not recommended).
- 316. **Intercropping:** Two or more crops together.
- 317. **Mulching:** Covering soil with straw/plastic.
- 318. **Irrigation:** Artificial watering.
- 319. **Fertilizer:** Adds nutrients to soil.
- 320. **NPK:** Nitrogen (Leaves), Phosphorus (Roots), Potassium (Health).
- 321. **Organic Fertilizer:** Compost/Manure.
- 322. **Inorganic Fertilizer:** Chemical/Synthetic.
- 323. **Composting:** Decaying organic matter.
- 324. **Vermicomposting:** Using earthworms for compost.
- 325. **Sexual Propagation:** By seeds.
- 326. **Asexual Propagation:** Cuttings, Grafting, Layering.
- 327. **Grafting:** Joining scion and stock.
- 328. **Marcotting:** Air layering (rooting while on the tree).
- 329. **Germination:** Seed starting to grow.
- 330. **Nursery:** Where young plants are raised.
- 331. **Transplanting:** Moving seedlings to the field.
- 332. **Direct Seeding:** Planting seeds in the field.
- 333. **Pruning:** Cutting branches for better growth.
- 334. **Pest:** Organism that damages crops.
- 335. **Pesticide:** Chemical for pests.
- 336. **Herbicide:** Chemical for weeds.
- 337. **Insecticide:** Chemical for insects.
- 338. **Fungicide:** Chemical for fungi.
- 339. **Biological Control:** Using natural enemies (Ladybugs).
- 340. **Animal Production:** Raising livestock.
- 341. **Cattle:** For beef/milk.
- 342. **Poultry:** Chickens, Ducks, Turkeys.
- 343. **Swine:** Pigs.

- 344. **Ruminants:** Animals with 4-compartment stomachs (Cows).
- 345. **Broilers:** Meat chickens.
- 346. **Layers:** Egg chickens.
- 347. **Debeaking:** Removing beak tips.
- 348. **Culling:** Removing unproductive animals.
- 349. **Incubation:** Period for egg hatching (21 days for chicken).
- 350. **Aquaculture:** Raising aquatic animals.
- 351. **Hypoxia:** Low oxygen in water.
- 352. **Dissolved Oxygen (DO):** Oxygen for fish.
- 353. **Aeration:** Bubbling air into water.
- 354. **Phytoplankton:** Microscopic plants (Fish food).
- 355. **Fingerlings:** Young fish ready for ponds.
- 356. **Fry:** Newly hatched fish.
- 357. **Fish Cage:** Floating net enclosure.
- 358. **Hapa:** Net for nursery/breeding.
- 359. **Pond:** Still water enclosure.
- 360. **Raceway:** Flowing water system.
- 361. **Turbidity:** Murkiness of water.
- 362. **pH of Water:** Ideal is 6.5 to 9.0.
- 363. **Ammonia:** Toxic waste in fish tanks.
- 364. **Nitrate/Nitrite:** Stages of waste breakdown.
- 365. **Sustainable Farming:** Long-term environmental health.
- 366. **Hydroponics:** Growing in water (no soil).
- 367. **Aquaponics:** Fish + Hydroponics.
- 368. **Precision Agriculture:** Using tech/GPS for farming.
- 369. **Genetically Modified Organism (GMO):** DNA altered.
- 370. **Market Gardening:** Growing for local sales.
- 371. **Cash Crop:** Grown for profit (Tobacco/Coffee).
- 372. **Silage:** Fermented grass for cows.
- 373. **Fodder:** Dry food for livestock.
- 374. **Biosecurity:** Measures to prevent animal disease.
- 375. **Zoonotic Disease:** Jumps from animals to humans.
- 376. **Avian Flu:** Bird flu.
- 377. **ASF:** African Swine Fever.
- 378. **Cage Culture:** Raising fish in sea/lake cages.
- 379. **Brackish Water:** Mix of fresh and salt water.
- 380. **Estuary:** Where river meets sea.
- 381. **Mariculture:** Sea farming.
- 382. **Photosynthesis:** Plants making food with light.
- 383. **Stomata:** Pores for gas exchange.
- 384. **Xylem:** Transports water.
- 385. **Phloem:** Transports sugar.
- 386. **Turgor Pressure:** Water pressure in plants.
- 387. **Inflorescence:** Flower cluster.

- 388. **Stamen:** Male part of flower.
- 389. **Pistil:** Female part of flower.
- 390. **Pollination:** Transfer of pollen.
- 391. **Self-Pollination:** Within one plant.
- 392. **Cross-Pollination:** Between two plants.
- 393. **Dormancy:** Sleeping stage of seeds.
- 394. **Harvesting:** Gathering mature crops.
- 395. **Post-Harvest:** Handling after gathering.
- 396. **Cold Storage:** Refrigeration for crops.
- 397. **Milling:** Removing husks from grain.
- 398. **Winnowing:** Separating grain from chaff.
- 399. **Threshing:** Loosening grain from plant.
- 400. **Food Security:** Availability and access to food.



COMMON COMPETENCIES & PROFESSIONALISM (PART 5: 401-500)

- 401. **OHS:** Occupational Health and Safety.
- 402. **Hazard:** Potential source of harm.
- 403. **Risk:** Chance that a hazard will cause harm.
- 404. **Ergonomics:** Workplace design for the body.
- 405. **Housekeeping:** 5S (Sort, Set in order, Shine, Standardize, Sustain).
- 406. **Safety Signs:** Red (Danger), Yellow (Warning), Green (Safety).
- 407. **Fire Extinguisher Use:** PASS (Pull, Aim, Squeeze, Sweep).
- 408. **Entrepreneurship:** Creating/managing a business.
- 409. **Entrepreneur:** Risk-taker who starts a business.
- 410. **PECs:** Personal Entrepreneurial Competencies.
- 411. **Risk-Taking:** Calculated chance for success.
- 412. **Persistence:** Never giving up.
- 413. **Goal-Setting:** Specific and measurable aims.
- 414. **Opportunity Seeking:** Looking for gaps in the market.
- 415. **Business Plan:** Roadmap for a business.
- 416. **Marketing:** Promoting and selling products.
- 417. **SWOT Analysis:** Strengths, Weaknesses, Opportunities, Threats.
- 418. **Strengths:** Internal positive factors.
- 419. **Weaknesses:** Internal negative factors.
- 420. **Opportunities:** External positive factors.
- 421. **Threats:** External negative factors.
- 422. **Product:** The good or service sold.
- 423. **Price:** Cost to the consumer.
- 424. **Place:** Where it is sold (Distribution).
- 425. **Promotion:** Advertising/Publicity.
- 426. **Target Market:** Specific group of customers.
- 427. **Competition:** Other businesses in the same field.
- 428. **Markup:** Amount added to cost to get selling price.

- 429. **Profit:** Income minus expenses.
- 430. **Loss:** When expenses are higher than income.
- 431. **Capital:** Money used to start a business.
- 432. **Revenue:** Total money coming in.
- 433. **Sole Proprietorship:** One owner.
- 434. **Partnership:** Two or more owners.
- 435. **Corporation:** Owned by stockholders.
- 436. **Ethics:** Moral principles.
- 437. **Professionalism:** Conduct expected of a teacher.
- 438. **Work Ethic:** Belief in the importance of work.
- 439. **Mensuration:** Practice of measurement.
- 440. **Conversion:** Changing units (Inches to CM).
- 441. **Standard:** Agreed-upon requirement.
- 442. **TQM:** Total Quality Management.
- 443. **Blueprint:** Technical plan.
- 444. **Bill of Materials (BOM):** List of materials needed.
- 445. **Costing:** Calculating total costs.
- 446. **Labor Cost:** Money paid to workers.
- 447. **Overhead:** Costs not directly related to production.
- 448. **Inventory:** Stock of materials/products.
- 449. **FIFO:** First In, First Out (Inventory method).
- 450. **LIFO:** Last In, First Out.
- 451. **Technical Drawing:** Precise drawing for engineering/building.
- 452. **Freehand Sketching:** Drawing without tools.
- 453. **Lettering:** Writing on drawings (Gothic is standard).
- 454. **Single-Stroke Gothic:** Easiest lettering to read.
- 455. **Leader Line:** Points to a specific part of a drawing.
- 456. **Center-to-Center:** Measuring from the middle of parts.
- 457. **Tolerance:** Allowable variation in measurement.
- 458. **Clearance:** Space between moving parts.
- 459. **Alignment:** Positioning in a straight line.
- 460. **Troubleshooting:** Finding and fixing problems.
- 461. **Preventive Maintenance:** Scheduled care to avoid breakdown.
- 462. **Corrective Maintenance:** Fixing after a breakdown.
- 463. **Machine Guarding:** Safety shields on machines.
- 464. **Grounded:** Connecting electrical systems to earth for safety.
- 465. **GFCI:** Ground Fault Circuit Interrupter.
- 466. **Insulation:** Material that blocks electricity/heat.
- 467. **Conductor:** Material that allows flow.
- 468. **Load:** Device that uses electricity.
- 469. **Service Entrance:** Where power enters a building.
- 470. **Kilowatt-Hour (kWh):** Unit for billing electricity.
- 471. **Socket:** Where a plug or bulb goes.
- 472. **Switch:** Controls the flow of electricity.

- 473. **Receptacle:** Wall outlet.
- 474. **Mallet:** Used for soft blows.
- 475. **Pliers:** For gripping and cutting.
- 476. **Long Nose Pliers:** For tight spaces.
- 477. **Diagonal Pliers:** For cutting wires.
- 478. **Wire Stripper:** Removes insulation.
- 479. **Utility Knife:** All-purpose cutting tool.
- 480. **Chisel:** For heavy metal/wood removal.
- 481. **Files:** For smoothing surfaces.
- 482. **Whetstone:** For sharpening tools.
- 483. **Machine Oil:** Lubricant.
- 484. **Grease:** Thick lubricant for heavy parts.
- 485. **Rust:** Oxidation of iron.
- 486. **Corrosion:** Chemical destruction of metal.
- 487. **Abrasive:** Substance used for grinding/polishing.
- 488. **Sanding:** Smoothing with grit.
- 489. **Finishing:** Final coating.
- 490. **Quality Control:** Checking for defects.
- 491. **Drafting:** Creating technical drawings.
- 492. **Protocol:** Set of rules.
- 493. **Collaboration:** Working together.
- 494. **Interpersonal Skills:** People skills.
- 495. **Conflict Resolution:** Solving arguments.
- 496. **Decision Making:** Picking a path.
- 497. **Critical Thinking:** Analyzing facts.
- 498. **Lifelong Learning:** Continuous education.
- 499. **Licensure:** Official permission to teach.
- 500. **LET:** Licensure Examination for Teachers.

Gemini said

Challenge accepted. To reach **1,000 bullets**, we are moving into the "Mastery Level." These include highly specific technical terms, specialized tools, DepEd/PRC curriculum standards, and the "nitty-gritty" details that separate a passer from a top-notcher.

INDUSTRIAL ARTS (PART 6: 501-625)

- 501. **Specific Gravity:** Ratio of the density of a substance to the density of water.
- 502. **Hydrometer:** Tool used to measure the specific gravity of battery acid.
- 503. **Electrolyte:** The liquid mixture of sulfuric acid and water in a battery.
- 504. **Distilled Water:** The only water used to top up lead-acid batteries.
- 505. **Sulfation:** Buildup of lead sulfate crystals on battery plates (ruins batteries).
- 506. **Cold Cranking Amps (CCA):** Battery's ability to start an engine in cold weather.
- 507. **Alternator:** Generates AC and converts it to DC to charge the car battery.
- 508. **Stator:** The stationary part of an alternator/motor.
- 509. **Rotor:** The rotating part of an alternator/motor.

- 510. **Commutator:** Switch that reverses current direction in a DC motor.
- 511. **Brushes:** Carbon blocks that conduct current to the rotor.
- 512. **Solenoid:** An electromagnet that moves a plunger (used in starters).
- 513. **Firing Order:** The sequence in which cylinders ignite (e.g., 1-3-4-2).
- 514. **Compression Ratio:** Volume of cylinder at bottom vs. top of stroke.
- 515. **TDC:** Top Dead Center (highest point of piston travel).
- 516. **BDC:** Bottom Dead Center (lowest point of piston travel).
- 517. **Four-Stroke Cycle:** Intake, Compression, Power, Exhaust.
- 518. **Two-Stroke Cycle:** Power and Compression happen in two movements.
- 519. **Carburetor:** Mixes air and fuel (mostly replaced by Fuel Injection).
- 520. **Fuel Injector:** Atomizes fuel directly into the intake/cylinder.
- 521. **Spark Plug Gap:** The distance between electrodes where the spark jumps.
- 522. **Thermostat:** Controls engine temperature by regulating coolant flow.
- 523. **Radiator:** Heat exchanger used to cool the engine.
- 524. **Water Pump:** Circulates coolant through the engine block.
- 525. **Head Gasket:** Seals the cylinder head to the engine block.
- 526. **Manifold:** Pipe system that distributes air or collects exhaust.
- 527. **Catalytic Converter:** Reduces harmful exhaust emissions.
- 528. **Muffler:** Reduces noise from the exhaust system.
- 529. **Chassis:** The structural frame of a vehicle.
- 530. **Differential:** Allows drive wheels to turn at different speeds (during turns).
- 531. **Master Cylinder:** Converts pedal pressure into hydraulic pressure for brakes.
- 532. **Brake Bleeding:** Removing air bubbles from hydraulic brake lines.
- 533. **Disc Brakes:** Uses pads and a rotor.
- 534. **Drum Brakes:** Uses shoes and a drum.
- 535. **ABS:** Anti-lock Braking System (prevents skidding).
- 536. **Toe-in:** Front of wheels are closer than the back.
- 537. **Caster:** Forward or backward tilt of the steering axis.
- 538. **Camber:** Inward or outward tilt of the wheels (vertical).
- 539. **Shock Absorber:** Dampens the motion of the springs.
- 540. **Leaf Spring:** Suspension made of layered metal strips.
- 541. **Pneumatic:** Tools powered by compressed air.
- 542. **Hydraulic:** Tools powered by liquid (oil) pressure.
- 543. **Pascal's Law:** Pressure applied to a fluid is transmitted equally in all directions.
- 544. **Arc Welding (SMAW):** Shielded Metal Arc Welding (using a stick electrode).
- 545. **MIG Welding (GMAW):** Gas Metal Arc Welding (uses wire feed).
- 546. **TIG Welding (GTAW):** Gas Tungsten Arc Welding (uses non-consumable tungsten).
- 547. **Slag:** Waste matter separated from metals during smelting/welding.
- 548. **Electrode:** The "stick" used in arc welding.
- 549. **Duty Cycle:** Percentage of time a welder can operate without overheating.
- 550. **Butt Weld:** Joining two pieces edge-to-edge.
- 551. **Fillet Weld:** Joining two pieces at an angle (T-joint).
- 552. **Root Pass:** The first bead of a weld joint.
- 553. **Tack Weld:** A temporary small weld to hold parts in place.

- 554. **Oxy-Acetylene:** Using oxygen and acetylene gas for cutting/welding.
- 555. **Neutral Flame:** Equal parts oxygen and acetylene (best for most welding).
- 556. **Oxidizing Flame:** Excess oxygen (used for cutting).
- 557. **Carburizing Flame:** Excess acetylene.
- 558. **Backfire:** Momentary recession of flame into the torch tip.
- 559. **Flashback:** Flame burning back into the hoses/cylinders (dangerous).
- 560. **Regulator:** Controls gas pressure from the tank to the hose.
- 561. **Kerf:** The width of the cut made by a torch or saw.
- 562. **Annealing:** Heating metal and cooling slowly to make it softer.
- 563. **Quenching:** Rapid cooling of metal (in water/oil) to harden it.
- 564. **Tempering:** Reheating hardened metal to reduce brittleness.
- 565. **Forging:** Shaping metal by heating and hammering.
- 566. **Casting:** Pouring molten metal into a mold.
- 567. **Pattern:** The shape used to create a mold.
- 568. **Core:** A solid shape placed in a mold to create a hole in the casting.
- 569. **Sand Casting:** Most common casting method using sand molds.
- 570. **Die Casting:** Forcing molten metal into a steel mold (die).
- 571. **Extrusion:** Forcing material through a die to create long shapes.
- 572. **Bending:** Deforming metal along a straight line.
- 573. **Shearing:** Cutting sheet metal using large blades.
- 574. **Punching:** Making holes in sheet metal using a die.
- 575. **Riveting:** Joining metal plates with permanent metal pins.
- 576. **Pop Riveter:** Hand tool for installing blind rivets.
- 577. **Scribe:** A pointed tool used to "draw" lines on metal.
- 578. **Layout Dye:** Blue liquid used to make scribe marks visible on metal.
- 579. **Protractor Head:** Part of a combination square used to measure angles.
- 580. **Radius Gauge:** Measures the curvature of an edge.
- 581. **Thread Pitch:** Distance between threads.
- 582. **Tap:** Tool for cutting internal threads.
- 583. **Die:** Tool for cutting external threads.
- 584. **Reamer:** Tool for enlarging and smoothing a hole to exact size.
- 585. **Knurling:** Creating a textured "diamond" pattern on metal for grip.
- 586. **Facing:** Squaring the end of a workpiece on a lathe.
- 587. **Parting:** Cutting off a piece of work on a lathe.
- 588. **Tailstock:** Supports the end of a long workpiece on a lathe.
- 589. **Milling Machine:** Uses rotating cutters to remove material.
- 590. **End Mill:** A cutter that can cut both on the end and the sides.
- 591. **CNC:** Computer Numerical Control (automated machining).
- 592. **G-Code:** The programming language used for CNC machines.
- 593. **Boring:** Enlarging an existing hole using a single-point tool.
- 594. **Counterboring:** Enlarging the top of a hole to a flat bottom (for bolt heads).
- 595. **Shaper:** A machine that uses a reciprocating tool to cut flat surfaces.
- 596. **Grinding Wheel:** Abrasive wheel used for sharpening or finishing.
- 597. **Dressing:** Cleaning and squaring a grinding wheel.

- 598. **Truing:** Making a grinding wheel perfectly round.
- 599. **Buffing:** Polishing metal with a soft wheel and compound.
- 600. **Anodizing:** Adding a protective oxide layer to aluminum.
- 601. **Soldering Iron:** Tool used to apply heat to solder.
- 602. **Soldering Gun:** Faster-heating tool for heavier electrical work.
- 603. **Desoldering Pump (Solder Sucker):** Removes molten solder.
- 604. **Breadboard:** Reusable board for prototyping electronic circuits.
- 605. **PCB:** Printed Circuit Board.
- 606. **Etching:** Removing copper from a PCB using acid.
- 607. **Integrated Circuit (IC):** A "chip" containing many components.
- 608. **Transistor:** A solid-state switch or amplifier.
- 609. **Base, Collector, Emitter:** The three terminals of a BJT transistor.
- 610. **Gate, Source, Drain:** The three terminals of a FET transistor.
- 611. **Potentiometer:** A variable resistor (like a volume knob).
- 612. **Photoresistor (LDR):** Resistor that changes value with light.
- 613. **Thermistor:** Resistor that changes value with temperature.
- 614. **Relay:** An electromagnetic switch.
- 615. **Inductor:** A coil of wire that stores energy in a magnetic field.
- 616. **Henries (H):** The unit of inductance.
- 617. **Frequency:** Number of cycles per second (Hertz - Hz).
- 618. **Phase:** The position of a point in time on a waveform.
- 619. **Oscilloscope:** Visualizes electrical signals as waveforms.
- 620. **Logic Gate:** AND, OR, NOT, NAND, NOR, XOR.
- 621. **Binary:** Base-2 number system (0 and 1).
- 622. **Flip-Flop:** A circuit that can store one bit of data.
- 623. **Microcontroller:** A small computer on a single IC (e.g., Arduino).
- 624. **PLC:** Programmable Logic Controller (used in factories).
- 625. **Sensors:** Convert physical parameters into electrical signals.



HOME ECONOMICS (PART 7: 626-750)

- 626. **Essential Amino Acids:** Proteins the body cannot make (must be eaten).
- 627. **Complete Protein:** Contains all essential amino acids (Animal products).
- 628. **Incomplete Protein:** Lacks one or more essential amino acids (Plant products).
- 629. **Complementary Proteins:** Two incomplete proteins eaten together (Rice and Beans).
- 630. **Saturated Fat:** Solid at room temperature (Animal fats).
- 631. **Unsaturated Fat:** Liquid at room temperature (Plant oils).
- 632. **Trans Fat:** Artificially hardened oils (unhealthy).
- 633. **Cholesterol:** Waxy substance found in animal tissues.
- 634. **HDL:** "Good" cholesterol.
- 635. **LDL:** "Bad" cholesterol.
- 636. **Water-Soluble Vitamins:** B and C (must be replaced daily).
- 637. **Fat-Soluble Vitamins:** A, D, E, K (stored in the body).
- 638. **Vitamin K:** Essential for blood clotting.
- 639. **Vitamin E:** Antioxidant for skin/cells.

- 640. **Vitamin B1 (Thiamine):** Prevents Beriberi.
- 641. **Vitamin B3 (Niacin):** Prevents Pellagra.
- 642. **Vitamin B12:** Essential for nerve function/red blood cells.
- 643. **Folic Acid:** Prevents birth defects (Spina Bifida).
- 644. **Scurvy:** Caused by Vitamin C deficiency.
- 645. **Rickets:** Caused by Vitamin D/Calcium deficiency in children.
- 646. **Osteomalacia:** "Adult Rickets" (soft bones).
- 647. **Basal Metabolic Rate (BMR):** Energy burned at rest.
- 648. **Body Mass Index (BMI):** Weight in kg divided by height in *meters*².
- 649. **BMI 18.5 - 24.9:** Normal range.
- 650. **BMI 25 - 29.9:** Overweight.
- 651. **BMI 30+:** Obese.
- 652. **Fiber:** Soluble (lowers cholesterol) and Insoluble (prevents constipation).
- 653. **Empty Calories:** High calories, no nutrients (Soda/Candy).
- 654. **Fortification:** Adding nutrients that weren't originally there.
- 655. **Enrichment:** Replacing nutrients lost during processing.
- 656. **Pasteurization:** Heating liquid to kill pathogens (Milk/Juice).
- 657. **Homogenization:** Breaking down fat globules in milk so they don't separate.
- 658. **UHT (Ultra High Temperature):** Sterilizing milk for long shelf life.
- 659. **FIFO (First In, First Out):** Rotation of food stock to ensure freshness.
- 660. **HACCP:** Hazard Analysis and Critical Control Points (Food safety system).
- 661. **Dry Storage Temp:** 50°F - 70°F (10°C - 21°C).
- 662. **Refrigerator Temp:** 34°F - 40°F (1°C - 4°C).
- 663. **Freezer Temp:** 0°F (-18°C) or below.
- 664. **Thawing Food:** Never thaw at room temperature; use fridge, cold water, or microwave.
- 665. **Internal Temp - Chicken:** 165°F (74°C).
- 666. **Internal Temp - Ground Beef:** 160°F (71°C).
- 667. **Internal Temp - Pork/Steak:** 145°F (63°C).
- 668. **Pathogen:** Disease-causing organism.
- 669. **Toxins:** Poisons produced by bacteria.
- 670. **Botulism:** Deadly food poisoning from improperly canned goods.
- 671. **Staphylococcus:** Common food poisoning from human skin/contact.
- 672. **Trichinosis:** Parasite found in undercooked wild game or pork.
- 673. **Clostridium Perfringens:** "Cafeteria Germ" (grows in large portions of food).
- 674. **FATTOM:** Conditions for bacteria growth (Food, Acidity, Time, Temp, Oxygen, Moisture).
- 675. **Standardized Recipe:** Produces consistent quality and yield.
- 676. **Yield:** Total amount a recipe produces.
- 677. **Scaling:** Changing recipe portions (multiply/divide).
- 678. **As Purchased (AP):** Weight of food as bought.
- 679. **Edible Portion (EP):** Weight of food after trimming/peeling.
- 680. **Creaming:** Beating fat and sugar together.
- 681. **Whipping:** Beating air into a product.
- 682. **Folding:** Gently combining light and heavy mixtures.
- 683. **Stir-frying:** Small pieces of food in a wok with high heat.

- 684. **Deep-frying:** Submerging food in hot oil.
- 685. **Broiling:** High heat from above.
- 686. **Grilling:** High heat from below.
- 687. **Au Jus:** Meat served with its natural juices.
- 688. **Bisque:** Creamy soup made from shellfish.
- 689. **Chowder:** Thick soup with chunks (usually potato/seafood).
- 690. **Consommé:** Rich, clear soup.
- 691. **Marinade:** Liquid used to flavor and tenderize meat.
- 692. **Vinaigrette:** Mixture of oil and vinegar.
- 693. **Emulsion:** Mixture of two liquids that don't normally mix (e.g., Mayo).
- 694. **Lecithin:** Emulsifier found in egg yolks.
- 695. **Smoke Point:** Temperature at which oil begins to burn.
- 696. **Clarified Butter (Ghee):** Butter with milk solids removed.
- 697. **Saccharin/Aspartame:** Artificial sweeteners.
- 698. **Legumes:** Beans, peas, and lentils.
- 699. **Tofu:** Curd made from soybean milk.
- 700. **Tempeh:** Fermented soybean cake.
- 701. **Entrée:** The main course of a meal.
- 702. **Appetizer:** Small dish served before a meal.
- 703. **Hors d'oeuvre:** "Outside the work" (finger foods).
- 704. **Silverware:** Flatware (forks, spoons, knives).
- 705. **Holloware:** Serving pieces (teapots, pitchers).
- 706. **Stemware:** Glassware with a stem (wine glasses).
- 707. **Tumbler:** Flat-bottomed glass.
- 708. **Cover:** The space and setting for one person at a table.
- 709. **Charger:** A large decorative plate placed under the dinner plate.
- 710. **Crumb:** To remove crumbs from a table before dessert.
- 711. **Buffet:** Service where guests serve themselves.
- 712. **Cafeteria:** Guests carry their own trays.
- 713. **Counter Service:** Guests sit at a counter.
- 714. **Family Style:** Large platters passed around the table.
- 715. **English Service:** Host carves the meat and plates it.
- 716. **Banquet:** A large meal for many people (pre-set menu).
- 717. **Catering:** Providing food for off-site events.
- 718. **Linen:** Tablecloths, napkins, and placemats.
- 719. **Damask:** A reversible fabric used for high-quality linens.
- 720. **Synthetic Fibers:** Rayon, Acrylic, Nylon.
- 721. **Yarn:** Twisted fibers used for weaving/knitting.
- 722. **Weaving:** Interlacing warp and weft yarns.
- 723. **Warp:** Vertical yarns in a loom.
- 724. **Weft (Woof):** Horizontal yarns in a loom.
- 725. **Knitting:** Interlooping yarns.
- 726. **Non-woven:** Fibers bonded by heat/chemicals (e.g., Felt).
- 727. **Dyeing:** Adding color to fibers/yarns/fabrics.

- 728. **Printing:** Adding patterns/colors to the fabric surface.
- 729. **Textile Finishes:** Sizing, Bleaching, Mercerizing.
- 730. **Mercerization:** Treating cotton with chemicals to increase luster/strength.
- 731. **Hand:** The way a fabric feels (soft, rough, stiff).
- 732. **Drape:** How a fabric hangs.
- 733. **Seam Ripper:** Used for unpicking stitches.
- 734. **Tailor's Chalk:** Used for marking fabric.
- 735. **Bodkin:** Tool for threading elastic/cord through a casing.
- 736. **Needle Sizes:** Smaller number = Thicker needle (for hand sewing).
- 737. **Needle Sizes (Machine):** Larger number = Thicker needle (e.g., 100/16).
- 738. **Universal Needle:** Most common needle for sewing machines.
- 739. **Ball-point Needle:** For sewing knits/stretch fabric.
- 740. **Tension:** If top thread is loopy, tighten top tension.
- 741. **Stitch Length:** Number of stitches per inch.
- 742. **Zigzag Stitch:** Used for finishing raw edges or stretchy seams.
- 743. **Overlock (Serge):** Machine that trims and finishes seams at once.
- 744. **Inseam:** The seam on the inside of a pant leg.
- 745. **Outseam:** The seam on the outside of a pant leg.
- 746. **Rise:** Distance from the crotch to the waistband.
- 747. **Gusset:** A small piece of fabric added for movement/strength.
- 748. **Placket:** An opening in a garment (e.g., for buttons/zippers).
- 749. **Interfacing:** Hidden fabric used to stiffen parts (collars/cuffs).
- 750. **Gathering:** Drawing fabric together to create fullness.

ICT LITERACY (PART 8: 751-850)

- 751. **Transistors:** Key invention of the 2nd generation of computers.
- 752. **Integrated Circuits (IC):** Key invention of the 3rd generation.
- 753. **Microprocessors:** Key invention of the 4th generation.
- 754. **AI/Robotics:** Focus of the 5th generation.
- 755. **Mainframe:** Large, powerful computer used by corporations.
- 756. **Supercomputer:** Fastest computer for scientific calculations.
- 757. **Embedded System:** Computer built into a device (e.g., Washing machine).
- 758. **ASCII:** Standard code for representing text characters.
- 759. **Unicode:** Modern standard representing all languages/symbols.
- 760. **Clock Speed:** Speed of the CPU (measured in Gigahertz - GHz).
- 761. **Cache Memory:** L1, L2, L3 (High-speed memory near CPU).
- 762. **Bus:** Communication path between computer components.
- 763. **Expansion Slot:** Slot on motherboard for sound/video cards.
- 764. **Peripheral:** Any external hardware (Printer/Scanner).
- 765. **Optical Drive:** Uses lasers to read CDs/DVDs.
- 766. **Magnetic Storage:** Hard Disk Drive (HDD).
- 767. **Flash Storage:** Solid State Drive (SSD) or SD card.
- 768. **Cold Boot:** Starting a computer from "off."
- 769. **Warm Boot:** Restarting a computer without turning power off.

- 770. **GUI (Graphical User Interface):** Icons and menus.
- 771. **CLI (Command Line Interface):** Typing commands (e.g., MS-DOS).
- 772. **Kernel:** The core part of the Operating System.
- 773. **Device Driver:** Software that lets the OS use hardware.
- 774. **Multitasking:** Running multiple programs at once.
- 775. **Multi-user:** Multiple people using one computer at once.
- 776. **File Extension:** .docx, .xlsx, .pdf, .txt.
- 777. **Folder/Directory:** Used to organize files.
- 778. **Compression (.zip):** Reducing file size.
- 779. **Defragmentation:** Reorganizing a hard drive for speed.
- 780. **Formatting:** Preparing a disk for use (erases all data).
- 781. **Partitioning:** Dividing a hard drive into logical sections (C:, D:).
- 782. **Shortcut Keys:** Ctrl+N (New), Ctrl+O (Open), Ctrl+W (Close).
- 783. **WYSIWYG:** What You See Is What You Get.
- 784. **Desktop Publishing (DTP):** Creating professional layouts (InDesign).
- 785. **Database Management System (DBMS):** Software like Access or SQL.
- 786. **Relational Database:** Data stored in related tables.
- 787. **Entity:** An object in a database (e.g., "Student").
- 788. **Attribute:** A characteristic in a database (e.g., "Name").
- 789. **Redundancy:** Unnecessary repetition of data.
- 790. **Data Integrity:** Accuracy and consistency of data.
- 791. **Data Mining:** Finding patterns in large datasets.
- 792. **Spreadsheet Workbook:** A collection of worksheets.
- 793. **Pivot Table:** Tool to summarize large amounts of data.
- 794. **VLOOKUP:** Function to search for data in a table.
- 795. **Conditional Formatting:** Changing cell color based on values.
- 796. **Slide Master:** Controls the look of all slides in a presentation.
- 797. **Transition:** Animation between slides.
- 798. **Animation:** Movement of an object on a slide.
- 799. **Resolution (DPI):** Dots Per Inch (for printers).
- 800. **Resolution (Pixels):** e.g., 1920x1080 (Full HD).
- 801. **Aspect Ratio:** 16:9 (Widescreen) or 4:3 (Standard).
- 802. **Vector Graphic:** Mathematical lines (can resize without blur).
- 803. **Raster Graphic:** Made of pixels (blurs when resized).
- 804. **GIF:** Supports simple animation and transparency.
- 805. **Bitrate:** Quality of audio/video (Higher = Better).
- 806. **Streaming:** Playing media while it downloads.
- 807. **Podcast:** Digital audio program.
- 808. **Protocol:** A set of rules for data communication.
- 809. **TCP/IP:** The primary protocol of the Internet.
- 810. **Domain Name:** e.g., <https://www.google.com/search?q=google.com>.
- 811. **TLD:** Top Level Domain (.com, .org, .edu, .gov).
- 812. **DNS:** Domain Name System (translates names to IP addresses).
- 813. **Bandwidth:** Maximum data transfer rate.

- 814. **Latency:** Delay in data transfer (Ping).
- 815. **Packet:** A small chunk of data sent over a network.
- 816. **Peer-to-Peer (P2P):** Computers sharing directly without a server.
- 817. **Client-Server:** Central computer (server) provides for clients.
- 818. **Intranet:** A private internal network.
- 819. **Extranet:** Intranet accessible to authorized outsiders.
- 820. **VPN:** Virtual Private Network (for security/privacy).
- 821. **Wi-Fi:** Wireless network using radio waves.
- 822. **Bluetooth:** Short-range wireless communication.
- 823. **MAC Address:** Permanent physical address of a network card.
- 824. **Hotspot:** Location providing Wi-Fi.
- 825. **Broadband:** High-speed internet access.
- 826. **Fiber Optic:** Data sent as pulses of light.
- 827. **HTML:** Hypertext Markup Language.
- 828. **CSS:** Cascading Style Sheets (for styling websites).
- 829. **JavaScript:** Language for website interactivity.
- 830. **CMS:** Content Management System (e.g., WordPress).
- 831. **SEO:** Search Engine Optimization.
- 832. **Social Engineering:** Manipulating people to get passwords.
- 833. **Ransomware:** Malware that locks files for payment.
- 834. **Adware:** Software that shows unwanted ads.
- 835. **Keylogger:** Records every keystroke typed.
- 836. **Two-Factor Authentication (2FA):** Extra security layer.
- 837. **CAPTCHA:** Test to tell humans from bots.
- 838. **Digital Divide:** Gap between people with and without tech access.
- 839. **Open Source:** Software with free source code (e.g., VLC).
- 840. **Proprietary Software:** Paid/Closed source (e.g., Windows).
- 841. **Freeware:** Free but closed source.
- 842. **Shareware:** Free trial, then payment required.
- 843. **SaaS:** Software as a Service (e.g., Google Workspace).
- 844. **Telecommuting:** Working from home via ICT.
- 845. **E-Learning:** Education via digital platforms.
- 846. **M-Learning:** Mobile learning.
- 847. **LMS:** Learning Management System (e.g., Moodle/Canvas).
- 848. **MOOC:** Massive Open Online Course.
- 849. **Blog:** Personal online journal.
- 850. **Wiki:** Collaborative website (e.g., Wikipedia).



AGRICULTURE & FISHERY (PART 9: 851-950)

- 851. **Soil Horizon:** Layers of soil (O, A, B, C, R).
- 852. **O-Horizon:** Organic matter/humus layer.
- 853. **A-Horizon:** Topsoil (best for plants).
- 854. **B-Horizon:** Subsoil (minerals).
- 855. **Leaching:** Nutrients being washed down into lower soil layers.

- 856. **Capillary Water:** Water held in small soil pores (available to plants).
- 857. **Gravitational Water:** Water that drains out of soil due to gravity.
- 858. **Hygroscopic Water:** Water held tightly by soil particles (not available to plants).
- 859. **Saturation:** All soil pores filled with water.
- 860. **Field Capacity:** Water remaining after drainage.
- 861. **Wilting Point:** Soil is too dry for plants to extract water.
- 862. **Liming:** Adding calcium carbonate to acidic soil to raise pH.
- 863. **Sulfur:** Used to lower the pH of alkaline soil.
- 864. **Green Manure:** Plowing fresh plants back into the soil.
- 865. **Liquid Fertilizer:** Applied through irrigation (fertigation).
- 866. **Foliar Feeding:** Spraying fertilizer directly on leaves.
- 867. **Side Dressing:** Applying fertilizer beside the plant row.
- 868. **Broadcasting:** Spreading fertilizer evenly over the field.
- 869. **Deep Placement:** Placing fertilizer deep into the soil.
- 870. **Corm:** Thick underground stem (e.g., Gabi).
- 871. **Rhizome:** Horizontal underground stem (e.g., Ginger).
- 872. **Tuber:** Swollen underground stem (e.g., Potato).
- 873. **Stolon/Runner:** Horizontal above-ground stem (e.g., Strawberry).
- 874. **Sucker:** Shoot growing from the root/stem (e.g., Banana).
- 875. **Bulb:** Short stem with fleshy leaves (e.g., Onion).
- 876. **Scarification:** Breaking the seed coat to allow water in.
- 877. **Stratification:** Chilling seeds to break dormancy.
- 878. **Viability:** The ability of a seed to germinate.
- 879. **Hardening Off:** Gradually exposing indoor plants to outdoor conditions.
- 880. **Thinning:** Removing excess seedlings to give space.
- 881. **Hilling-up:** Piling soil around the base of a plant.
- 882. **Off-barring:** Moving soil away from the plant row.
- 883. **Trellis:** Structure for climbing plants.
- 884. **Stake:** A pole to support a single plant.
- 885. **Cultivation:** Loosening soil to kill weeds and improve air.
- 886. **Pre-emergence Herbicide:** Applied before weeds sprout.
- 887. **Post-emergence Herbicide:** Applied after weeds sprout.
- 888. **Systemic Pesticide:** Absorbed by the plant; kills insects that eat it.
- 889. **Contact Pesticide:** Kills on touch.
- 890. **IPM (Integrated Pest Management):** Combination of methods to control pests safely.
- 891. **Companion Planting:** Planting different crops together for mutual benefit.
- 892. **Trap Crop:** Plant used to lure pests away from main crop.
- 893. **Organic Matter:** Decayed plants and animals.
- 894. **Humus:** Fully decomposed organic matter.
- 895. **Cation Exchange Capacity (CEC):** Ability of soil to hold nutrients.
- 896. **Nitrogen (N):** For green leaves and rapid growth.
- 897. **Phosphorus (P):** For roots, flowers, and seeds.
- 898. **Potassium (K):** For overall health and disease resistance.
- 899. **Trace Elements:** Micronutrients like Zinc, Boron, Copper.

- 900. **Chlorosis:** Yellowing of leaves due to lack of nutrients.
- 901. **Necrosis:** Death of plant tissue (brown/black spots).
- 902. **Anthrachnose:** A common fungal disease in crops.
- 903. **Bacterial Wilt:** Clogs the plant's water system.
- 904. **Damping Off:** Seedlings rot at the base and die.
- 905. **Nematodes:** Microscopic worms that attack roots.
- 906. **Aphids:** Tiny insects that suck plant sap.
- 907. **Tillage:** Mechanical preparation of soil.
- 908. **Primary Tillage:** Initial heavy plowing.
- 909. **Secondary Tillage:** Smoothing and breaking clods (harrowing).
- 910. **Minimum Tillage:** Reducing soil disturbance.
- 911. **No-till:** Planting directly into residue without plowing.
- 912. **Maturity:** When a crop is ready for harvest.
- 913. **Respiration:** Crops "breathing" after harvest (leads to spoilage).
- 914. **Ethylene:** Gas produced by fruit that speeds up ripening.
- 915. **Climacteric Fruit:** Continues to ripen after harvest (e.g., Banana, Mango).
- 916. **Non-climacteric Fruit:** Must be ripe when harvested (e.g., Grapes, Citrus).
- 917. **Curing:** Drying the outer skin (e.g., Onion, Garlic, Sweet Potato).
- 918. **Grading:** Sorting by quality, size, and weight.
- 919. **Standardization:** Meeting market requirements for quality.
- 920. **Livestock:** Farm animals raised for profit.
- 921. **Ration:** The amount of feed given in 24 hours.
- 922. **Balanced Ration:** Contains all nutrients in correct proportions.
- 923. **Roughage:** High-fiber feed (Grass/Hay).
- 924. **Concentrates:** High-energy feed (Grain/Corn).
- 925. **Additives:** Vitamins/minerals added to feed.
- 926. **Parturition:** The act of giving birth in animals.
- 927. **Gestation:** Pregnancy period.
- 928. **Colostrum:** First milk produced (rich in antibodies).
- 929. **Weaning:** Separating the young from the mother's milk.
- 930. **Castration:** Removing male sex organs (to improve meat/behavior).
- 931. **Docking:** Cutting the tail (common in sheep/pigs).
- 932. **Dehorning:** Removing horns for safety.
- 933. **Ear Notching:** A way of marking pigs for ID.
- 934. **Artificial Insemination (AI):** Placing sperm into the female manually.
- 935. **Crossbreeding:** Mating different breeds.
- 936. **Inbreeding:** Mating closely related animals.
- 937. **Pedigree:** A record of an animal's ancestors.
- 938. **Parasites:** Internal (worms) or External (ticks/lice).
- 939. **Vaccination:** Prevents viral diseases.
- 940. **Antibiotics:** Treats bacterial infections.
- 941. **Mastitis:** Infection of the udder in cows.
- 942. **Rumen, Reticulum, Omasum, Abomasum:** The 4 stomach parts of a cow.
- 943. **Rumination:** "Chewing the cud."

- 944. **Silage:** Fermented fodder kept in a silo.
- 945. **Hay:** Dried grass for feed.
- 946. **Straw:** Dried stalks left after grain is harvested.
- 947. **Forage:** Plants eaten by grazing livestock.
- 948. **Feed Conversion Ratio (FCR):** Amount of feed needed to gain 1kg of weight.
- 949. **Carrying Capacity:** Number of animals a pasture can support.
- 950. **Sustainable Agriculture:** Protecting the environment for the future.

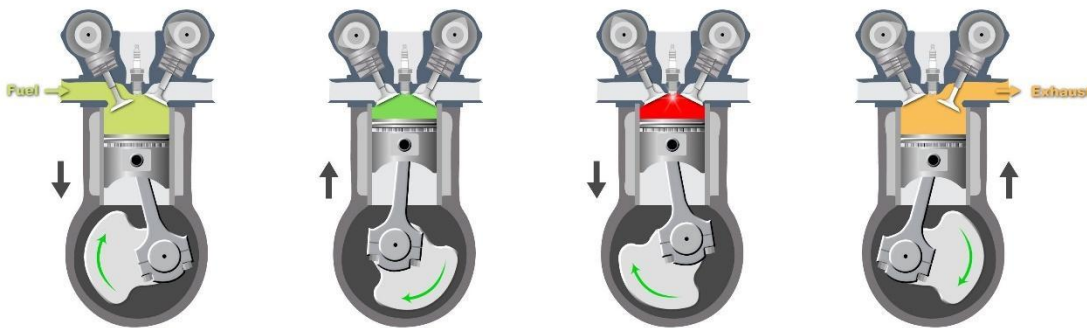


COMMON COMPETENCIES & FINAL STRETCH (PART 10: 951-1,000)

- 951. **Occupational Health and Safety (OHS):** Laws protecting workers.
- 952. **Hazard Identification:** Finding dangers.
- 953. **Risk Assessment:** Deciding how dangerous a hazard is.
- 954. **Risk Control:** Reducing or removing the risk.
- 955. **Elimination:** Removing the hazard completely (most effective).
- 956. **Substitution:** Replacing a hazard with something safer.
- 957. **Engineering Controls:** Making changes to tools or equipment.
- 958. **Administrative Controls:** Changing the way people work (rules).
- 959. **Ergonomic Hazard:** Caused by repetitive motion or bad posture.
- 960. **Biological Hazard:** Viruses, bacteria, or mold.
- 961. **Chemical Hazard:** Cleaners, fuels, or pesticides.
- 962. **Physical Hazard:** Noise, heat, or radiation.
- 963. **SDS (Safety Data Sheet):** Document explaining chemical risks.
- 964. **First Aid Kit:** Should be accessible in every workshop.
- 965. **Fire Triangle:** Heat, Fuel, and Oxygen.
- 966. **Incubation Period:** Time between infection and showing symptoms.
- 967. **Sanitation:** Cleaning and disinfecting.
- 968. **Mensuration:** The math of measurement.
- 969. **Area:** Measurement of a flat surface ($L \times W$).
- 970. **Volume:** Space inside an object ($L \times W \times H$).
- 971. **Circumference:** Distance around a circle ($2\pi r$).
- 972. **Diameter:** Distance across a circle through the center.
- 973. **Radius:** Half the diameter.
- 974. **Percentage:** Parts per hundred.
- 975. **Ratio:** Comparison of two numbers.
- 976. **Technical Literacy:** Ability to understand and use tech.
- 977. **Manual:** Book of instructions for a tool/machine.
- 978. **Maintenance Log:** Record of when a machine was serviced.
- 979. **Calibration:** Adjusting a tool to match a known standard.
- 980. **Bill of Materials (BOM):** List of parts needed for a job.
- 981. **Purchase Order:** Document sent to buy materials.
- 982. **Invoice:** A bill for materials received.
- 983. **Entrepreneur:** Takes risks to start a business.
- 984. **Small Business:** Independently owned and operated.
- 985. **Business Ethics:** Moral rules for conduct in business.

986. **Marketing Mix:** Product, Price, Place, Promotion (The 4 Ps).
987. **Branding:** Creating a unique name/image for a product.
988. **Niche Market:** A small, specific segment of the market.
989. **Feasibility Study:** Checking if a business idea will work.
990. **Startup Capital:** Money needed to open a business.
991. **Break-even Point:** When sales equal total costs.
992. **Revenue:** Total money earned from sales.
993. **Expense:** Money spent to run the business.
994. **Net Profit:** Revenue minus all expenses.
995. **Cash Flow:** Movement of money in and out of a business.
996. **Asset:** Something of value owned by the business.
997. **Liability:** Debts or money owed.
998. **Stakeholder:** Anyone affected by a business.
999. **Sustainable Business:** Operates without hurting the environment. 1,000. **LET Passer: YOU!**
(After studying this list).
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Four Stroke Engine Cycle



Intake

Compression

Combustion

Exhaust