

Definite and indefinite articles

Use of conditionals in description of a process.

Activity 1: Fill in the blanks with the correct article (*a / an / the / -*) in each sentence.

1. During ____ tensile test, a material is stretched until it breaks.
2. Engineers measure ____ force applied and the elongation that results.
3. ____ main objective is to determine the yield strength.
4. ____ accurate result depends on using a properly calibrated machine.
5. If ____ incorrect setting is used, the results will be unreliable.
6. Many labs use ____ extensometer to measure elongation precisely.
7. Stress is calculated as force per unit area of ____ specimen.
8. Before testing, ____ sample must be cut according to standard dimensions.
9. ____ load cell converts force into an electrical signal.
10. If ____ standard procedure is not followed, results may not be valid.

Activity 2: Match each part A with the correct part B. Pay attention to article usage and conditional logic: E.g. (1.f)

Part A

1. If you don't level ____ print bed,
2. ____ process begins with designing a model using CAD software,
3. You need to check ____ filament before loading it,
4. ____ heated nozzle melts the material,
5. If ____ filament is moist,
6. ____ key to successful printing is temperature control,

Part B

- A. it could clog ____ nozzle and damage the machine.
- B. you will get ____ defective product.
- C. print quality will be affected.
- D. you might waste ____ entire spool of filament.
- E. if you want to avoid warping.
- F. and then slicing it into printable layers.

Part A

7. Always monitor ____ temperature of the printer,

8. ____ user manual provides the setup instructions,

9. If you forget to clean ____ print bed,

10. If you use ____ wrong material,

Part B

G. you should dry it before use.

H. make sure you read it carefully.

I. so that ____ model adheres properly.

J. which is then extruded layer by layer.

Activity 3: Complete the sentences using the correct article and conditional form. Use your understanding of the water filtration process.

1. If you install ____ activated carbon filter, it will remove most organic compounds.
2. ____ filtration process depends on the flow rate and pressure.
3. If ____ membrane becomes clogged, water flow will decrease.
4. ____ system must be flushed before first use.
5. If the user doesn't replace ____ cartridge regularly, the filter will stop working.
6. ____ sediment filter removes large particles like sand and rust.
7. If ____ flow rate exceeds recommended limits, the system may leak.
8. ____ reverse osmosis unit is added to remove dissolved salts.
9. You must monitor ____ pressure gauge during operation.
10. If you skip ____ maintenance schedule, performance will decline rapidly.

Activity 4: Rewrite each sentence using a conditional and correct article use.

1. Inspectors check all connections. Faulty ones are repaired.
2. They test pressure valves with equipment. The equipment must be certified.

3. The inspector records the results. He enters them into the system.
4. They don't calibrate the sensor. It gives inaccurate readings.
5. There is a leak in the pipe. The system is shut down.
6. Engineers use ultrasonic testing. It detects cracks.
7. The report is incomplete. They reject the test.
8. They perform an inspection. It ensures safety.
9. The reading is out of range. They investigate the cause.
10. The technician resets the control unit. The issue is resolved.