HAND TOOLS: PART II

2.1. Vocabulary

Ex. 1. *Match the words to their definitions.*

1. basin wrench	a. a pipe wrench with smooth jaws, designed to prevent damage to the surface of pipes while still providing a strong grip
2. tubing cutter	b. long, thin pliers with pointed jaws, ideal for reaching into small spaces or bending wires with precision
3. angled jaw pliers	c. a type of tool with a movable jaw that can be adjusted to fit different sizes of nuts or bolts
4. locking pliers	d. a specialized wrench used for tightening or loosening nuts on faucets or pipes under a sink
5. pipe wrench	e. a tool specifically designed for expanding the end of copper tubing to create a flare, which helps connect pipes securely
6. copper flaring tool	f. a heavy-duty wrench with serrated jaws used for gripping and turning pipes or other cylindrical objects

7. crimping tool	g. a wrench that measures and applies a specific amount of torque or rotational force to tighten or loosen nuts and bolts accurately
8. needle nose pliers	h. a tool used to cut through plastic or metal tubing cleanly and evenly
9. torque wrench	i. a tool used to join two pieces of metal or wire together by pressing them tightly and creating ridges or folds
10. adjustable wrench	j. a pair of pliers with jaws that are set at an angle, allowing for better access in tight spaces
11. combination pliers	k. pliers with a mechanism that allows them to lock onto objects, providing a secure grip without requiring continuous pressure from the user
12. smooth jaw pipe wrench	l. a versatile hand tool with flat jaws for gripping and cutting wires, as well as a built-in cutter near the pivot point

Ex. 2. Complete the sentences with the given words.

torque, flaring, nose, tubing, adjustable, locking, basin, copper, wrench, pliers, cutter, crimping, smooth, needle, combination

I used a _____(1) _____(2) to tighten the faucet in the bathroom.

The plumber used a _____(3) jaw pipe wrench to fix the leaking pipe.

He carefully used _____(4) _____(5) pliers to remove the small nail from the wall.

My dad always keeps an _____(6) wrench in his toolbox for handyman tasks.

The electrician used angled jaw _____(7) to tighten the wires inside the switchboard.

The plumber needed a _____(8) _____(9) to cut the PVC pipe for the installation.

She used _____(10) pliers to loosen the tight nuts on the bicycle pedals.

The technician used a _____(11) _____(12) tool to create a solid connection for the copper pipes.

We used _____(13) pliers with a clamp feature to hold the piece in place while we worked on it.

He used a _____(14) tool to securely connect the electrical wires together.

The mechanic used a _____(15) wrench to ensure the car's wheel bolts were tightened to the correct torque specifications.

2.2. Reading

Ex. 1. Read the text.

Hand-tools are essential for fixing things around the house. Here's a list of commonly used hand-tools and their uses:

- An adjustable wrench is versatile and can fit different nuts and bolts, making it useful for plumbing or automotive repairs.

- Angled jaw pliers have jaws angled to provide better access in tight spaces. They're great for gripping and turning objects such as pipes or fittings.

- A basin wrench has a long handle and pivoting jaw that allows you to reach into tight spaces under the sink when working on faucets and sink fittings.

- Combination pliers can cut wires, bend metal, and grip objects.

- A copper flaring tool is necessary if you work with copper pipes. It creates a flare at the end of the pipe, allowing easy connections with other pipes or fittings.

- A crimping tool compresses two pieces of metal or wire together to create secure connections in electrical work or plumbing.

- Locking pliers stay clamped onto an object without needing constant pressure, which makes them great for holding objects firmly in place.

- Needle nose pliers are perfect for handling delicate objects or working in small spaces and are common in electronics or jewelry-making.

- A smooth jaw pipe wrench is recommended for heavy-duty tasks involving polished or delicate surfaces because its rubber or plastic-covered jaws prevent scratching.

- A torque wrench ensures proper tightening without over-tightening and is commonly used in automotive or mechanical applications.

- Lastly, a tubing cutter provides a clean and precise cut through various types of tubing, making it ideal for plumbing or HVAC installations.

Always choose the appropriate tool based on the task at hand and follow safety guidelines when using hand-tools.

Ex. 2. *Which title fits best?*

1. The History of Hand-Tools: From Ancient Times to Modern Applications

2. Essential Hand-Tools and Their Uses

3. How to Create a Microgravity Environment with Hand-Tools

Ex. 3. *Answer the questions.*

1. What is the purpose of an adjustable wrench and in what situations is it useful?

2. How are angled jaw pliers different from regular pliers, and when are they particularly helpful?

3. When would you use a basin wrench and why is its design important for certain tasks?

4. What are the functions of combination pliers and in what types of work are they commonly used?

5. Why is a copper flaring tool necessary when working with copper pipes?

6. In what situations would you need to use a crimping tool and what does it do?

7. What makes locking pliers different from other types of pliers and how can they be beneficial?

8. When would you choose to use needle nose pliers instead of other types of pliers?

9. Why is a smooth jaw pipe wrench recommended for heavy-duty tasks involving polished or delicate surfaces?

10. What is the purpose of a torque wrench and in what fields is it commonly used?

2.3. Communication

Ex. 1. *Make questions using the following words:*

1. adjustable wrench/used

2. angled jaw pliers/how

3. basin wrench/works

4. combination pliers/use

5. copper flaring tool/purpose

6. crimping tool/use

7. locking pliers/used

8. needle nose pliers/show

9. pipe wrench/should

10. smooth jaw pipe wrench/difference