4. METALS

4.1. Vocabulary

Ex. 1. Solve the crossword puzzle.



Across

[4] a chemical element, symbol Sn

[5] rock or soil from which metal can be obtained

[6] to have or own something, or to have a particular quality

[7] a chemical element, symbol Ag

[10] a chemical element, symbol Au

Down

[1] a bright yellow metal made from copper and zinc

[2] a chemical element, symbol Cu

[3] a strong metal that is a mixture of iron and carbon, used

for making things that need a strong structure, especially vehicles and buildings

[6] of great value because of being rare, expensive, or important

[8] a chemical element, symbol Fe

[9] a chemical element, symbol Pb

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

Lead, silver, Gold, mixture, precious, possess, Iron

The welder must _____(1) great technique to create strong connections.

The jewelry maker crafted a _____(2) necklace with rare gems.

(3) is a common metal used in welding projects.

_____(4) exposure is dangerous in welding due to toxic fumes.

(5) is often used in intricate welding designs for luxury items.

The welding mask protects against the fumes from the (6) of metals.

The _____(7) solder seamlessly connected the two steel pieces together.

4.2. Reading

Ex. 1. Read the text.

Metals Used In Welding

Welding is a process that involves joining two pieces of metal together by heating them until they melt and fuse. Different types of metals are used in welding, each with its own properties and applications. One common metal used in welding is steel. Steel is strong, durable, and relatively easy to weld, making it a popular choice for construction and manufacturing.

Another metal often used in welding is aluminum. Aluminum is lightweight and resistant to corrosion, which makes it ideal for projects like aircraft and boat construction. However, welding aluminum can be more challenging because it requires specific techniques and equipment.

Stainless steel is also frequently used in welding. It is known for its resistance to rust and staining, making it suitable for use in environments that are exposed to moisture, such as kitchens and laboratories. However, welding stainless steel can produce harmful fumes, so proper ventilation and protective gear are necessary.

Each type of metal brings its own set of challenges and advantages to the welding process. Understanding the properties of the metal being welded is crucial for ensuring a strong and lasting bond.

Ex. 2. Answer the questions.

1. Why is steel a popular choice for welding in construction and manufacturing?

2. What are the properties of aluminum that make it suitable for welding in aircraft and boat construction?

3. How does welding stainless steel differ from welding other metals?

4. Why is proper ventilation and protective gear necessary when welding stainless steel?

5. Why is it important to understand the properties of the metal being welded?

6. Can you name some environments where stainless steel is commonly used due to its properties?

4.3. Communication

Ex. 1. Make sentences using the following words:

- 1. Steel/common/welding
- 2. Aluminum/popular/welding
- 3. Copper/sometimes/projects
- 4. Stainless/resistant/corrosion
- 5. Brass/chosen/malleability
- 6. Nickel/high/temperature
- 7. Titanium/lightweight/welding
- 8. Bronze/versatile/applications
- 9. Tungsten/electrode/welding
- 10.Cast/durable/tasks