



*Answer all the questions below then check your answers*

- 1. True or False: Metals are generally good conductors of heat.*
- 2. Fill in the gap to complete the sentence: The more reactive a metal, the more easily it forms a positive \_\_\_\_\_.*
- 3. Potassium reacts vigorously with water. Where would potassium be found on the reactivity series?*
  - A) At the very top*
  - B) In the middle*
  - C) At the very bottom*
  - D) Potassium is not found on the reactivity series*
- 4. Fill in the gaps to complete the sentence: When a metal reacts with oxygen, a metal \_\_\_\_\_ is formed. This reaction is called an \_\_\_\_\_ reaction.*
- 5. True or False: The reactivity series of metals can be determined by observing their reactions with water and dilute acids.*
- 6. True or False: Metals are generally malleable, meaning they can be hammered into different shapes.*
- 7. Fill in the gap to complete the sentence: The ability of metals to be drawn into thin wires is known as \_\_\_\_\_.*

8. Most metals have a \_\_\_\_ melting point:
- A) Low
  - B) High
  - C) Moderate
  - D) They don't melt
9. Give two reasons why metals are often used to make electrical wires.
10. How do the reactivities of alkali metals and transition metals differ?
11. True or False: Alkali metals are typically softer and have lower melting points compared to transition metals. Provide a **brief** explanation for your answer.
12. Describe one physical property and one chemical property that would enable you to identify an alkali metal from transition metal.

## Answers

1. True or False: Metals are generally good conductors of heat. (Answer: True)
2. Fill in the gap to complete the sentence: The more reactive a metal, the more easily it forms a positive \_\_\_\_\_. (Answer: ion)
3. Potassium reacts vigorously with water. Where would potassium be found on the reactivity series?
  - A) At the very top
  - B) In the middle
  - C) At the very bottom
  - D) Potassium is not found on the reactivity series
4. Fill in the gaps to complete the sentence: When a metal reacts with oxygen, a metal \_\_\_\_\_ is formed. This reaction is called an \_\_\_\_\_ reaction. (answers: oxide, oxidation)
5. True or False: The reactivity series of metals can be determined by observing their reactions with water and dilute acids. (Answer: True)
6. True or False: Metals are generally malleable, meaning they can be hammered into different shapes. (Answer: True)
7. Fill in the gap to complete the sentence: The ability of metals to be drawn into thin wires is known as \_\_\_\_\_. (Answer: ductility)

8. Most metals have a \_\_\_\_ melting point:

A) Low

B) High

C) Moderate

D) They don't melt

9. Give two reasons why metals are often used to make electrical wires.

(Answers: Metals are good conductors of electricity, and they are ductile, so they can be drawn into wires)

10. How do the reactivities of alkali metals and transition metals differ?

Answer: Alkali metals are more reactive than transition metals.

11. True or False: Alkali metals are typically softer and have lower melting points compared to transition metals. Provide a **brief** explanation for your answer.

Answer: True. Alkali metals are softer and have lower melting points compared to transition metals because they have weaker metallic bonds.

12. Describe one physical property and one chemical property that would enable you to identify an alkali metal from transition metal.

Answer: One physical property that differentiates alkali metals from transition metals is that alkali metals have lower melting and boiling points compared to transition metals. One chemical property is that alkali metals react vigorously with water to form alkaline solutions and hydrogen gas, while transition metals generally do not react with water under normal conditions.