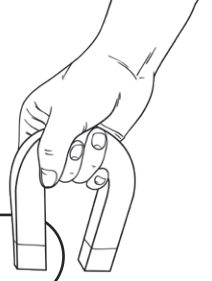


Properties of Metals




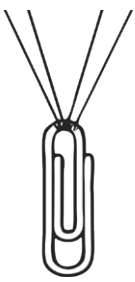
Metals have many properties that make them useful to us.

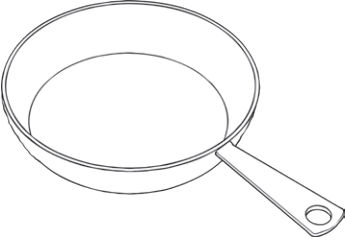
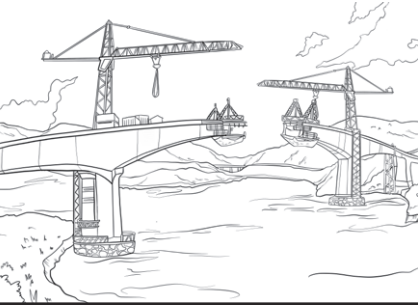
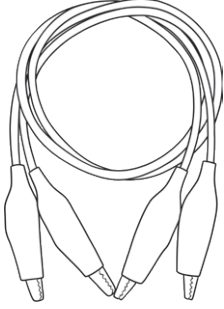
1. Rewrite the properties listed below next to their correct definitions.

| | | | | |
|-------|------|-----------|---------|--------------------|
| shiny | hard | malleable | ductile | high melting point |
|-------|------|-----------|---------|--------------------|

- a. Can be drawn into thin wires - _____
- b. Goes from a solid to a liquid under high temperatures - _____
- c. Able to be hammered and shaped - _____
- d. Firm and resistant to pressure - _____
- e. Reflects light - _____

2. Look at the pictures below. Rank the properties of each displayed metal in order of importance.

| | |
|--|--|
| <p>Necklace</p>  | |
| <p>Paperclip</p>  | |

| | |
|---|--|
| <p>Cooking Pan</p>  | |
| <p>Construction Steel</p>  | |
| <p>Electric Wires</p>  | |

3. Metals have some properties that are not useful to us, such as rust.

| | | | | |
|------|-------|--------|-------|-----------|
| iron | water | oxygen | alloy | corrosion |
|------|-------|--------|-------|-----------|

Rust occurs in some metals. It happens when _____ and _____ react with the _____ present in some metals. Rust looks like a red-brown cover over metals. Eventually this can lead to patches called _____ forming in the metal. Today, we can minimise the harmful effects of rust by combining other elements to a metal. We call these metals _____.

Properties of Metals Answers

1. Rewrite the properties listed below next to their correct definitions.

| | | | | |
|-------|------|-----------|---------|--------------------|
| shiny | hard | malleable | ductile | high melting point |
|-------|------|-----------|---------|--------------------|

- a. Can be drawn into thin wires - **ductile**
- b. Goes from a solid to a liquid under high temperatures - **high melting point**
- c. Able to be hammered and shaped - **malleable**
- d. Firm and resistant to pressure - **hard**
- e. Reflects light - **shiny**

2. Look at the pictures below. Rank the properties of each displayed metal in order of importance.

| | |
|-------------|--|
| Necklace | <ol style="list-style-type: none">1. Malleable2. Ductile3. Shiny4. Hard5. High Melting point |
| Paperclip | <ol style="list-style-type: none">1. Ductile2. Malleable3. Hard4. Shiny5. High Melting Point |
| Cooking Pan | <ol style="list-style-type: none">1. High Melting Point2. Hard3. Malleable4. Shiny5. Ductile |

| | |
|--------------------|---|
| Construction Steel | <ol style="list-style-type: none"> 1. Hard 2. Malleable 3. High Melting Point 4. Shiny 5. Ductile |
| Electric Wires | <ol style="list-style-type: none"> 1. Ductile 2. High Melting Point 3. Malleable 4. Shiny 5. Hard |

* **Importance can be debated in some areas.**

3. Metals have some properties that are not useful to us, such as rust.

| | | | | |
|------|-------|--------|-------|-----------|
| iron | water | oxygen | alloy | corrosion |
|------|-------|--------|-------|-----------|

Rust occurs in some metals. It happens when **water** and **oxygen** react with the **iron** present in some metals. Rust looks like a red-brown cover over metals. Eventually this can lead to patches called **corrosion** forming in the metal. Today, we can minimise the harmful effects of rust by combining other elements to a metal. We call these metals **alloys**.