Rusting of Iron

Equipment:

rusty piece of rail

Safety:

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Demonstration:

The rusty piece of rail is demonstrated or passed around.

Obervation:

The rust is easily recognizable due to its reddish-brown color.

Explanation:

Rust is the corrosion product formed on iron or steel by reaction with oxygen in the presence of water. From a chemical point of view, rust consists of hydrous iron oxides of varying composition. In a simplified way, the formation of rust can be described by the following conversion formula:

4 Fe|s + 3 O_2 |g + 2 H₂O|I \rightarrow 4 FeOOH|s.

Rusting of a piece of iron in humid air takes about 10 years.



Photo: pxhere.com

<u>Disposal:</u>

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