 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



Use experimental results to suggest an order of reactivity of various metals.



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| --- | --- | --- | --- | --- |
| Know | |  | Apply  2  1 | |
| Ideas | |  |  |  |
| K1 | Metals and non-metals react with oxygen to form oxides which are either bases or acids. |  | A1 | Describe an oxidation, displacement, or metal-acid reaction with a word equation. |
| K2 | Metals can be arranged as a reactivity series in order of how readily they react with other substances. |  | A2 | Use particle diagrams to represent oxidation, displacement and metal-acid reactions. |
| K3 | Some metals react with acids to produce salts and hydrogen. |  | A3 | Identify an unknown element from its physical and chemical properties. |
|  | |  | A4 | Place an unfamiliar metal into the reactivity series based on information about its reactions. |
| Facts | |
| K4 | Iron, nickel and cobalt are magnetic elements. |  |  |  |
| K5 | Mercury is a metal that is liquid at room temperature. |  | A5 |  |
| K6 | Bromine is a non-metal that is liquid at room temperature. |  |  |  |
|  | |  |  |  |
| Key words | |
| K7 | **Metals:** Shiny, good conductors of electricity and heat, malleable and ductile, and usually solid at room temperature. |  |  |  |
| K8 | **Non-metals:** Dull, poor conductors of electricity and heat, brittle and usually solid or gaseous at room temperature. |  | A6 |  |
| K9 | **Displacement:** Reaction where a more reactive metal takes the place of a less reactive metal in a compound. |  |  |  |
| K10 | **Oxidation:** Reaction in which a substance combines with oxygen. |  |  |  |
| K11 | **Reactivity:** The tendency of a substance to undergo a chemical reaction. |  |  |  |
| 3 | Extend |  |  |  |
| E1 | Deduce the physical or chemical changes a metal has undergone from its appearance. |  |  |  |
| E2 | Justify the use of specific metals and non-metals for different applications, using data provided. |  |  |  |
| E3 | Deduce a rule from data about which reactions will occur or not, based on the reactivity series. |  |  |  |
| E3 |  |  |  |  |
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|  |  |  |  |  |
| E4 |  |  |  |  |
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