# Identifying ions: supporting resources

This resource supports the practical video Identifying ions, available here: <rsc.li/3dhnn5B>

### Results tables for flame tests

|  |  |  |
| --- | --- | --- |
| **Metal ion** | **Symbol** | **Observation: flame colour** |
| Lithium |  |  |
| Potassium |  |  |
| Calcium |  |  |
| Copper |  |  |
| Sodium |  |  |

|  |  |  |
| --- | --- | --- |
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| Lithium |  |  |
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| Copper |  |  |
| Sodium |  |  |

### Microscale reactions of positive ions with sodium hydroxide

|  |  |  |
| --- | --- | --- |
| **Positive ion** | **Symbol** | **Positive ion solution and sodium hydroxide solution** |
| Iron(ii) | Fe2+ |  |
| Iron(iii) | Fe3+ |  |
| Copper(ii) | Cu2+ |  |
| Aluminium | Al3+ |  |
| Calcium | Ca2+ |  |
| Magnesium | Mg2+ |  |

### Results table for positve ion tests

|  |  |  |  |
| --- | --- | --- | --- |
| **Positive ion** | **Symbol** | **Observation when added to sodium hydroxide solution** | **Observation with excess sodium hydroxide solution** |
| Iron(ii) |  |  |  |
| Iron(iii) |  |  |  |
| Copper(ii) |  |  |  |
| Aluminium |  |  |  |
| Calcium |  |  |  |
| Magnesium |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Positive ion** | **Symbol** | **Observation when added to sodium hydroxide solution** | **Observation with excess sodium hydroxide solution** |
| Iron(ii) |  |  |  |
| Iron(iii) |  |  |  |
| Copper(ii) |  |  |  |
| Aluminium |  |  |  |
| Calcium |  |  |  |
| Magnesium |  |  |  |

### Results tables for negative ion tests

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Negative ion** | | **Symbol** | **Test** | **Observation** |
| Carbonate | |  |  |  |
| Sulfate | |  |  |  |
| Halide | Chloride |  |  |  |
| Bromide |  |  |  |
| Iodide |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Negative ion** | | **Symbol** | **Test** | **Observation** |
| Carbonate | |  |  |  |
| Sulfate | |  |  |  |
| Halide | Chloride |  |  |  |
| Bromide |  |  |  |
| Iodide |  |  |  |