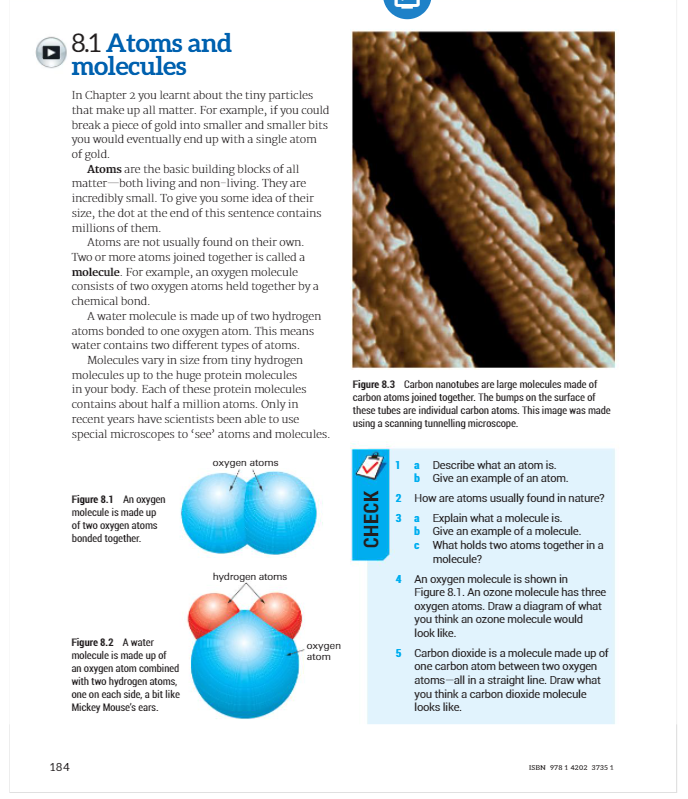
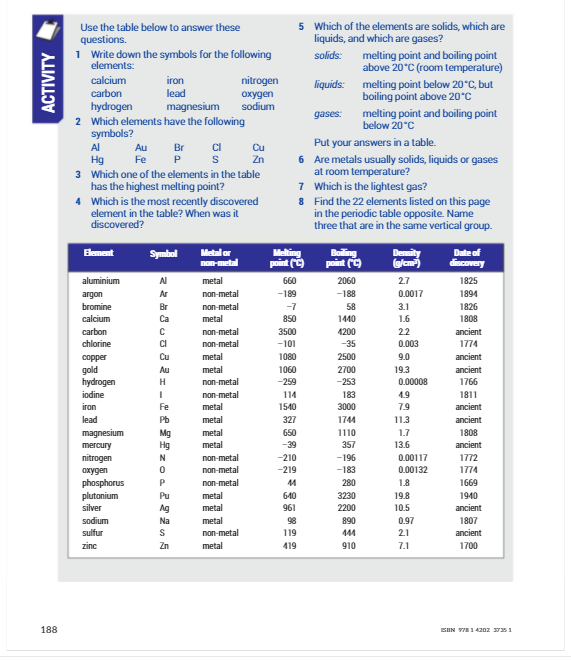
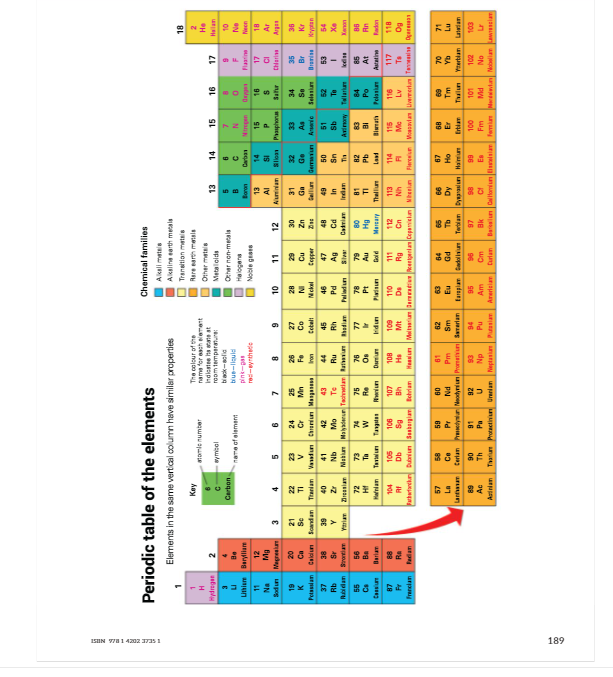
|  |
| --- |
| **Week: Term 2, Week 7** |
| **Day/Date: Wednesday 2nd - Thursday 3rd June** |
| **Class: 8 Science** |
| **Topic: Elements and Compounds** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Completed** | **Suggested Time** | **Learning Activity** | **Student Action** |
| ***Please note, all textbook pages referred to for this checklist have been provided in this word document.*** | | | |
|  | 15 min | **Check questions - Atoms** | 1. Complete **Check questions** on page 184, for a recap of knowledge |
|  | 3 min | **Element’s song**  <https://www.youtube.com/watch?v=uJGrwWOWt3Q> | 1. Watch video and sing along! |
|  | 7 min | **The story of Marie Curie**  [The genius of Marie Curie - Shohini Ghose - YouTube](https://www.youtube.com/watch?v=w6JFRi0Qm_s) | 1. Watch the story of Marie Curie |
|  | 15 min | **Science as a Human Endeavour – Fireworks** | 1. Read **‘Science as a Human Endeavour’** on pages 191 2. As a reflection; 3. What is a pyrotechnician? 4. When and where was the first time did you see fireworks? 5. What is your favourite type of firework? |
|  | 20 min | **Activity worksheet - Fireworks** | 1. Please complete ‘**Fireworks’** worksheet attached. |
| **Additional task (optional)** | | | |
|  | 20 Min | **Activity** | 1. Complete activityquestions on page 188 |









# Fireworks

Chemical elements in fireworks

|  |  |  |  |
| --- | --- | --- | --- |
| **Chemical element** | **Symbol** | **Metal/Non-Metal?** | **What it does in fireworks** |
| Lithium |  |  | Colour agent - red |
|  | Na |  | Colour agent - gold and yellow |
|  | K |  | Fuel and orange - red sparks; colouring agent - lilac |
| Magnesium |  |  | Fuel and bright white flames |
| Calcium |  |  | Colour enhancer - helps make colours deeper; colouring agent - brick red |
|  | Sr |  | Colouring agent - red (crimson) |
| Barium |  |  | Colouring agent - green |
| Titanium |  |  | Fuel and produces silver-white sparks |
|  | Fe |  | Produces gold coloured sparks |
|  | Cu |  | Colouring agent - blue/green |
| Zinc |  |  | Fuel and smoke agent |
| Aluminium |  |  | Fuel and makes yellow-white sparks eg in sparklers |
|  | C |  | Fuel, component of black powder |
|  | P |  | Fuel |
|  | Sb |  | Fuel, glitter effects |
| Sulfur |  |  | Fuel, component of black powder |

Questions

1. Complete the **Chemical elements in fireworks table** (above) by adding the missing element names and symbols. Then work out and fill in which elements are metals and which are non metals. Use a Periodic Table to help you if necessary ( on page 189 Scienceworld 8 textbook).

2. Which chemical elements could be combined in a firework to make:

* 1. Turquoise (blue/green)?..................................................................................
  2. Glitter effect? ………………………………………………………………………………………………
  3. Gold and yellow?…………………………………………………………………………………………

3. Look at the photograph of fireworks. Which chemical elements can be seen?

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