KS4 Chemistry

Each week a science teacher will be setting work for chemistry on google classroom; this doesn’t have to be completed on the day it’s set. Please make sure you answer your work on the online exercise book or include a picture of your work in the online exercise book.

If you have finished your work set on google classroom have a look at the following activities.

**TV and movies**

* **Climate change** - BBC iplayer documentary
* **Hidden figures** - is about an African American woman at NASA in the 1950s and '60s.
* **Apollo-13** - A classic film
* **Underwater dreams** - film about a gifted student taking on universities in a robot-war style game.
* **The Imitation game** (12) - During World War II, the English mathematical genius Alan Turing tries to crack the German Enigma code with help from fellow mathematicians.
* **The theory of everything** - Based on Stephen Hawking
* **Forensics: The real CSI -** BBC Two
* **The secret story of stuff: Materials of modern age** - BBC iplayer

**Chemistry Podcast**

* **Lagrange point**

<http://www.lagrangepointpodcast.com/category/chemistry/>

* **Episodictable**

<https://episodictable.com/>

* **Chemistryworld**

[chemistryworld.com/podcasts](https://www.chemistryworld.com/podcasts)

* **Twis.org**

[twis.org/category/chemistry](https://www.twis.org/category/chemistry/)

* **TedTalk**

<https://www.youtube.com/watch?v=ezVEzCmiXM4>

**Chemistry youtubers**

**DO NOT TRY ANY PRACTICALS YOU SEE IN THESE VIDEOS**

* **NurdRage**
* **Chemical Bouillon**
* **CAMERA**

**Chemistry puzzles and games**

* **Balancing Chemical Equations**

<http://phet.colorado.edu/sims/html/balancing-chemical-equations/latest/balancing-chemical-equations_en.html>

* **Canary Zoo - chemistry game**

<http://www.canaryzoo.com/Chemistry%20Games.htm>

* **BBC bitesize**

<https://www.bbc.co.uk/bitesize/levels/z98jmp3>

**Open University Chemistry courses**

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| --- | --- | --- | --- |
| Course title  | How many hours to complete  | Level  | Hyperlink  |
| Discovering Chemistry  | 24 | Introductory | <https://www.open.edu/openlearn/science-maths-technology/chemistry/discovering-chemistry/content-section-overview?active-tab=description-tab> |
| The science of alcohol  | 24 | Introductory  | <https://www.open.edu/openlearn/science-maths-technology/the-science-alcohol/content-section-overview?active-tab=description-tab> |
| What is a metal? | 3 | Introductory  | <https://www.open.edu/openlearn/science-maths-technology/chemistry/what-metal/content-section-0?active-tab=description-tab> |
| Understanding antibiotic resistance  | 24 | Introductory  | <https://www.open.edu/openlearn/science-maths-technology/understanding-antibiotic-resistance/content-section-overview?active-tab=description-tab> |
| Metals in medicine  | 12 | Intermediate  | <https://www.open.edu/openlearn/science-maths-technology/metals-medicine/content-section-0?active-tab=description-tab> |
| [What chemical compounds might be present in drinking water?](https://www.open.edu/openlearn/science-maths-technology/what-chemical-compounds-might-be-present-drinking-water/content-section-0?active-tab=description-tab) | 6 | Intermediate  | <https://www.open.edu/openlearn/science-maths-technology/what-chemical-compounds-might-be-present-drinking-water/content-section-0?active-tab=description-tab> |
| The molecular world | 20  | Intermediate  | <https://www.open.edu/openlearn/science-maths-technology/chemistry/the-molecular-world/content-section-0?active-tab=description-tab> |
| Test kits for water analysis  | 12 | Intermediate  | <https://www.open.edu/openlearn/science-maths-technology/chemistry/test-kits-water-analysis/content-section-0?active-tab=description-tab> |
| Drug development process: combating pain | 2 | Advance  | <https://www.open.edu/openlearn/science-maths-technology/science/drug-development-process-combating-pain/content-section-0?active-tab=description-tab> |
| Iron transport and storage  | 5 | Advance  | <https://www.open.edu/openlearn/science-maths-technology/science/chemistry/iron-transport-and-storage/content-section-0?active-tab=description-tab> |
| Introduction to polymers  | 20 | Advance  | <https://www.open.edu/openlearn/science-maths-technology/science/chemistry/introduction-polymers/content-section-0?active-tab=description-tab> |
| Birth of a drug  | 4 | Advance  | <https://www.open.edu/openlearn/science-maths-technology/science/chemistry/birth-drug/content-section-0?active-tab=description-tab> |
| The three-way catalytic converter | 12  | Advance  | <https://www.open.edu/openlearn/science-maths-technology/science/chemistry/the-three-way-catalytic-converter/content-section-0?active-tab=description-tab> |