

The grand end of term quiz

Education in Chemistry

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Round 1: science fiction

None of these chemicals are real, but who cares?

Q1. What colourful device would you power with a kyber crystal?

Q2. Captain America's shield is made from which element?

Q3. What can you make with lacewing flies, leeches, bicorn horn, knotweed, fluxgrass, boomslang skin and a strand of hair?

Q4. What famous starship is powered by dilithium?

Q5. Which upcoming movie starring Timothée Chalamet is about a battle over the spice Melange?

Round 2: what's happening?

Test your knowledge with these GCSE questions.

Q1. A hydrogen and a chlorine atom bond together, each contributing one electron to a shared pair. What type of bonding has occurred?

Q2. One atom of one isotope of calcium has an atomic number of 20 and a mass number of 42. How many protons does it have?

Q3. Chlorine has a boiling point of -35°C and a melting point of -101.5°C . What state would it be in if I cooled it to -20°C ?

Q4. How many times smaller is 1nm relative to 1cm?

Q5. Why do metals conduct electricity?

(In case you have covered different areas of the syllabus so far...)

Bonus questions

Q6. I need to separate two different coloured substances from each other. What technique should I use?

Q7. I pour a solution through filter paper. What is the term for the particles left on the filter paper?

Round 3: chememojis

Can you work out what term is lurking behind these symbols?



Round 4: name that element

Name the element being described in the question.

- Q1.** When combined with iron, I make mild steel.
- Q2.** I'm the most abundant element in the universe.
- Q3.** When two of me bond to oxygen, I make you laugh.
- Q4.** My chemical symbol is K, although the letter isn't in my name!
- Q5.** When exposed to oxygen, I turn green.

Round 5: current science

Have you been paying attention to science news?

- Q1.** In September, scientists found phosphine in a planet's atmosphere, which could be evidence of alien life. On what planet did they make the discovery?
- Q2.** What disease is caused by SARS-CoV-2?
- Q3.** Two letters of the alphabet aren't in the name of any element on the periodic table. Name either of them.
- Q4.** What brand of washing powder shares its name with the European Space Agency's new space telescope?
- Q5.** 2019's Nobel prize for chemistry was won for batteries typically used in laptops and smartphones. What chemical element do these batteries use?

Bonus round: musical elements

For advanced students only! Can you work out the artists sounded out by these elements' symbols?

Q1. Lanthanum – Dysprosium – Gallium – Gallium

Q2. Tantalum – Yttrium – Lawrencium – Sulfur – Tungsten – Hafnium – Tellurium

Q3. Sulfur – Americium – Samarium – Iodine – Thorium

Q4. Carbon – Argon – Dysprosium – Boron

Q5. Boron – Tennessine