

ATOMIC COMICS

THE ALCHEMY DETECTIVES:

THE CASE OF THE PHILOSOPHER'S STONE

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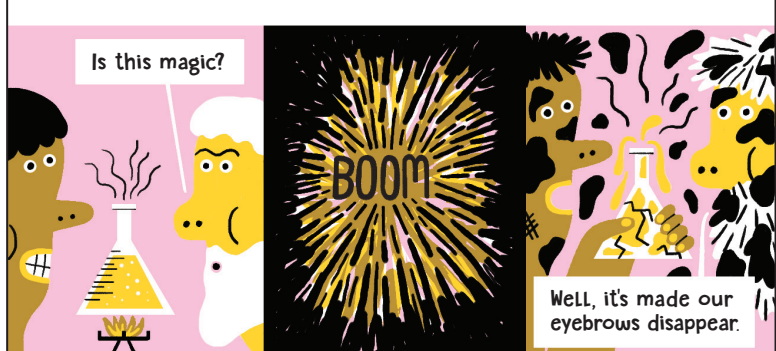
FOR THOUSANDS OF YEARS, PEOPLE TRIED TO TURN LESS VALUABLE SUBSTANCES INTO GOLD... WITHOUT SUCCESS!



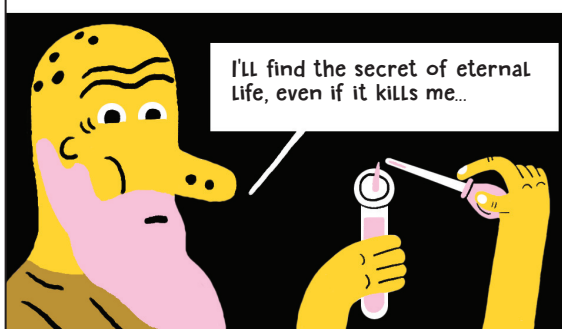
THESE EARLY CHEMISTS WERE CALLED IDIOTS ALCHEMISTS, WITH THE WORD 'ALCHEMY' GOING BACK TO ANCIENT EGYPT.



ALCHEMISTS OFTEN WORKED IN SECRET AS MANY OF THEIR BELIEFS BORDERED ON BLACK MAGIC.



ALCHEMISTS ALSO SEARCHED FOR A 'UNIVERSAL PANACEA' (PAN-AH-SEE-AH) CAPABLE OF CURING ALL DISEASES AND PROLONGING YOUTH.



ALCHEMY RECOGNISED 16 NATURAL ELEMENTS, OF WHICH GOLD WAS THE PUREST AND MOST PERFECT.



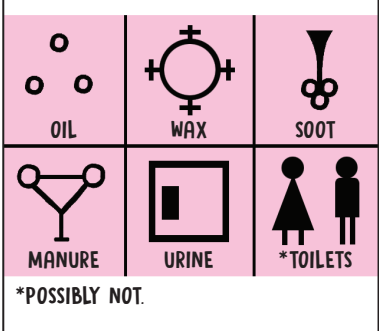
THESE ELEMENTS (SEE BOX ON RIGHT) WERE EACH GIVEN SECRET SYMBOLS SO ALCHEMISTS COULD RECORD THEIR RESULTS. SOME WERE QUITE BAFFLING.



MANY OF THE ELEMENTS HAD SYMBOLS THAT LINKED THEM TO OBJECTS IN THE HEAVENS WITH THE SUN BEING THE SYMBOL FOR GOLD (OF COURSE).



BESIDES ELEMENTS, ALCHEMISTS HAD SECRET SYMBOLS FOR EVERYTHING ELSE THEY USED TOO.



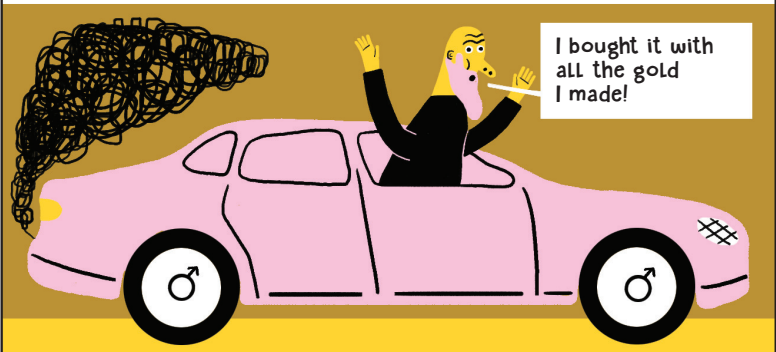
MANY EUROPEAN ALCHEMISTS SEARCHED FOR 'THE PHILOSOPHER'S STONE', BELIEVING IT WOULD GRANT ETERNAL LIFE - THE SAME STONE MENTIONED IN THE HARRY POTTER BOOKS!



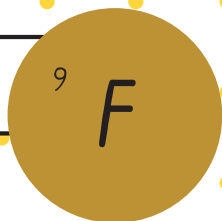
EARLY ALCHEMY SLOWLY LED TO MODERN CHEMISTRY. THE GERMAN MONK ALBERTUS MAGNUS ISOLATED ARSENIC IN ABOUT 1250CE - THE FIRST ELEMENT WITH A KNOWN DISCOVERER.



BUT IF YOU THINK WE'VE LEFT ALCHEMY FAR BEHIND US, THINK AGAIN. THE VOLVO CARS LOGO IS THE OLD ALCHEMICAL SYMBOL FOR IRON!



Fluorine



- 👁 Pale-yellow gas
- ⚠ Extremely reactive ☆ Serious bite

Fluorine is rare, which may be a good thing given how fiercely reactive it is. It reacts with almost every element, even including some noble gases.

Fluorine reacts with water to form hydrofluoric acid, an acid so strong it can burn through glass. Many chemists who tried to isolate fluorine as an element suffered terrible accidents, losing eyes, limbs and their lives. They are known as the 'fluorine martyrs'.

FIND IT IN:

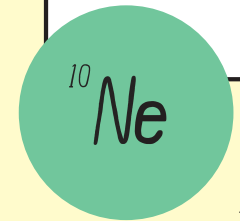
- FLUORIDE TOOTHPASTE
- TEA
- NON-STICK (TEFLON) SAUCEPANS
- BREATHABLE (GORE-TEX) WATERPROOFS



Smile please

Tooth enamel is the hardest substance in the body, but it still gets destroyed by the acids produced when the bacteria in our mouths break down sugars. That's why we need to brush twice a day. The fluoride atoms in fluoride toothpaste bond with our tooth enamel to make it even harder and more resistant to decay.

Neon



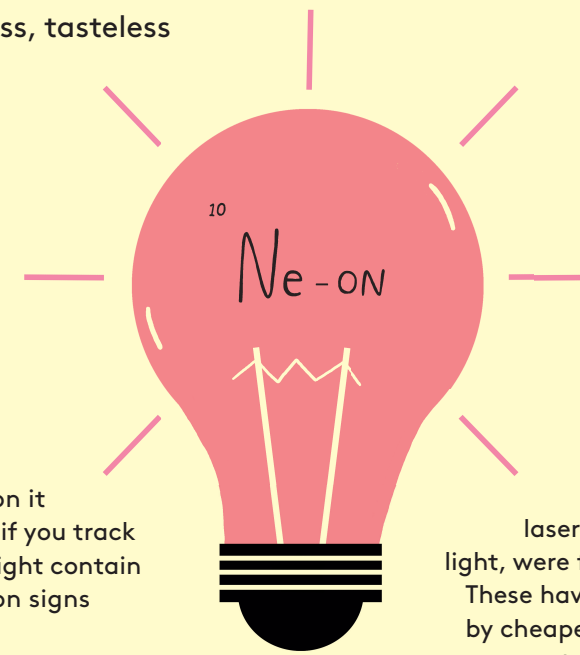
- 👁 Colourless, odourless, tasteless gas ⚠ None, it's inert
- ☆ Glows in the dark

Look at the Periodic Table, and you will find neon among the noble gases, which are all very unreactive. Its name means 'new', which neon was in 1898 when it was first discovered! It is so light that it can float up and escape from the Earth's atmosphere.

If you pass electricity through neon it produces an orangey-red glow. So if you track down an old advertising sign, it might contain neon. Painting the glass turns neon signs different colours.

FIND IT IN:

- AIR
- NEON SIGNS
- OLD CD PLAYERS



See the light

Helium-neon (He-Ne) lasers, which produce a red light, were fitted in early CD players. These have mostly been replaced by cheaper diode lasers, but your parents might still have one.