

Canberra Islamic School

NEWSLETTER

This newsletter was made possible by the ACT Multicultural Grants Program

Assalamu alaikum

Dear readers,

In this issue, we will be taking a good look at chemistry and its origins in Islamic civilisation and the great part it had to play in the development of this great science and some artwork related to Surah Al-Layl by some of our students.

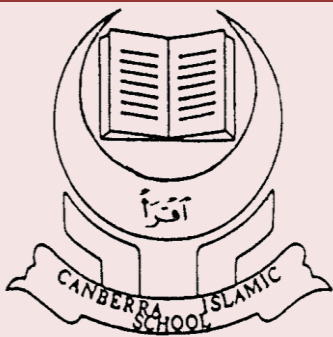
The last brainteaser was slightly confusing, but I hope you got the answer. The **answer to last month's brainteaser: there are 3 girls + 4 boys = 7 children.**

Salam,
Hannan Mansuri
Editor

P.S. A correction to last month's newsletter, as pointed out by the Level 5 boys class. Last week, we had a story called 'The Day of Judgement', where one of the kids, Abdullah, did not believe in Allah or the Hereafter. In this case, he would not be called a Muslim.



By Sumaiyah and Fatmata, Level 5
In relation to **Surah 92, Al-Lail (The Night)**



The
Prophet
(pbuh)'s Way

The Prophet (saw) was reported to have said,

"Part of someone's being a good Muslim is his leaving alone that which does not concern him."

-Tirmidhi and others

Canberra Islamic School Info

Time: Sundays 10 am—1:15 pm
Location: Canberra Masjid, 130 Empire Circuit, Yarralumla,
Phone: 02 62732422
Email: canberraislamicschool@gmail.com
Website: www.canberraislamicschool.com

At the Canberra Islamic school, we aim to (InshaAllah):

Provide a social setting to meet other Muslim children of their age group

Foster understanding that Allah is One - the same Allah for all mankind (muslims and non-muslims) and that humanity is one

Provide a means to learn about Islam and develop the urge to learn more independently

Provide a means to understand and practice Quranic Arabic and Quran in order to develop the love and need for Quran

With all of the above to foster love of Allah, the Prophet Muhammad (s), Islam and Muslims

CIS School Term Dates 2011

	Starts	Ends	Holidays
Term 1	13 th Feb	10 th Apr	
Term 2	8 th May	3 rd Jul	
Term 3	31 st Jul	25 th Sep	4 th Sep – Eid Al-Fitr
Term 4	23 rd Oct	18 th Dec	6 th Nov- Eid Al-Adha



Word Puzzle

Can you solve them all?

Brainteaser: A Riddle

Forward and forward I go never looking back.
My limit no one knows more of me do they lack.
Like a river I do flow and an eagle I fly.
Now can you guess what am I?

Answer in next month's newsletter

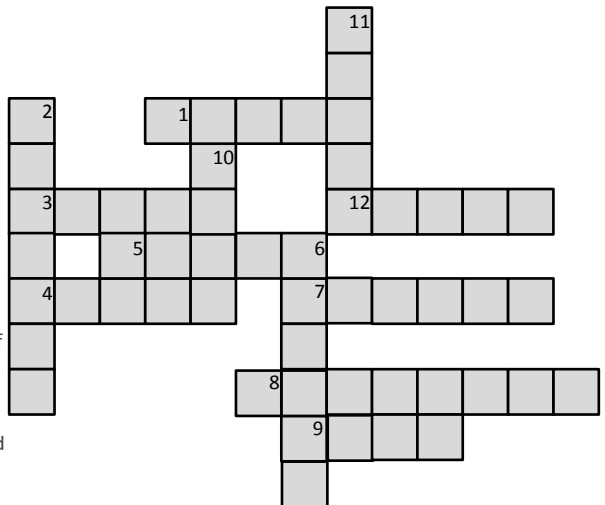
Across

- An Islamic ruling based on the unanimous agreement of Islamic scholars, after referring to the Quran and Sunnah
- Last Surah (chapter) of the Quran
- Greatest woman scholar in Islam
- Ascent of the Prophet (s) to the heavens
- 3rd rightly guided Caliph
- 1st wife of Uthman, and

- daughter of the Prophet (s)
- Daughter of Abu Bakr (ra), besides Aisha
- 2nd pillar of Islam

Down

- 1st pillar of Islam
- Friday in Arabic
- Miraculous journey of the Prophet (s) to Jerusalem
- Led the Muslim conquest of Egypt and great Sahabab, Amr ibn _ _



Acid

GREAT MUSLIM SCIENTISTS- of Al-Kimya

Base

(e.g. alkali)

Today we'll be talking about chemistry and its origins in the Islamic civilisation. Chemistry is the study of matter, and the changes it can go through. It came from the word 'alchemy', from the Arabic *Al-Kimya*. This didn't used to be a science at all but a mystical, magical study of spirits and substances to make gold out of other cheaper things. This was very exciting to not only ordinary people, but also Umayyad princes and Abbasid Caliphs (the leaders of the early Islamic civilization) and continued until the 18th century in Europe. The emergence of Muslim chemists and scientists, beginning with Khalid ibn Yazid helped to make chemistry into the precise science it is today.

The Umayyad Prince Khalid ibn Yazid ibn Muawiya studied alchemy and medicine, and got chemistry to the stages of research and discovery, instead of the legends of alchemy. He also started the first translation movement in Islam. He ordered the translation of books on alchemy, medicine and astronomy from Greek and Coptic sources into Arabic. These were all very helpful to the next Muslim chemists, who also made great findings in the field.

Muslims wrote many books on chemicals and distinguished between acids and alkalis (almost like the opposite of acids). They studied and formed hundreds of medical drugs.

Khalid ibn Yazid (d. 90H/709 CE) wrote three articles on chemistry, which at that time was called *ilm al-san'a* (knowledge of making). Being a well-educated scientist, he also was credited with being the originator of libraries in Islam, so that cultural, scientific and literary treasures could be collected and preserved.

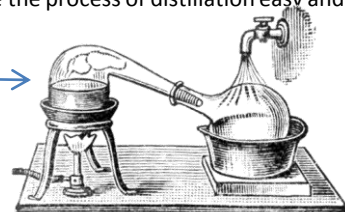
One century after Khalid, the Caliph Abu Ja'far Al-Mansur also had a similar interest, working on alchemy, further increasing knowledge and support of the sciences. There were numerous other Muslim chemists, the most famous being Al-Razi (d. 311H/923 CE) and his teacher Jabir ibn Hayyan, some of whose books were translated into Latin and used as a reference for almost a thousand years.

In science, it is important to experiment and carefully record observations, which Jabir made the base of his work. He was reported to have said, "The most important thing about such a

science is work and experimentation, as he who fails to be hard working and neglects experiments will eventually utterly fail". His greatest gift to chemistry included the perfection of scientific techniques such as:

- crystallization (making crystals of different salts, such as copper sulphate),
- distillation (separating liquids of different melting points),
- calcination (heating something in a way that breaks the substance apart),
- sublimation (turning a solid directly into a gas)
- evaporation (turning a liquid into a gas)
- development of several instruments for them. The alembic is his great invention, which made the process of distillation easy and systematic.

alembic



- Separation of substances into 3 types: spirits (easily vaporized), metals and those easily powdered, leading the way for classification into metals and non-metals and volatile substances.
- The development of basic chemical methods
- mechanisms of chemical reactions (how they work, and their speeds) helped evolve chemistry as a science from the legends of alchemy.

Important Muslim innovations in chemistry were in nitric acid, sulfuric acid, important metal salts and discoveries in alcohol (through distillation), potash, ammonia, arsenic, antimony (also called surma or kajal) and the term alkaline (from Arabic: alkali). They were the first to write about the composition of medicines and drugs, purification of compounds and discoveries like soap, fireworks, paper, silk, dyes, extracting perfumes, manufacturing steel,. A lot of the chemical methods were very helpful in minting coins and forming alloys for the *Bayt Al-Maal* (National Treasury), which sought to equally divide wealth and support the poor.

-----Compiled by Hannan Mansuri

