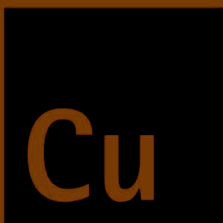
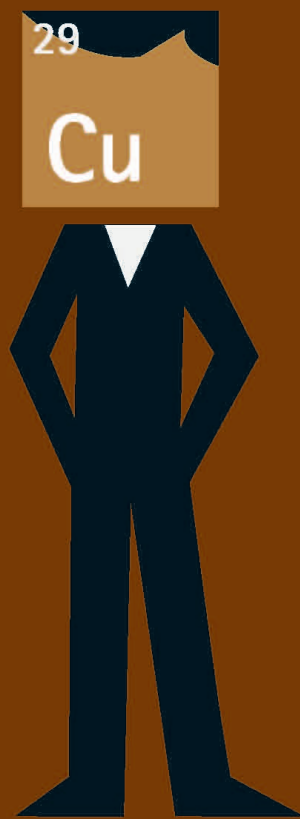


I work with copper.



I am...

Copper plays a crucial role in modern society. It is used by more people in more professions than most people realise.

To name just a few, copper helps designers create exceptional ornaments to adorn our homes, allows watchmakers to make accurate timepieces that help keep us on schedule, enables chefs to create tantalising dishes for us to savour and helps nurses keep us free from infection.

Thanks to its unique properties we can share information and photos with our families over the internet, as well as keeping dry, drinking clean water and enjoying electricity in our homes.

Finally, copper is even inside us since it is essential for our physical health and well-being.

This publication from the European Copper Institute features many of the different professions that work with copper every day, and outlines why they consider it vital for their work.

Copper has been used since ancient times and, as society and technology continue to progress, new professions will no doubt also benefit from this highly versatile material.



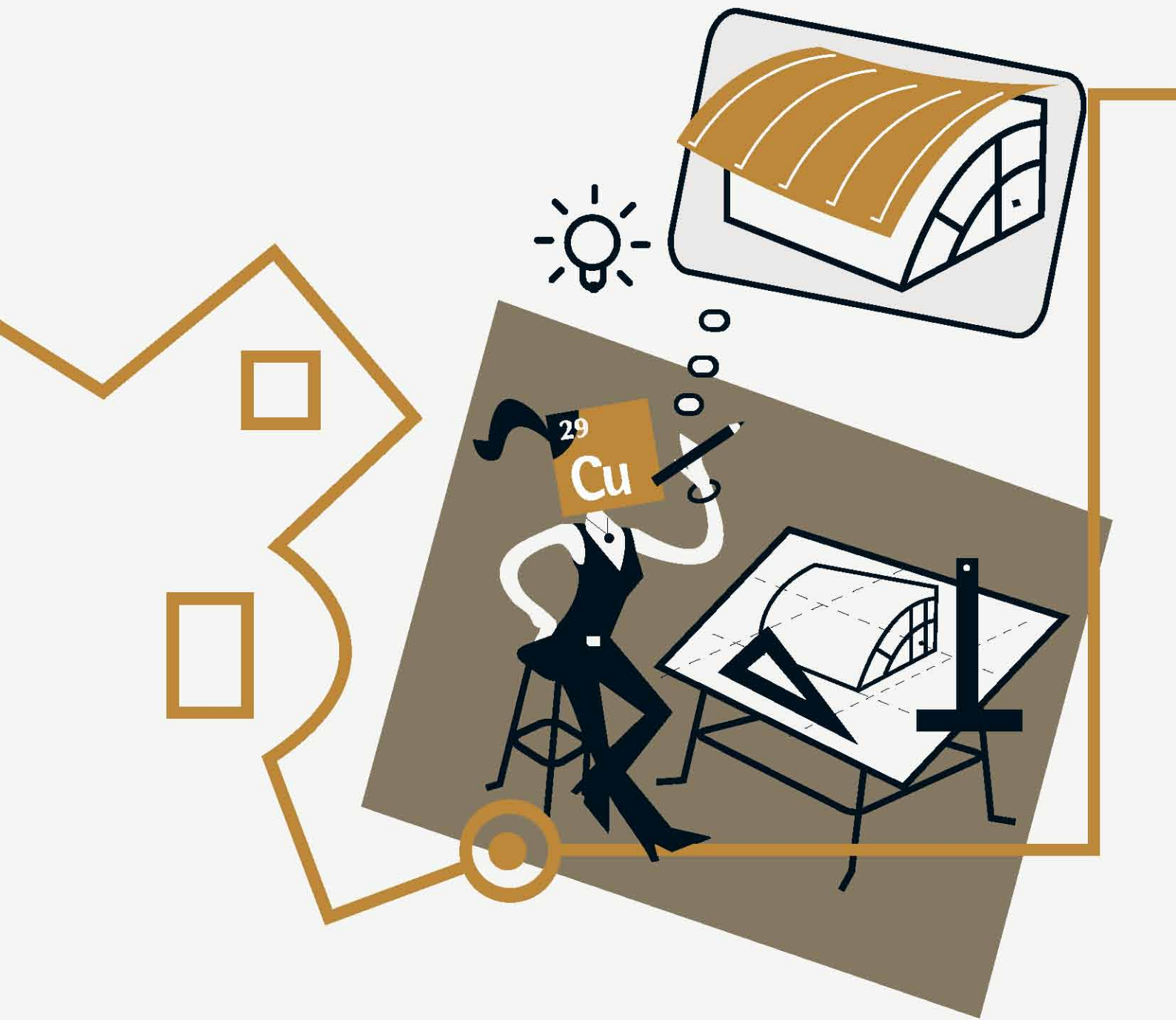
**European  
Copper Institute**  
Copper Alliance



# ... an Architect

Building on copper's durability and elegance, I create golden façades that catch the sun and rooftops that become green and more remarkable with age. Copper can be easily fashioned into complex curves or strict lines and the kaleidoscope of colours that copper and copper alloys offer makes them the most multi-tasking of metals.





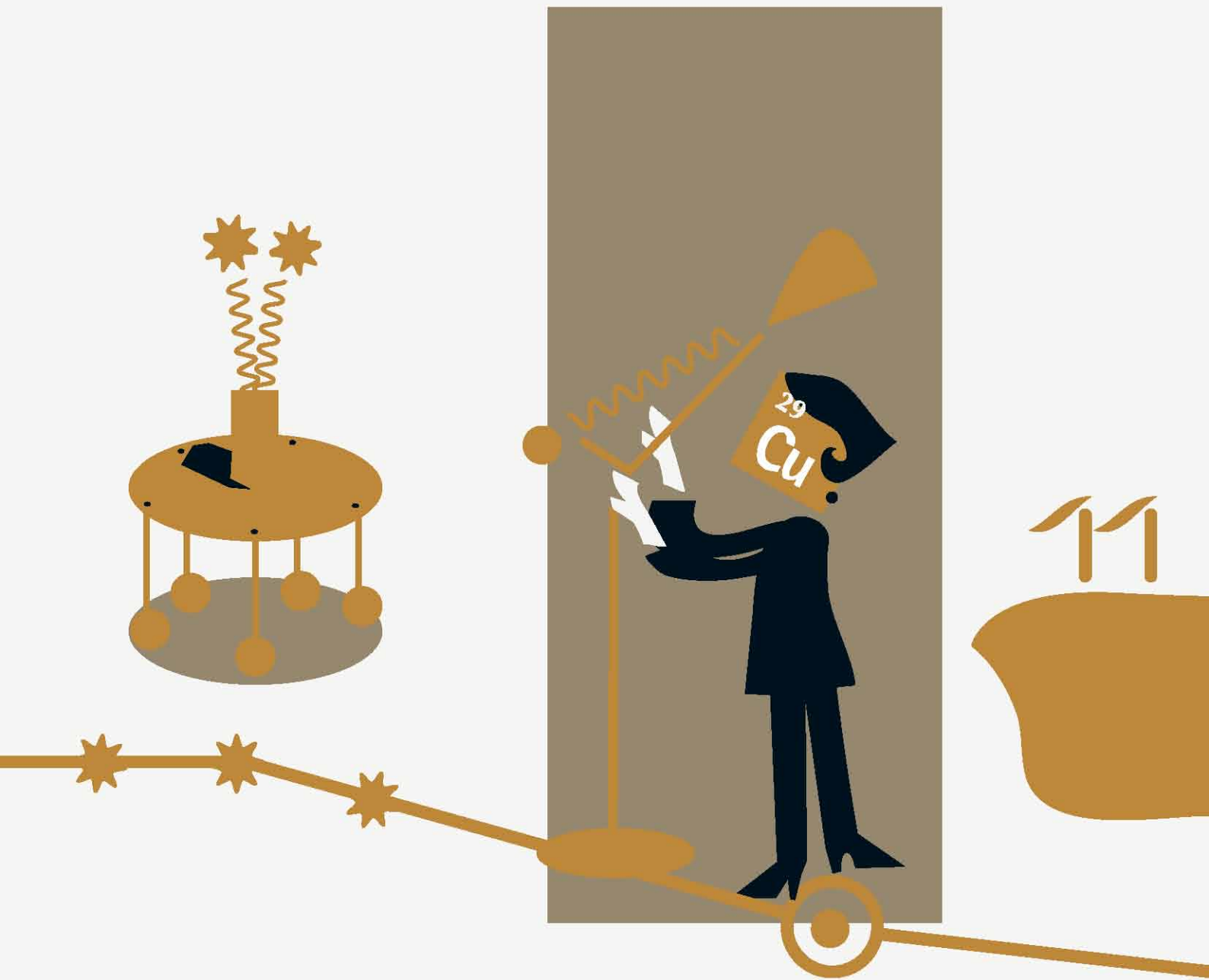
# ... a Designer

Interior fashions may  
come and go,  
but copper will endure.

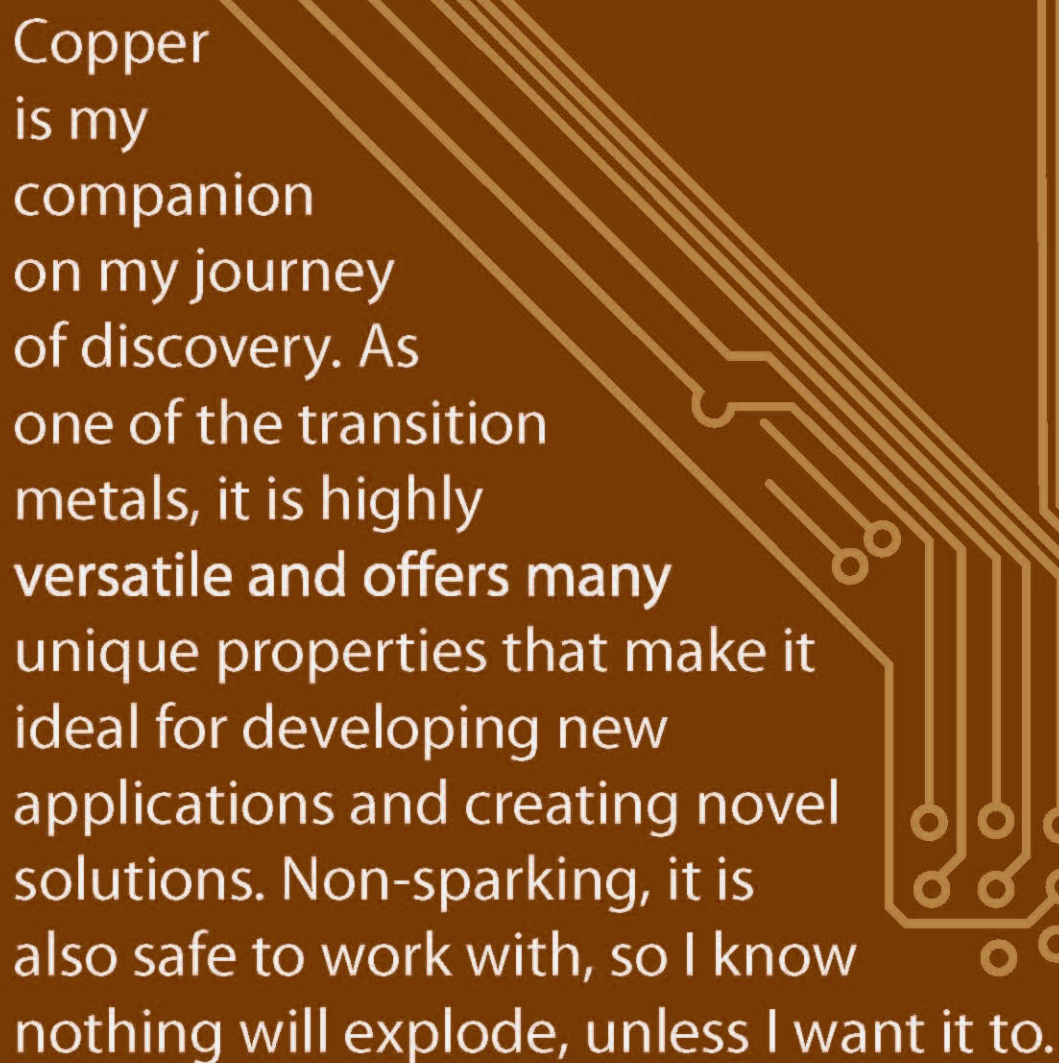
No other metal offers  
the vast range of  
colours that allow me  
to explore and exploit my  
artistic talents.

From striking  
centrepieces to  
surprising  
accessories, why  
should copper ever  
lose its shine?





# ... a Scientist



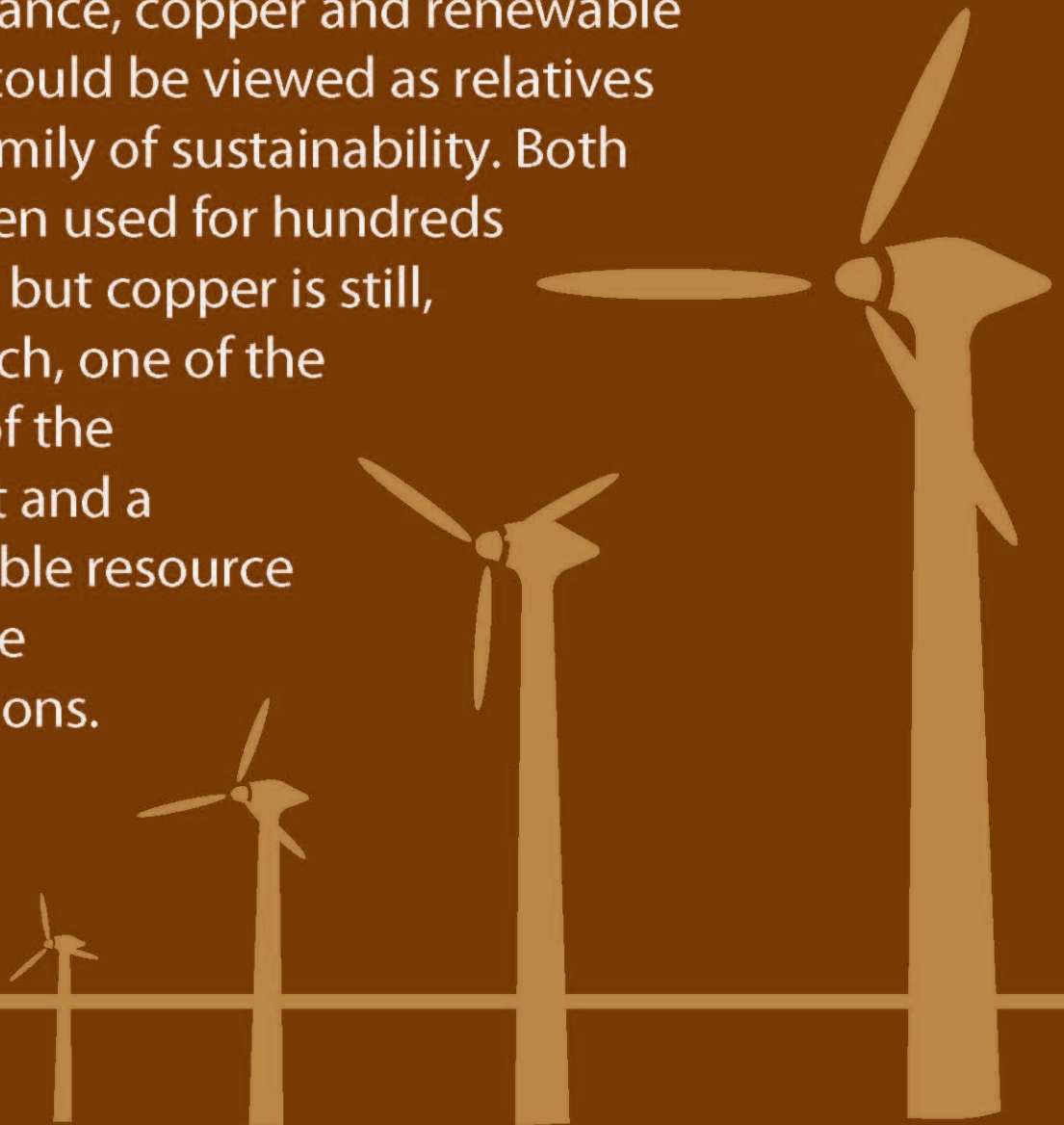
Copper is my companion on my journey of discovery. As one of the transition metals, it is highly versatile and offers many unique properties that make it ideal for developing new applications and creating novel solutions. Non-sparking, it is also safe to work with, so I know nothing will explode, unless I want it to.





# ... an Engineer

Fully recyclable without any loss of performance, copper and renewable energy could be viewed as relatives in the family of sustainability. Both have been used for hundreds of years, but copper is still, very much, one of the metals of the moment and a sustainable resource for future generations.



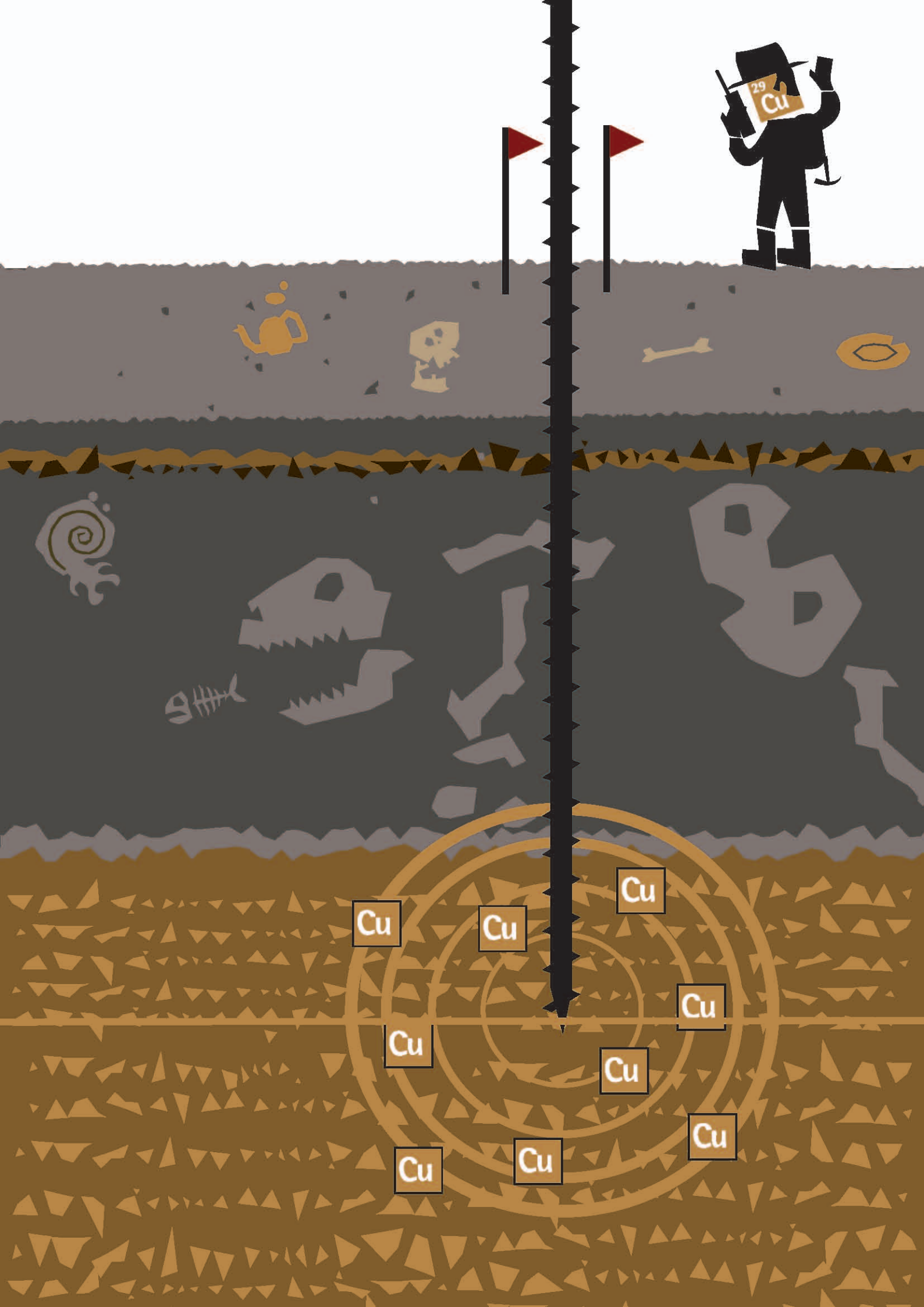


# ... a Geologist



It is my job to search for the new deposits of copper that the world needs.

Whether this is in the mountains of the Andes, the plains of Mongolia, or under the sea, I need to explore, analyse samples and make decisions on where the mines of tomorrow will be built.



# ... a Miner

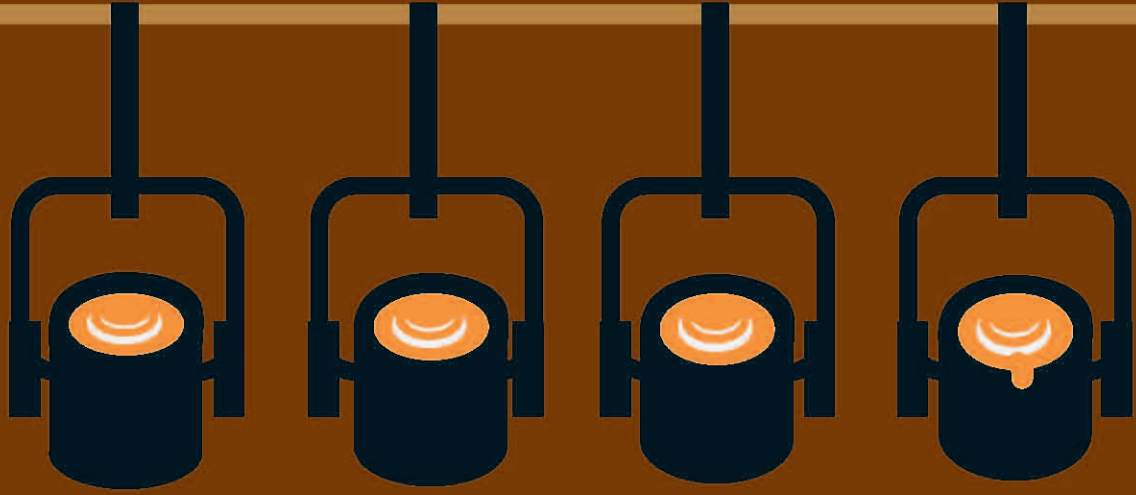
Copper can be mined underground and in huge open pits.

I can use explosives to break free new ore, operate shovels that lift 80 tonnes in one scoop and drive trucks with wheels 4 metres in diameter, carrying 300 tonnes of ore.



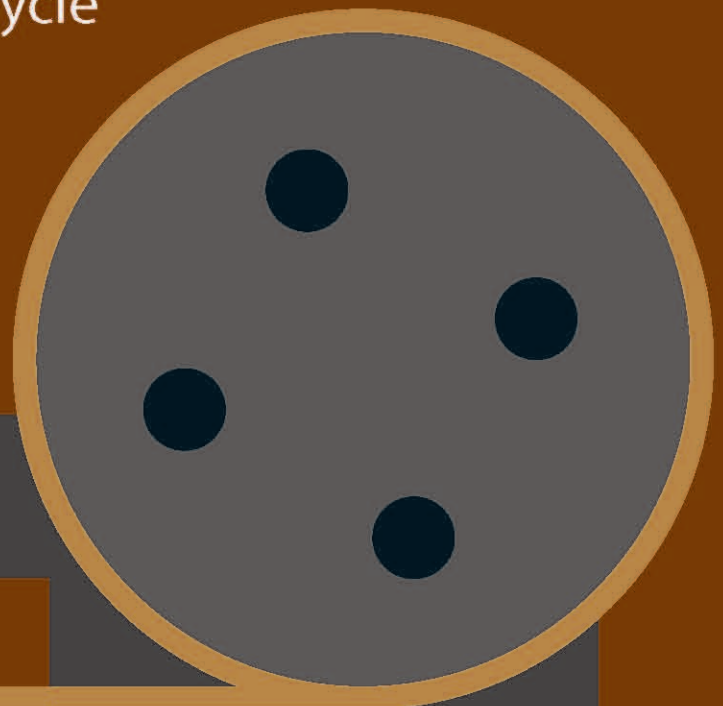


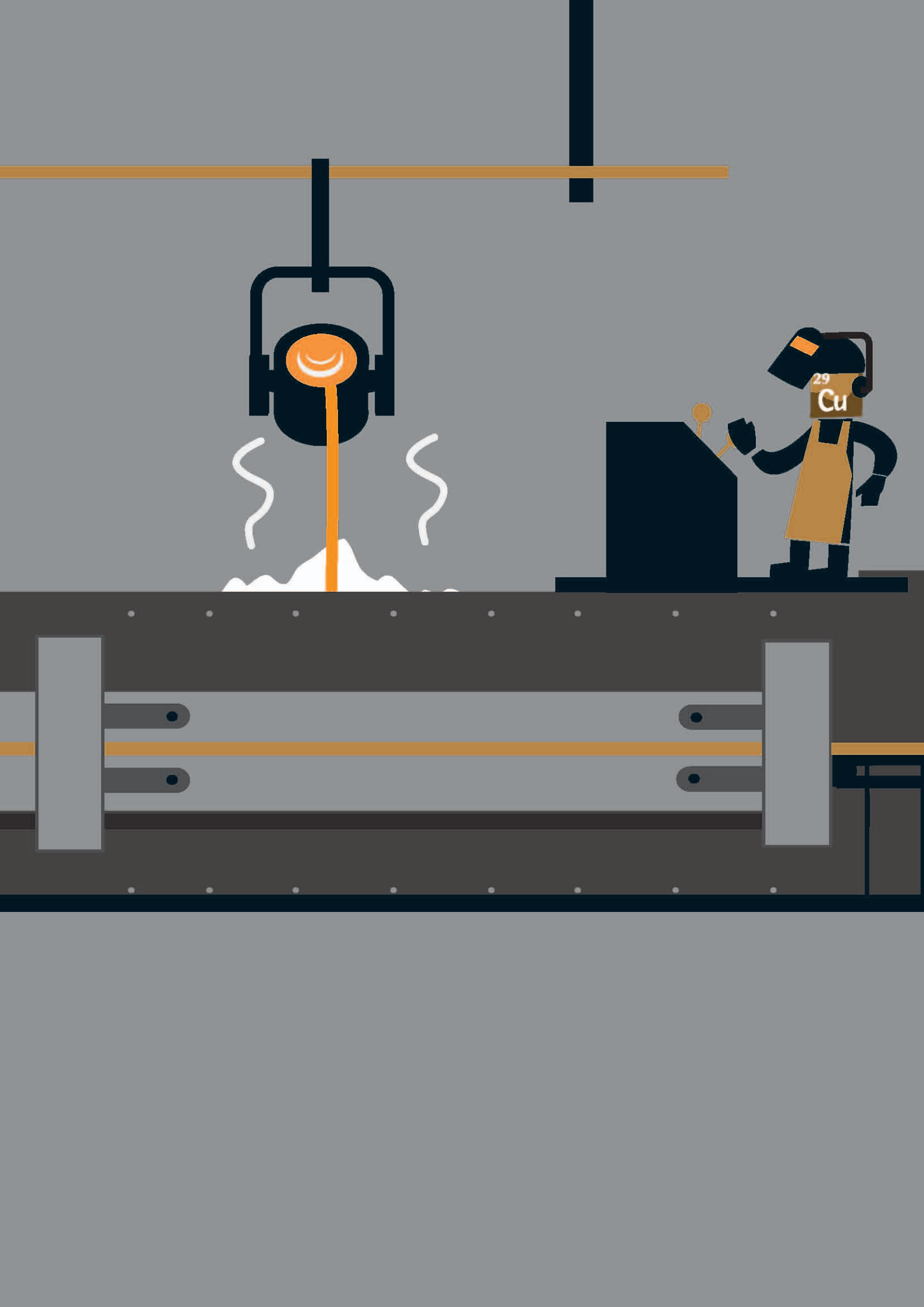




## ... a Metalworker

While copper is an extremely durable metal, it is also highly malleable and easy to work with when hot. I can bend it, stretch it, roll it and mould it into just about anything the customer requires. Without impacting the quality of my products, I can also recycle old copper that has been recovered from end-of-life applications.

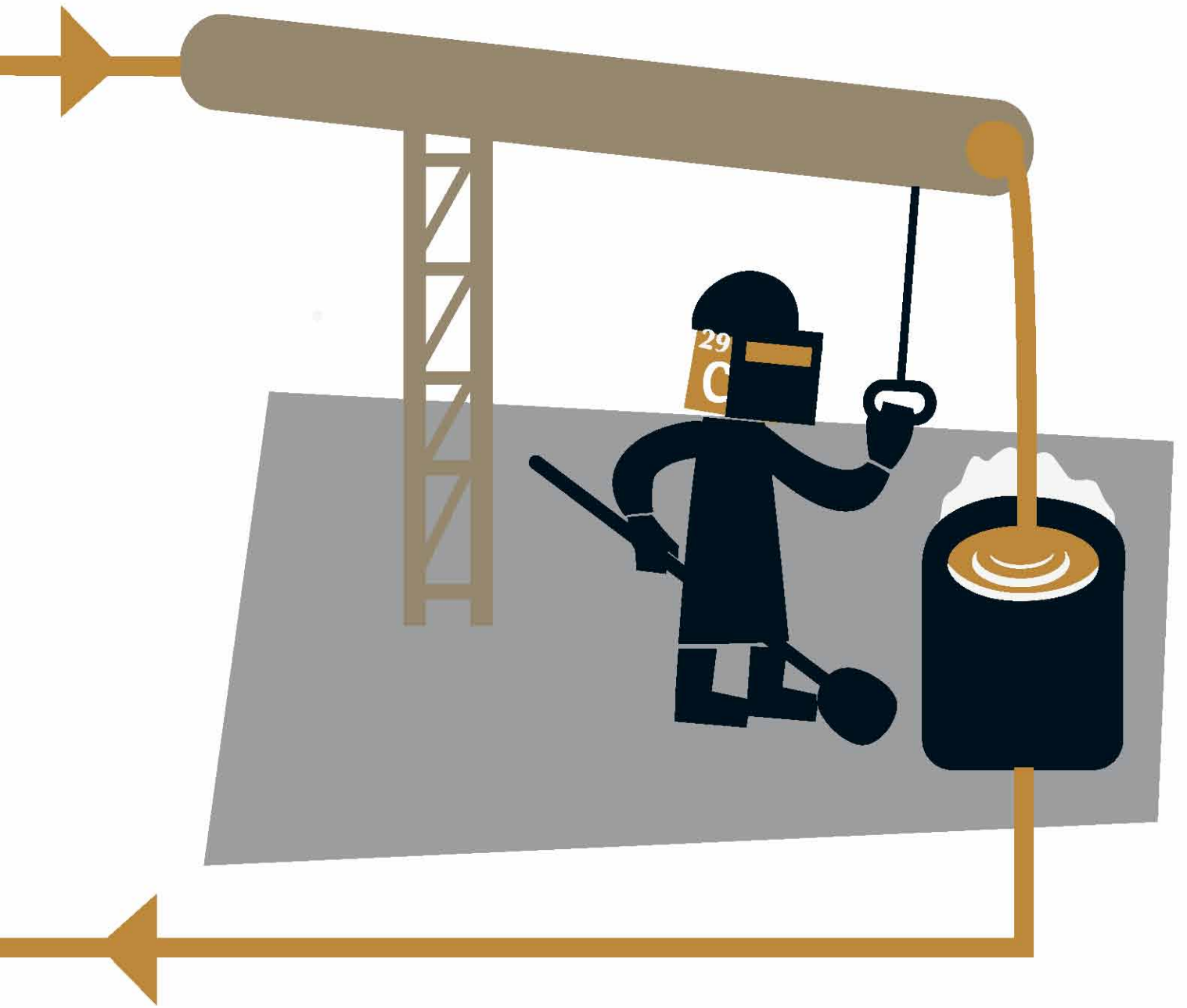




# ... a Metallurgist

By mixing and matching with other metals, I exploit the technical capabilities of copper into a broader range of products. The most common alloys – bronze, brass and copper-nickel – allow me to provide innovative and resource-efficient solutions for a wide range of downstream industries.

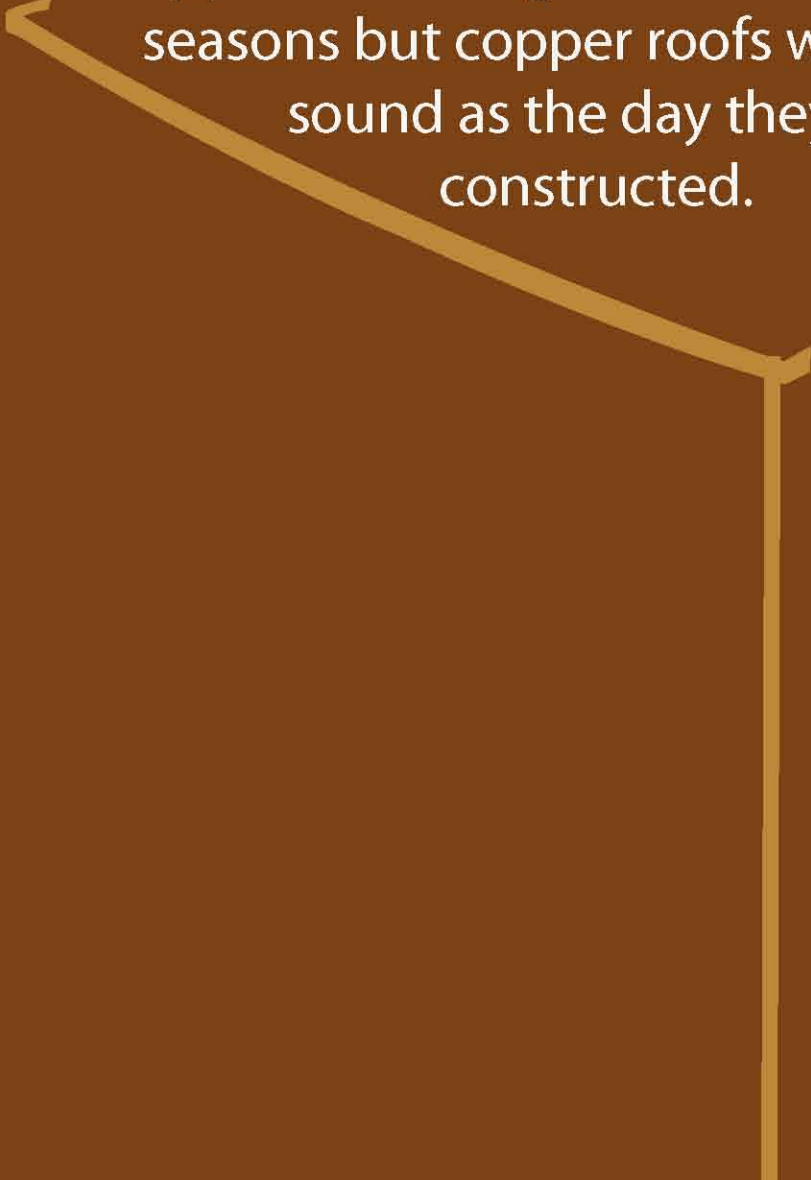






# ... a Roofer

For me, the sky's  
really the limit since I use copper to create  
architecturally-decorative roofs and façades  
that will last for decades, even centuries.  
Copper will change colour over hundreds of  
seasons but copper roofs will remain as  
sound as the day they were  
constructed.







# ... a Plumber

My job is to ensure that the pipes and fittings that deliver water and gas to our homes and offices are put together safely and don't leak. While I have many sizes of copper pipes, plus a whole range of copper and copper alloy fittings, taps and valves to choose from, one of the key benefits of a copper installation is that industry standards allow me to join elements from multiple suppliers.

This is really important when I am carrying out renovation work and repairs.

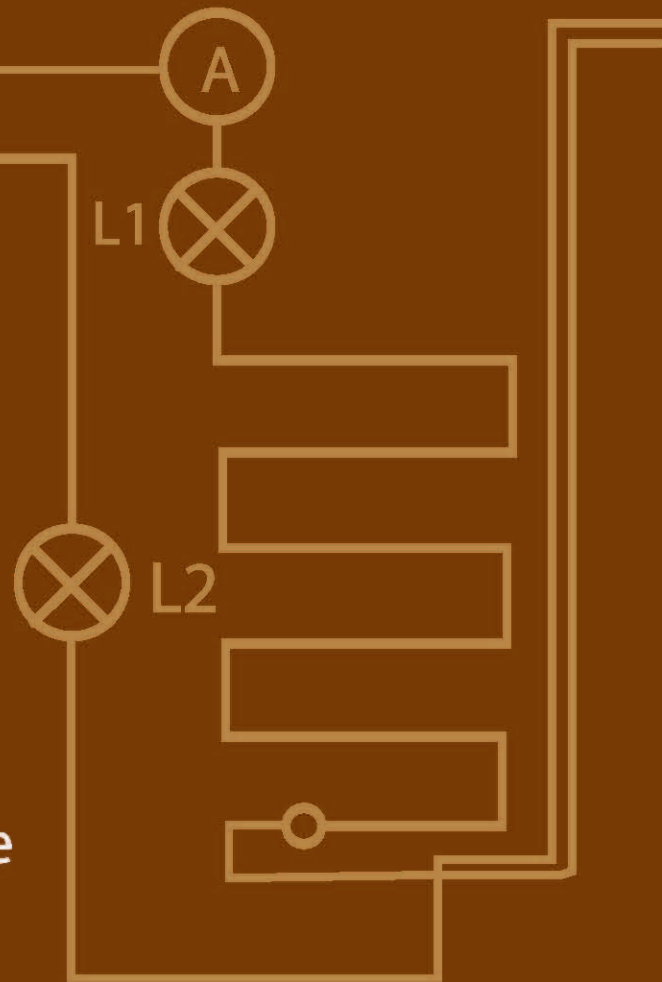
Traditional soldering and brazing techniques are still used, and new technologies – such as mechanical press fittings – can be used in places where naked flame is not allowed.



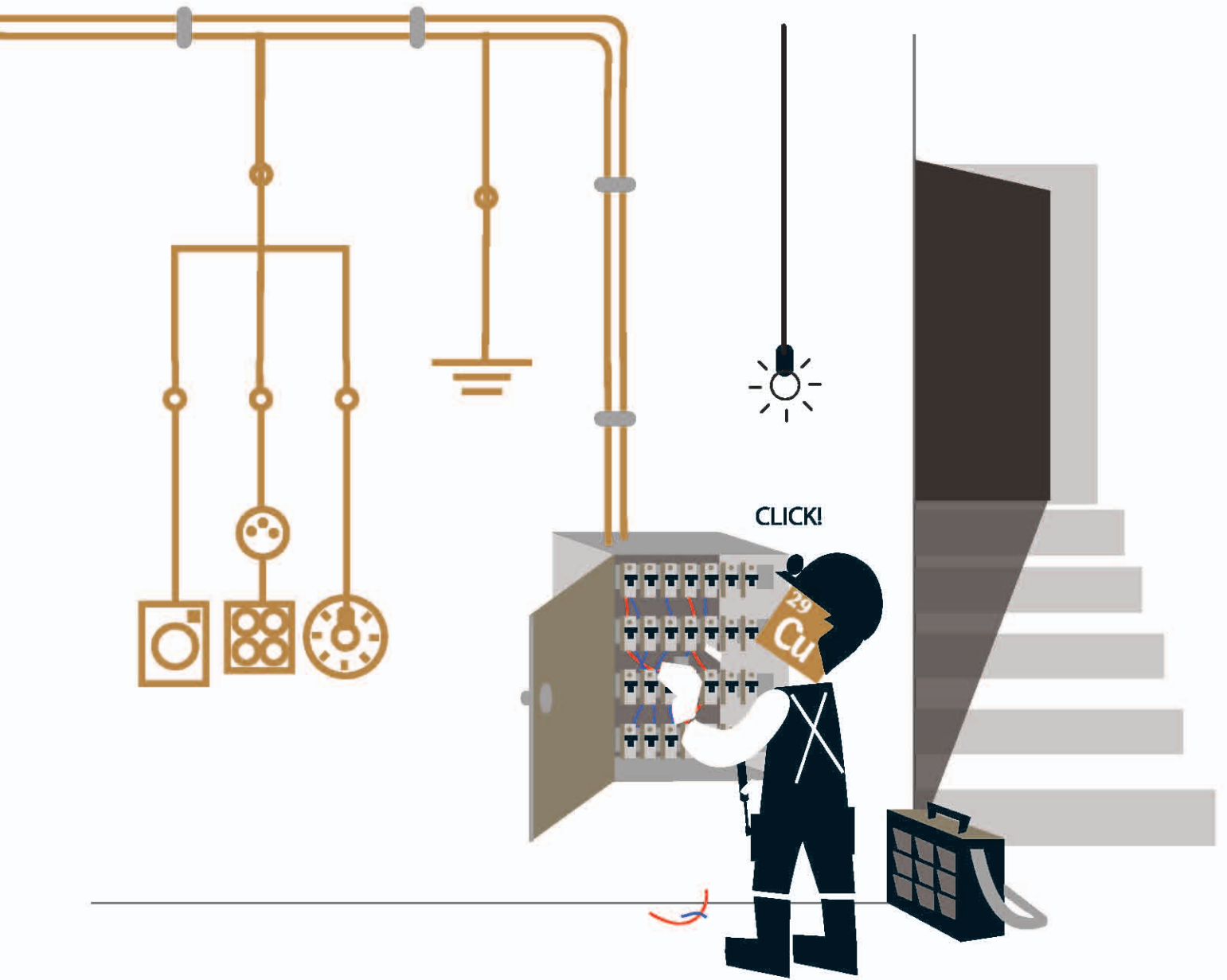
# ... an Electrician

Due to copper's outstanding conductivity, my profession almost certainly uses more copper than any other. Copper reinforces the safety of electrical installations, reduces energy losses, improves energy efficiency and helps to lower the lifetime cost of electrical components.

Wherever you find electricity, no matter how large or small its usage, you will find copper.





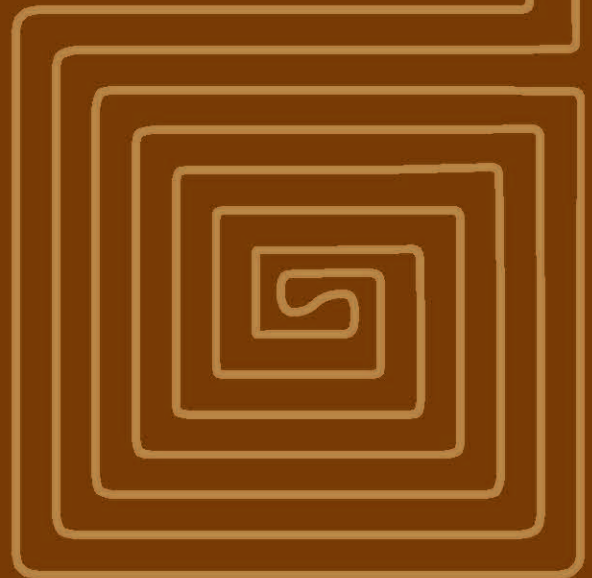


# ... an Installer

All things considered, experience tells me that nothing beats copper tubing for heating and cooling systems. It's reliable, durable and easy to join and bend.

With copper, I can use the smallest and most economic tube sizes that require little space for the installation.

Whether it's for heating on a winter's day, or cooling at the height of summer, copper's thermal conductivity provides the answer.







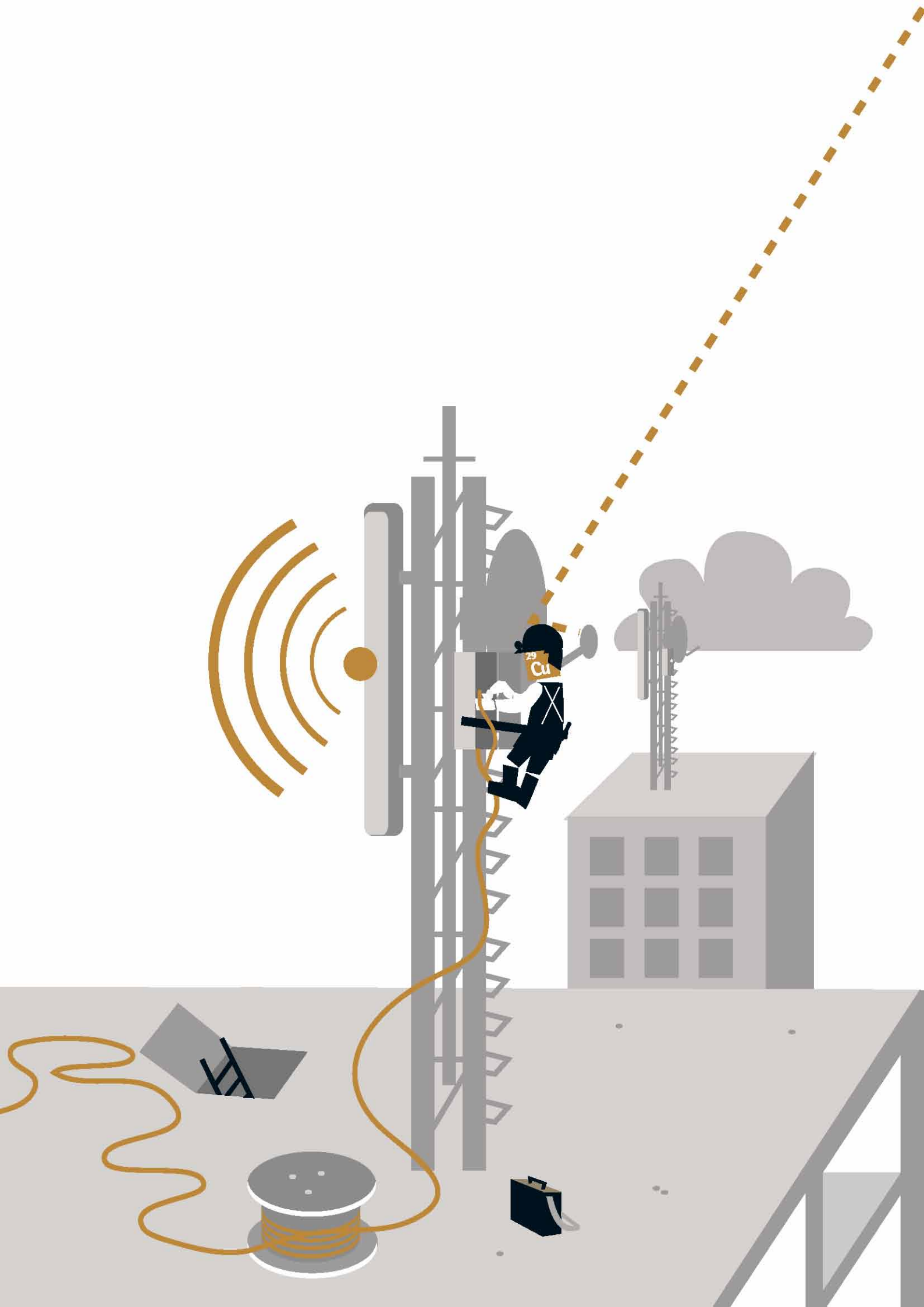
# ... a Network Developer

Today, modern society demands that data passes between people and organisations in milliseconds.

Larger-diameter submarine copper cables transfer signals between continents, while tiny copper wires transmit power and data to individual users.

Even wireless communications require copper cabling in the masts and relay stations.





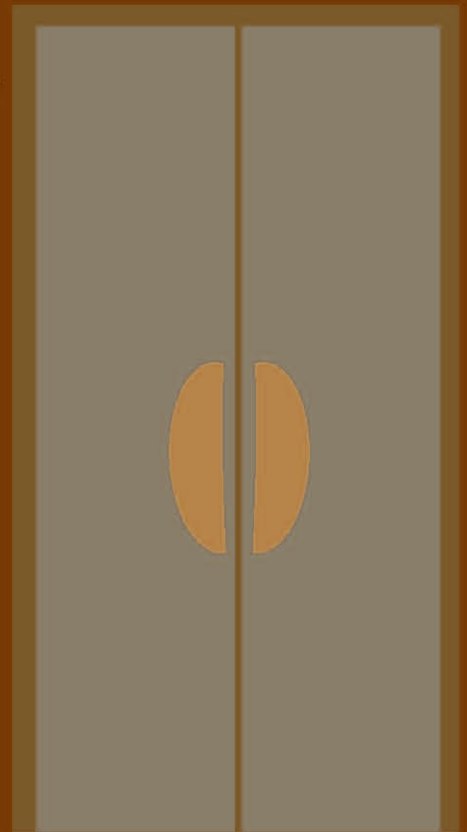


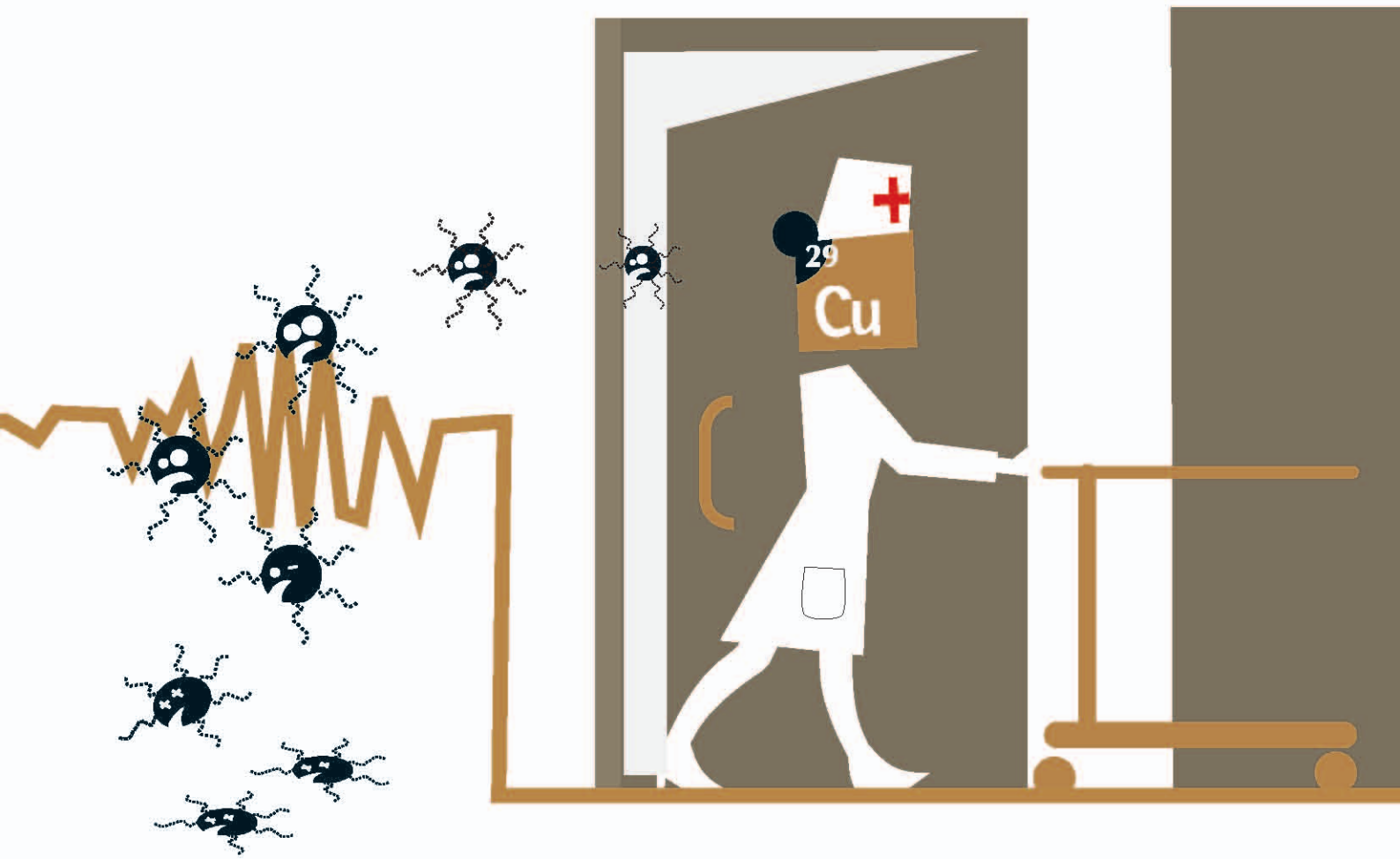
# ... a Nurse

Harmful pathogens, such as MRSA, are no match for touch surfaces that make use of copper's inherent antimicrobial properties. Copper door handles, taps and bed rails have been shown to have greater than 90% less contamination than

non-copper equivalents, helping reduce germ transfer between people in hospitals and healthcare facilities.

I count on copper as my trusted partner in helping to reduce the risk of my patients acquiring a healthcare-associated infection.





# ... a Doctor

It is not copper's aesthetic or conductivity properties that I rely on in my work, but its role as an essential trace element that keeps living organisms healthy.

We all need copper to allow our blood to carry oxygen. It also helps foetuses to develop properly, enhances bone strength and red and white blood cell maturation, helps brain development and much more.

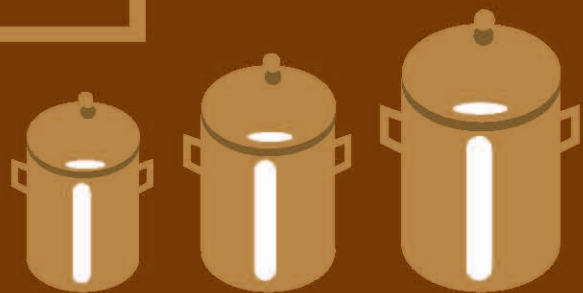
A healthy diet delivers the 1 mg of copper an adult needs each and every day.



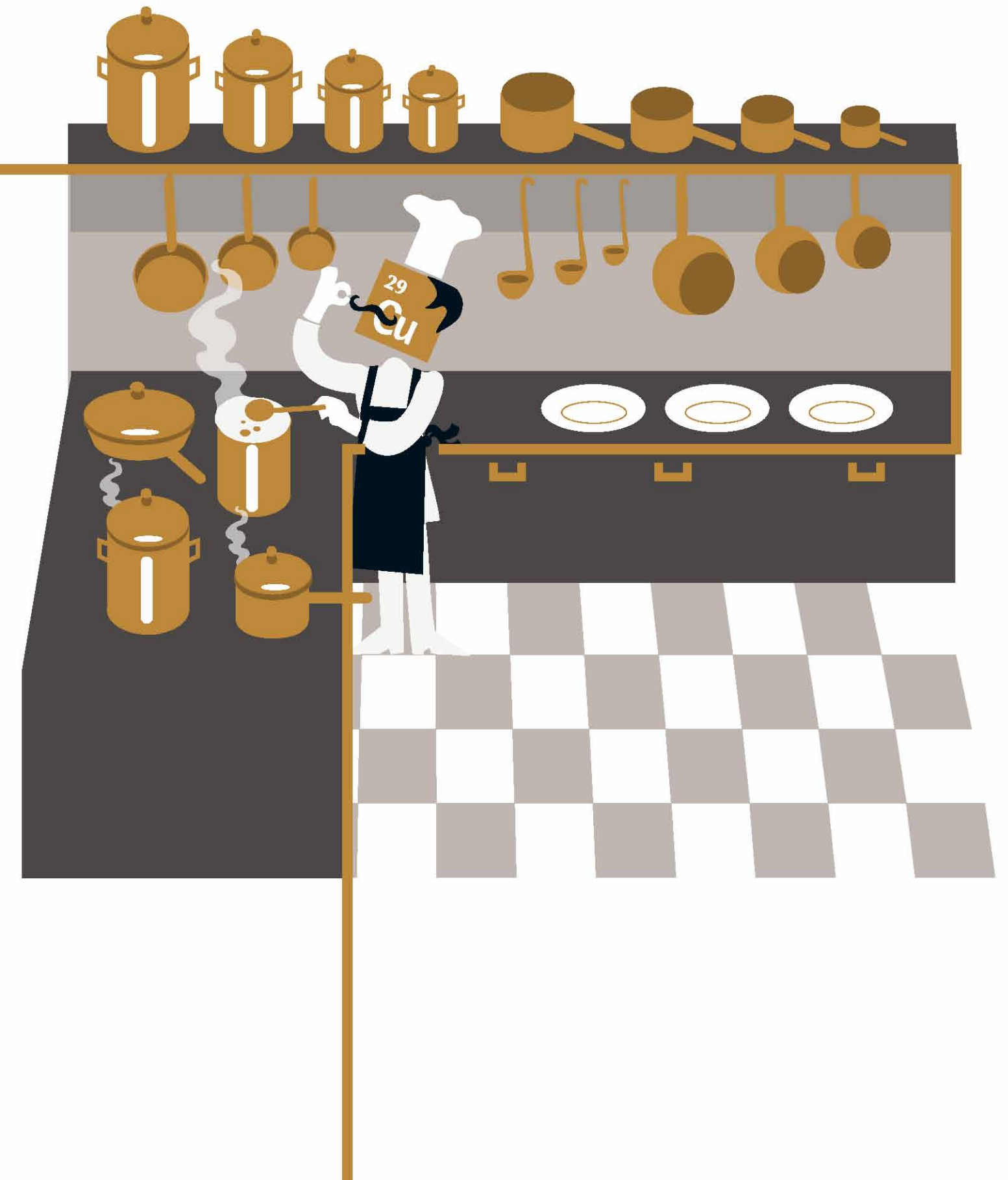
# ... a Cook

Cooks use pots but world-class chefs use copper-bottomed pans.

Copper enables uniform heating across the base of the pan, thus ensuring close temperature control of the contents (although that may not always apply to the chef's temperament).





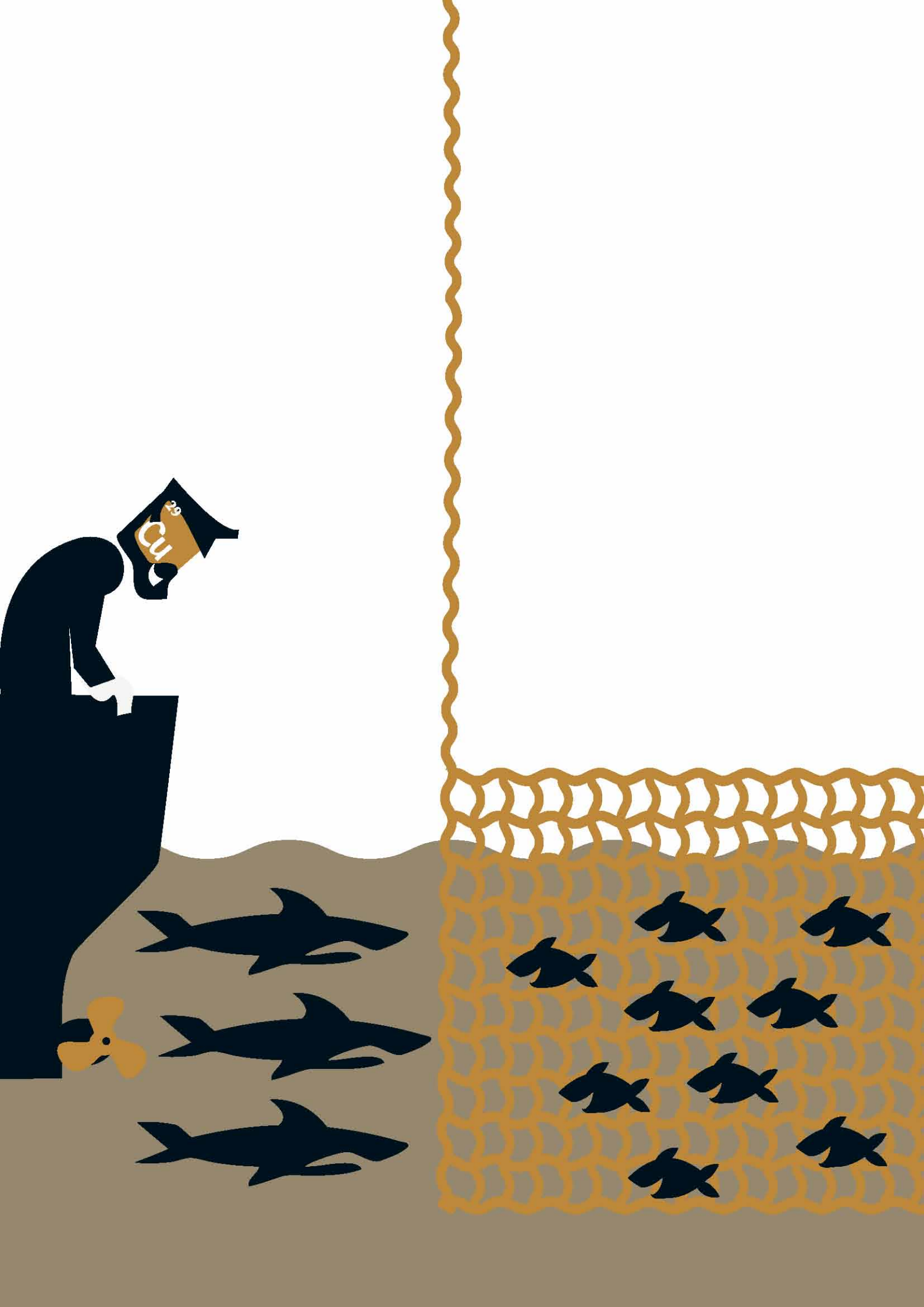


# ... a Fish Farmer

Far

from the latest cyber threat, the notorious Toredó Worm has been attacking the undersides of boats for centuries. That is until it came face-to-face with the copper-nickel alloys that are used to protect hulls, offshore oil and gas platforms and desalination units. The recent introduction of copper alloy cages keeps my fish safe and healthy, reduces the need for me to give them antibiotics and dramatically cuts my maintenance costs.





# ... a Jeweller

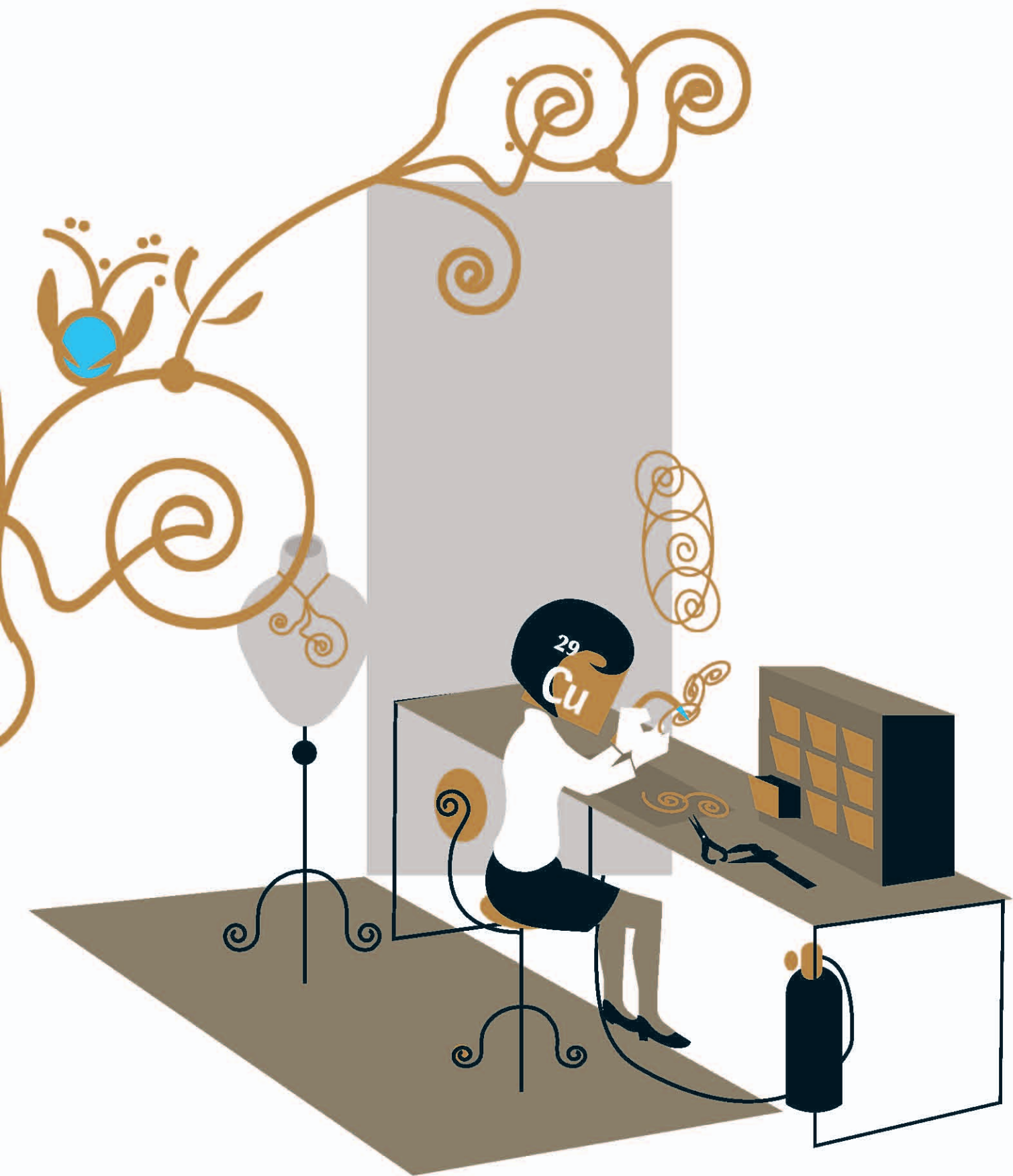
Tools to create personal decorative items, featuring intricate patterns and sophisticated shapes, have developed over thousands of years, but for me – just like my ancestors – copper is the material of choice. It is easy to work with and, along with its alloys, can be fashioned into beautifully coloured and crafted rings, pendants and bracelets.

What's the main difference between pure 24 carat gold and the 18 carat gold items my customers can purchase?

The answer is: copper!









# ... a Watchmaker

A decorative graphic consisting of a wavy line that transitions into a gear-like shape on the right side, set against a dark orange background.

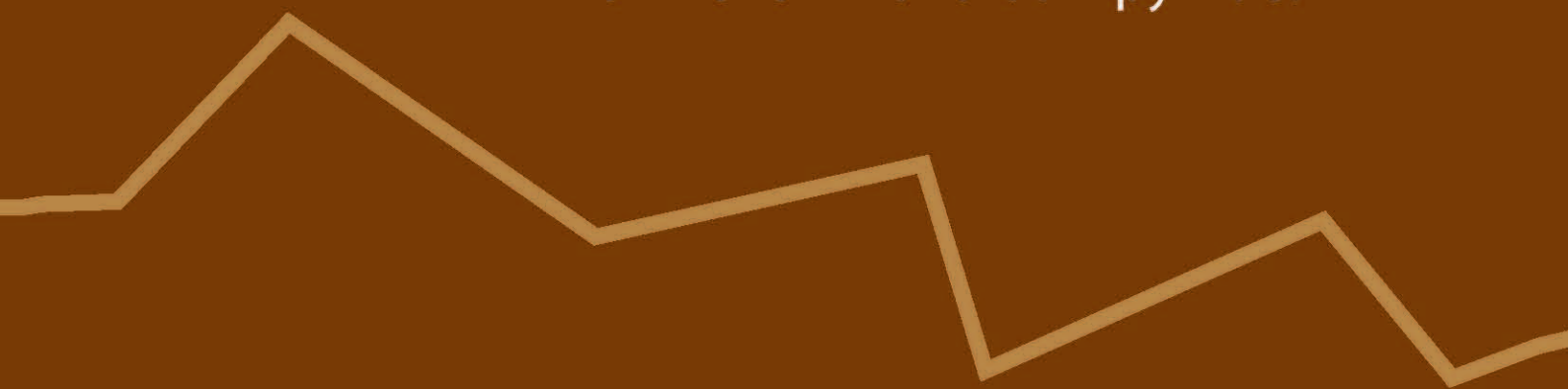
Brass and tin bronze helped John Harrison solve the problem of longitude in the 18th century and copper is still involved in telling the time around the world today. Used in timepieces – from iconic sea clocks to personal wrist watches – copper's low magnetic permeability ensures accuracy. I'm still working on how copper will guarantee people get where they need to be on time.



# ... a Trader

Copper has earned the nickname 'Doctor of Economics' in the financial trading arena.

Just as copper is essential to health it is also at the heart of the economy, with copper futures often considered to be an accurate barometer of economic growth. I know that when copper demand fluctuates, the economy is either on its way up or we're in for a bumpy ride.





# ... Instrument



# Maker

Bebop may never have come into being and Charlie Parker's infamous music may not have been so legendary had his saxophone been made out of anything but brass.

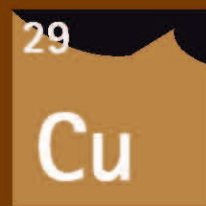
Trumpets, saxophones and other brass instruments require complex shapes and intricate curves.

The excellent malleability of copper enables musicians to produce such dazzling, virtuosic sounds.





I work with copper



Do You?

<http://youtu.be/mbyFDjX8cLI>

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