For all the brilliant women in my life. - ***F.D***

For my son Aris, my wife Andrea, my mum Rosa and my uncle Cinto. - ***N.V***

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EUREK-HER!

STORIES of INSPIRATIONAL WOMEN in STEM

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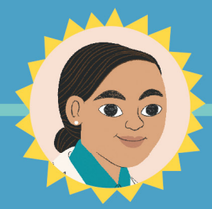
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TAPPUTI BELATEKALLIM

(MESOPOTAMIA, C. 1,200 B.C.E.)

Tapputi lived in the Middle East, in a kingdom called Assyria, more than three thousand years ago. Everything we know about her comes from a few lines of ancient writing carved into a broken stone tablet.But what we do know is pretty amazing ...



FIRST PERFUME MAKER

In the stone tablet, Tapputi is called 'muraqqītu' – a person who makes perfume. She is the earliest perfume maker to ever be named, in all of history! The tablet describes Tapputi's perfume as being 'fit for a king', and she must have been important to be named at all.

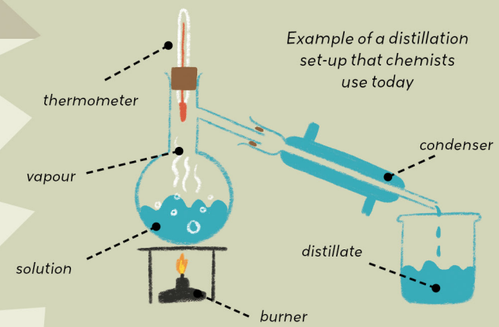
Perfumes were very important in the ancient world. Often only very rich people could afford to buy them. Tapputi would have thought of herself as a perfume maker, not a scientist. But the stone tablet describes Tapputi using a scientific process called **distillation** for the very first time recorded in history!



We know that Tapputi was a woman because her name and title 'muraqqītu' are both written in the feminine form of those words.

The stone tablet tells us that Tapputi worked with another woman, who we know only as '-ninu'. The first part of her name has chipped off.

Distillation separates out parts of a mixture by heating liquid until it turns to **vapour** and then cooling it back into liquid. In perfume making, this process captures the nice-smelling essential oils from flowers and other ingredients. People often call Tapputi the world's first known **chemist**, because chemists often use distillation.



CHEMIST

A chemist studies chemistry, the science of what things are made of and how they work together.

THE SCIENCE OF SMELLS

Tapputi's stone tablet includes her recipe for turning flowers, oils, tree resin, water and other ingredients into a perfumed lotion. First, she boiled her chosen ingredients together in a device called a **still**. She then left the mixture overnight.

In the morning, she **filtered** the mixture to remove unwanted material. Then she began the distillation process again, and kept repeating it until she had made the perfect perfume!

Today, Tapputi still inspires many perfume makers who use natural ingredients rather than artificial chemicals.

Turn to page 54 to make perfume for your home!