

And that's chapter 3!  
It was researched by supermaker  
**John Lynch**, a.k.a. **@Mittensbrother**  
on Twitter. Please support him in his work!

We plan to make the full fifty chapters on all  
the tools on our poster, one by one.  
Each with some history, nice facts and lots  
of DIY ideas for home and schools.

We'll do it all together with the  
international maker-community. (You!)  
We'll make all chapters available for free  
through our website. (CC: BY-NC-ND 4.0)

Do you like our project and want to keep track  
of it? Or do you want to join in?  
Please follow our progress and get in touch:  
**[www.lekkersamenklooien.nl](http://www.lekkersamenklooien.nl)**.  
You'll also find a free download of the 50 tools  
poster there.  
Or find me on Twitter: **@astridpoot**.

<3 love, Astrid

Available soon: **4. spirit level**



The Big Fat Book is a project by Astrid Poot.

# the Big Fat Book by Max & Ro



Humans have been gluing stones together with cement for thousands of years.

Is concrete a rock?

Don't know. It looks different.



Gobleki Tepe - 8000 BCE



Pyramids at Giza - 2500 BCE

Over time, people experimented with mixing new things into quicklime cement and improved the recipe.

But people use it to make solid things!

Concrete is LIKE a rock you mix from scratch, and mold into a shape you want.

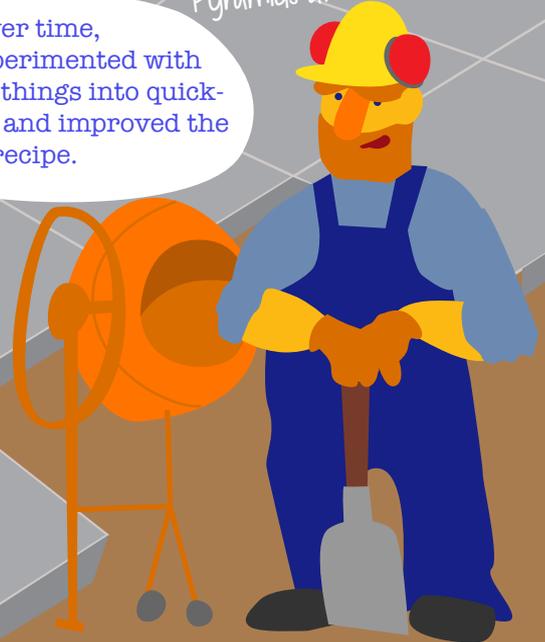
Recipe:

**Aggregate**  
(bits of rock give the concrete strenght)

**Cement and water**  
(hold the aggregate bits together)



Cement is like rock-gluе. The key ingredient is **quicklime**, a powder made by cooking calcium-rich stuff like shells, bones or limestone. When mixed with water, it makes a paste that dries hard as stone.



Ming Dynasty  
Great Wall  
1400 AD



We added sticky rice into our cement for extra strenght and earthquake protection!

The Romans, 100 BCE



We mixed ours with volcanic ash. Not only was it stronger, it could get rock-hard without drying. It even set underwater!

We built a lot!  
The Pantehon,  
acqueducts, villa's  
and baths!



Let's make our own recipe for **super strong rock stuff!**

Seashells, bones, **GROSS!!!**



No need!  
I created a process for mass production. You can buy it at the store!



Joseph Aspin, 1840