References

http://www.ima-na.org/?page=what_is_bentonite

http://www.ima-na.org/?page=what_is_diatomite

https://www.worldcoal.org/coal/what-coal

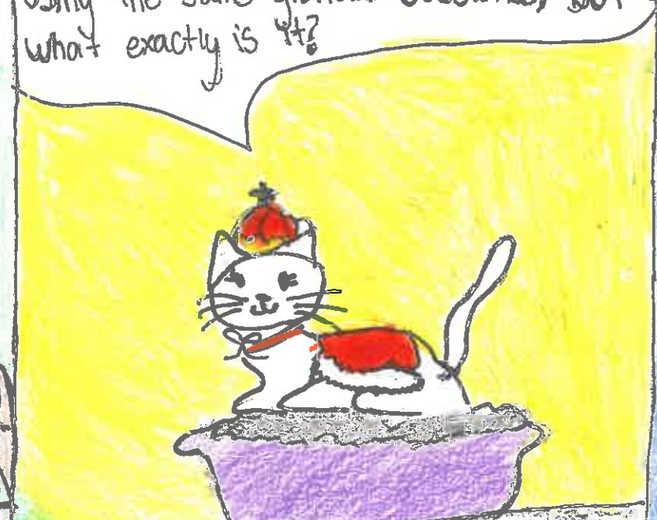
http://www.eytonsearth.org/bentonite-montmorillonite.php

Where Challenge

Kitty Litter

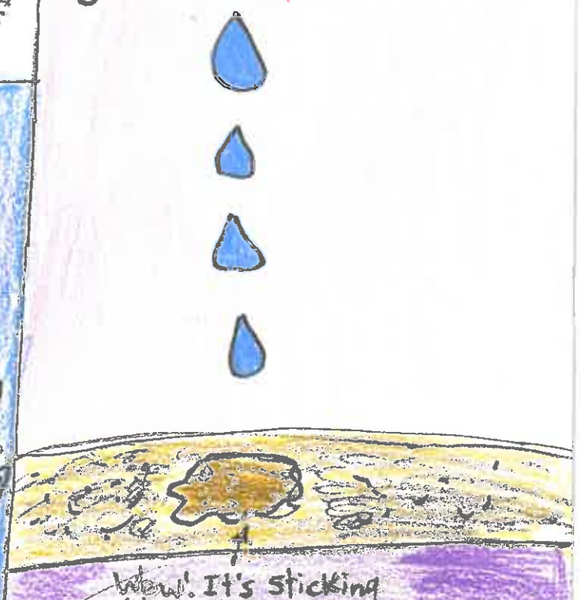
A story of understanding between two cats and their relationships with Kitty litter!

Three years ago today I opened my eyes as a princess! Now, I am a queen! Many things have changed throughout the years! but one thing hasn't. Kitty litter. From kitten to cat I have been using the same granular substance, but what exactly is it?



Bentonite clay is one of kitty litter's main ingredients. It is mined from the earth and can be found in Southern Saskachewan Bentonite Clay contains a clay mineral called Montmorillonite. Which is made up of coordinated aluminum, magnesium, and iron.

Bentonite clay acts almost like a magnet when water is added. Making it the perfect ingredient in kitty litter.

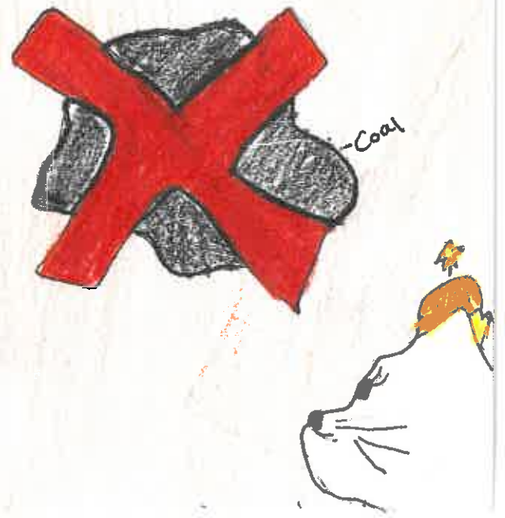


Diatomite is a fine-grained sedimentary rock that is found in British Columbia. It works as a great base in Kitty-litter because of its lightweight structure.

Diatomite is also known as diatomaceous earth, and it leaves your hands dusty after handling it.

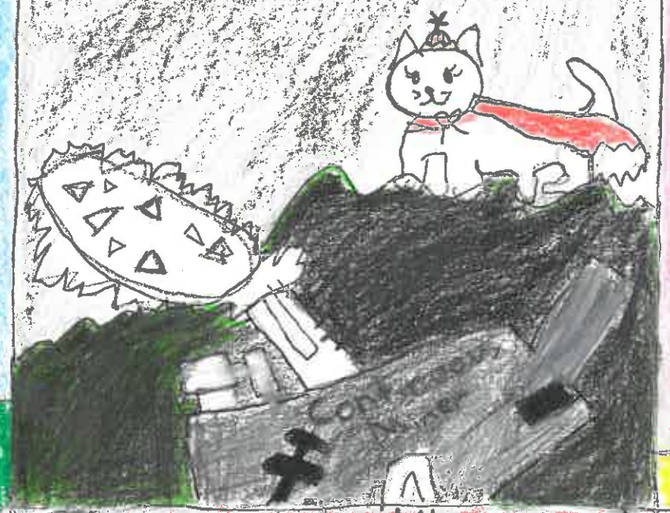
Charcoal and Coal are also used in Kitty litter for scent purposes. Charcoal is a flyash waste product. Coal is mined from places such as Alberta and Saskachewan.

Coal is non-renewable!



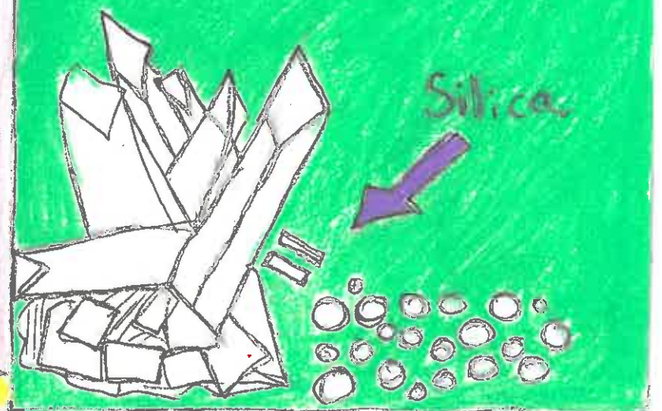
Extra ingredients that are added into kitty litter for moisture control and scent include Baking Soda, which is mined in Wyoming, and Silica, which is mined in Quebec and Ontario.

Baking Soda is found in Wyoming. Which is mined underground using heavy equipment like the Continuos miner!



A Continuous miner is a mining machiene. It is used to mine things like coal and baking soda.

Silica is used to absorb Moisture and keep things dry.



So now we know that Bentonite-Clay + Diatomite + Charcoal and Coal + Baking Soda + Silica = Modern Day Kitty litter.

Technically Kitty litter is not Sustainable since Canadians throw out over two million tons of it each year!

But on the bright side, Clay based litter is able to break down trash Mountains!

What about back in the day when using dirt and sand as litter was the norm? How did that work? Is dirt and sand sustainable?

Dirt and Sand

Hi

I'm a cat from the past here to talk about Dirt and Sand. A.K.A my Kitty Litter!

Before Edward Lowe invented modern day Kitty-litter, all us 'indoor cats' used Dirt and Sand!

Kitty Litter

?

Dirt is a mixture of organic matter, gases, liquids, and many types of minerals.

Minerals

Liquids

Organic matter

In most dirt, bedrock serves as the parent rock. The parent rock is the source of rock and mineral fragments in the dirt.

Bedrock contains igneous, sedimentary, or metamorphic rock.

Back then, if you were to fancy to use dirt as litter, Sand would be your next best option. Sand is a naturally occurring granular material that is composed of tiny pieces of rocks and minerals.

Maybe the next time you go to one of Canadas many popular beaches, you can pretend all that sand is just a giant litterbox.

The end