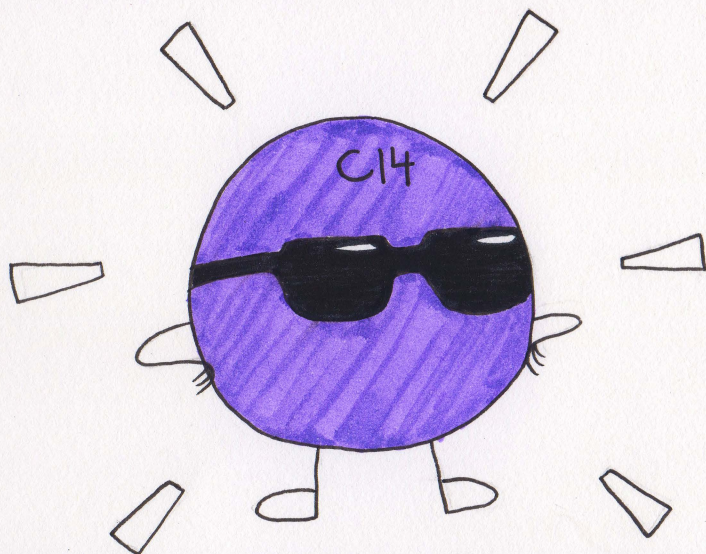


RADIO ~~IO~~ CARBON



and dating how long ago
something died

A ZINE by E. REHN

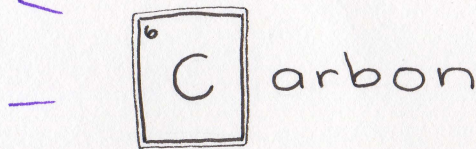
every living
thing is a
little bit



RADIOACTIVE

(that's natural, you'll be okay)

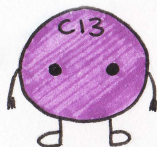
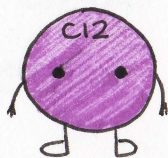
One type of radioactivity in you
comes from



This carbon acts as a

CL  CK once you die

CARBON ISOTOPES



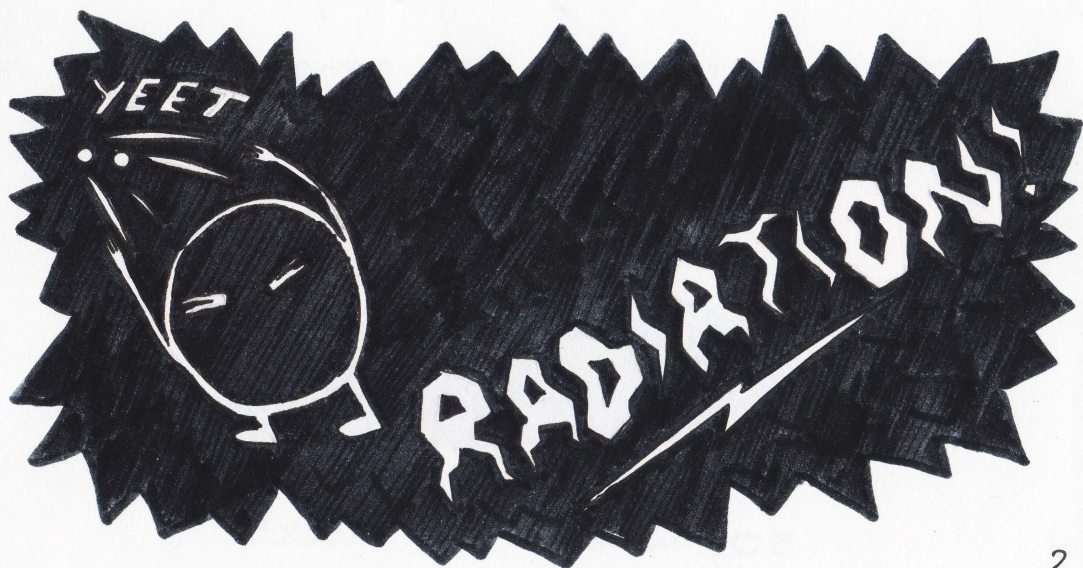
Two types of carbon (C^{12} & C^{13})
are STABLE, content.

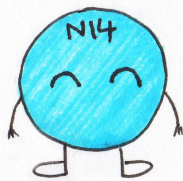
Carbon-14 is not.

I can't
stay
this
way!



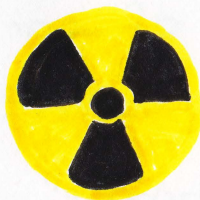
It doesn't want to
be carbon. Eventually,
each one becomes
something else





Much better!
Hello there,
nitrogen-14!

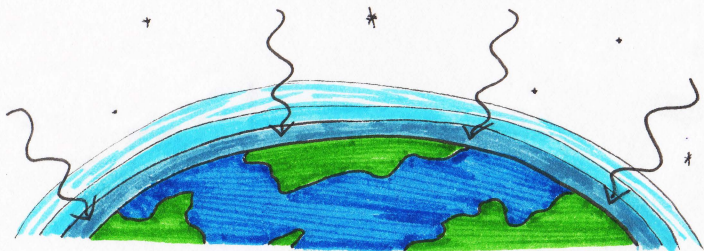
This radioactive
change is why
C14 is called
RADIOCARBON



and it comes from

SPACE!

well, really from **COSMIC RAYS**
knocking around in the atmosphere



3.

so, where's the clock?

LIVING THINGS (like you) take
in carbon all of their lives...

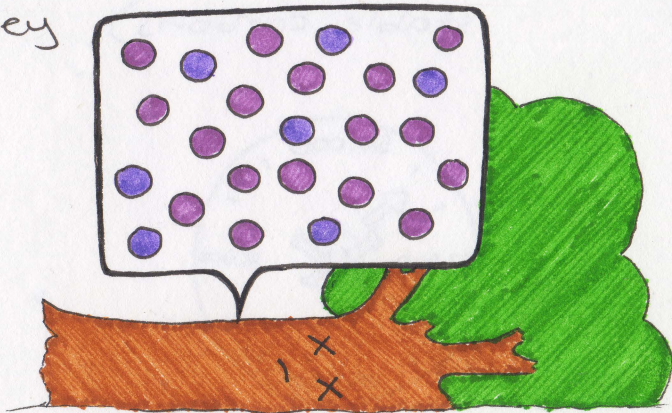


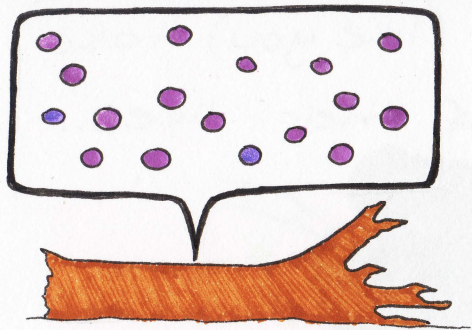
until they die.



After death, they
STOP taking in
new carbon.

The stable
carbons stick
around





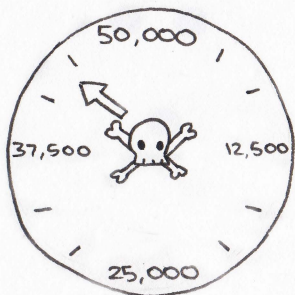
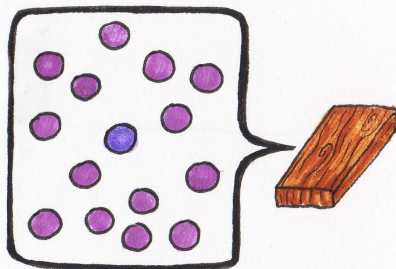
but over time
the radiocarbon
gets fed up
and leaves (by
becoming $N14$)

it takes **5,730 years**

for half of the $C14$
to change to $N14$

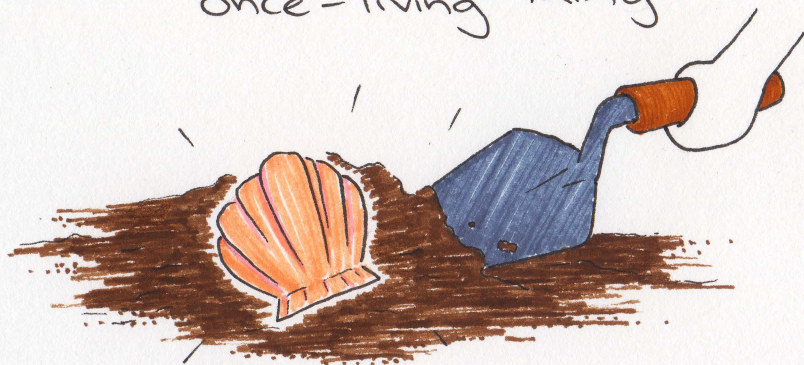
THIS IS $C14$'s HALF-LIFE

If you measure how
much $C14$ is left in
a dead thing (compared
to stable carbons)



you find out
how long ago
it died!

So when archaeologists find a once-living thing...



...radiocarbon
can tell us
how long ago
it died.

20,000 years
ago, that one.



Thanks,
radiocarbon!



THIS ZINE

was created as part of the

JCU Nguma-bada Zine Club

2022