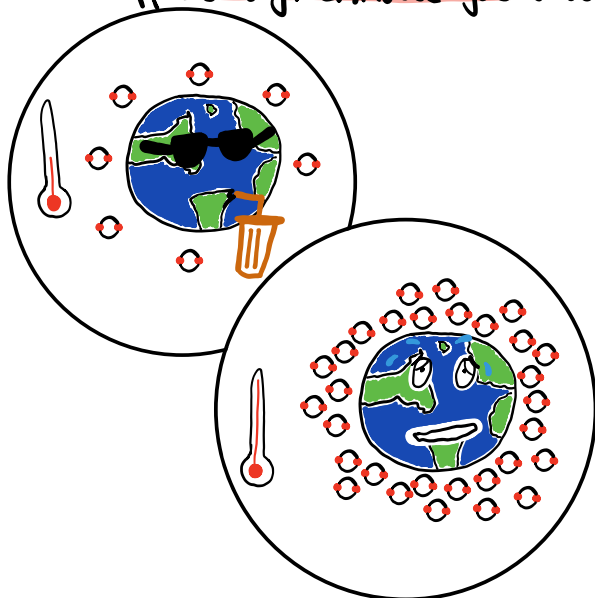


Greenhouse gases
warm up the Earth
so we can live there.
They are the best!
Right?

WRONG!

Have you ever heard that
too much of a good thing
is a bad thing?

This applies to greenhouse gases too!



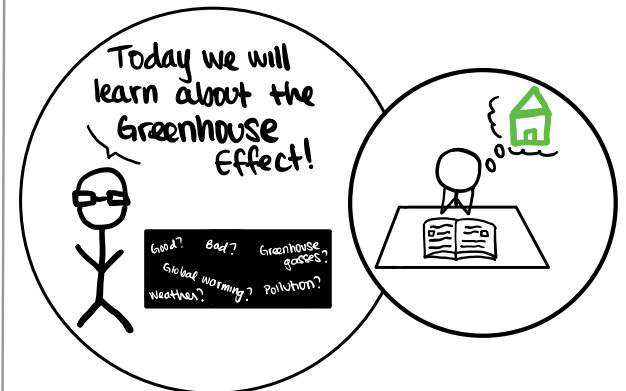
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Greenhouse gases are
good in moderation
because they keep the
Earth warm, but
too many greenhouse
gases means that
too much heat is
trapped in the
atmosphere and
temperatures rise.

This is a major cause
of global warming.

What have you learned about the
greenhouse effect and what questions
are still on your mind?

The Greenhouse Effect



WHAT do you think
heats up the Earth?
Go ahead. Name anything
that comes to mind!

I am willing to guess that
you thought of the **sun**.

It will probably
come as a surprise
to you when I
tell you that
this is only
somewhat true...



6

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Yes, the sun is incredibly important in **heating up** the Earth... but equally important are the **greenhouse gases** that trap energy from the sun!

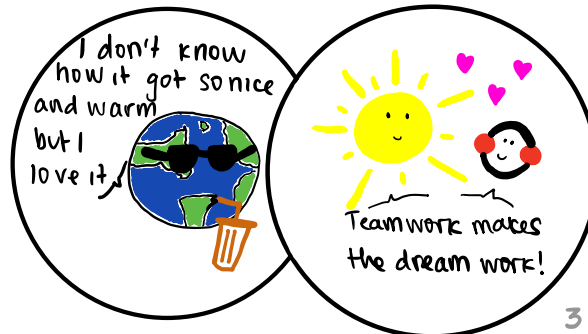
The sun emits UV radiation, which the Earth absorbs and releases as thermal energy.

The greenhouse gases absorb some of this thermal energy and keep it close to Earth so it stays warm and happy!


WHAT are greenhouse gases?

Like you saw before, they are gasses that **absorb** and **emit** thermal energy so the Earth stays warm.

Without these **gases** to trap heat in the **atmosphere**, Earth would only be warmed by the **sun**, which would be ineffective.



Greenhouse gases include :

- carbon dioxide 
- methane (found in cows' farts)
- water vapor
- nitrous oxide
- many more!

