

The Tiny Plant that Saved Our Planet

The incredible true story of
Tiny Mighty Al



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Illustrated by Lynne Avril

Dedication

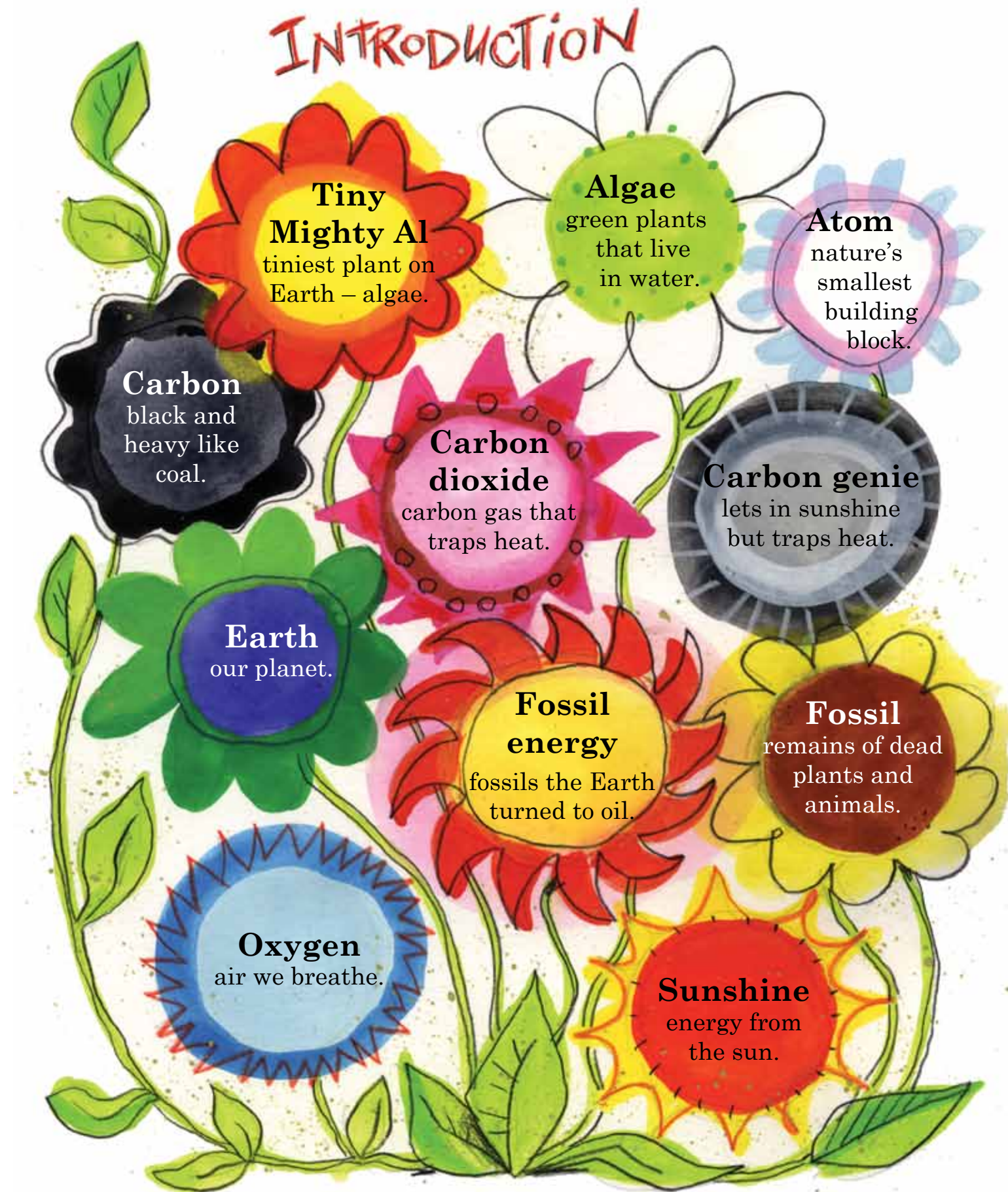
To you _____
whom we trust will help save our Earth.



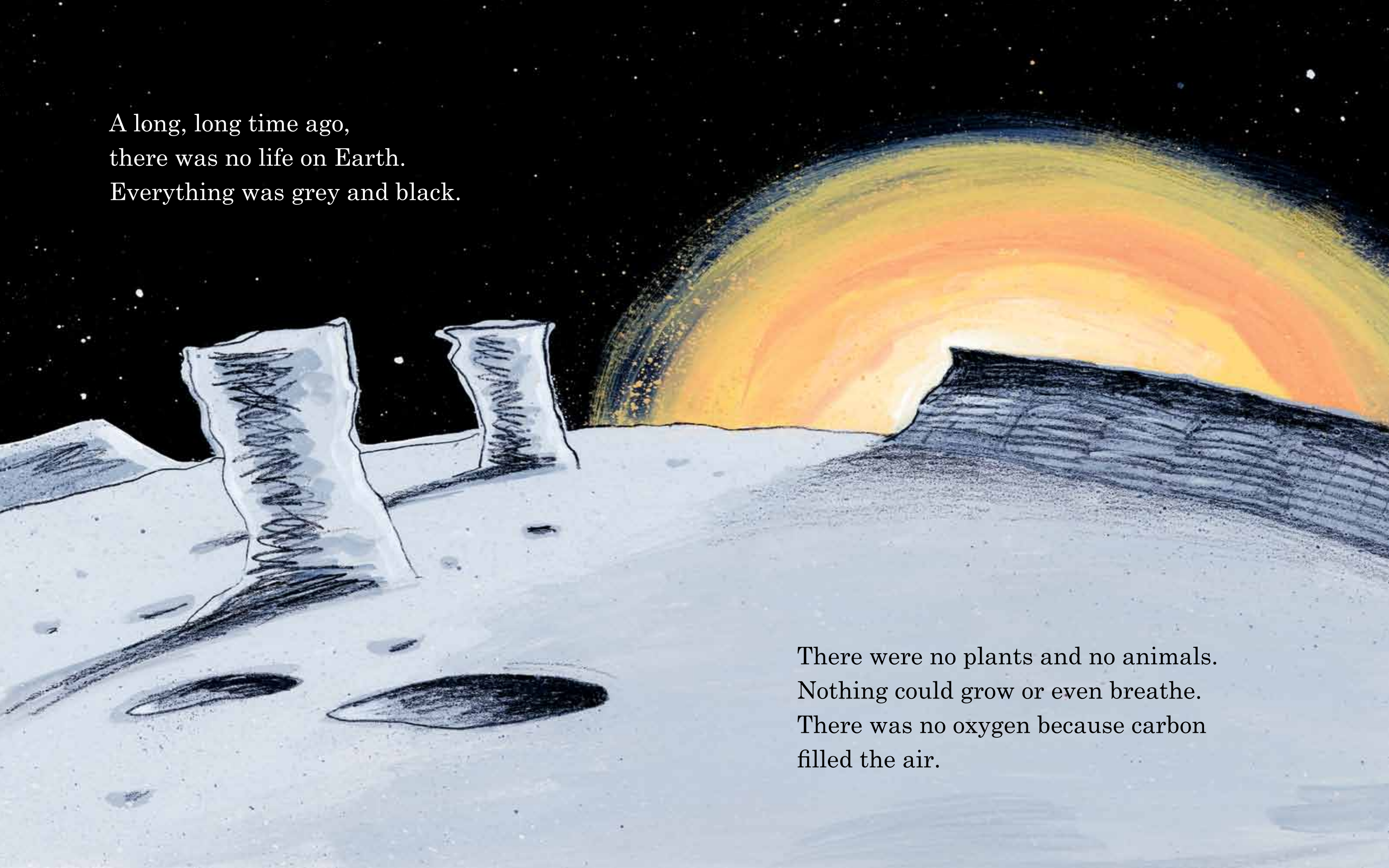
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A long, long time ago,
there was no life on Earth.
Everything was grey and black.



There were no plants and no animals.
Nothing could grow or even breathe.
There was no oxygen because carbon
filled the air.



A carbon genie
made of CO_2 surrounded the Earth,
and let sunshine in but trapped the heat.

The carbon genie acted like a heat blanket
that made the Earth too hot for plants or
animals.

What could save the Earth?
What eats carbon?



In a small mud puddle,
the first green plant grew –

TINY MIGHTY AL

He was an algae.



Al didn't look like a plant.
He was really, really, small – only one cell.
Even if you looked very hard,
he was still too small to see.

Al might have been tiny but WOW,
was he **mighty**!



Every time he ate some black carbon,
he let out a little burp!

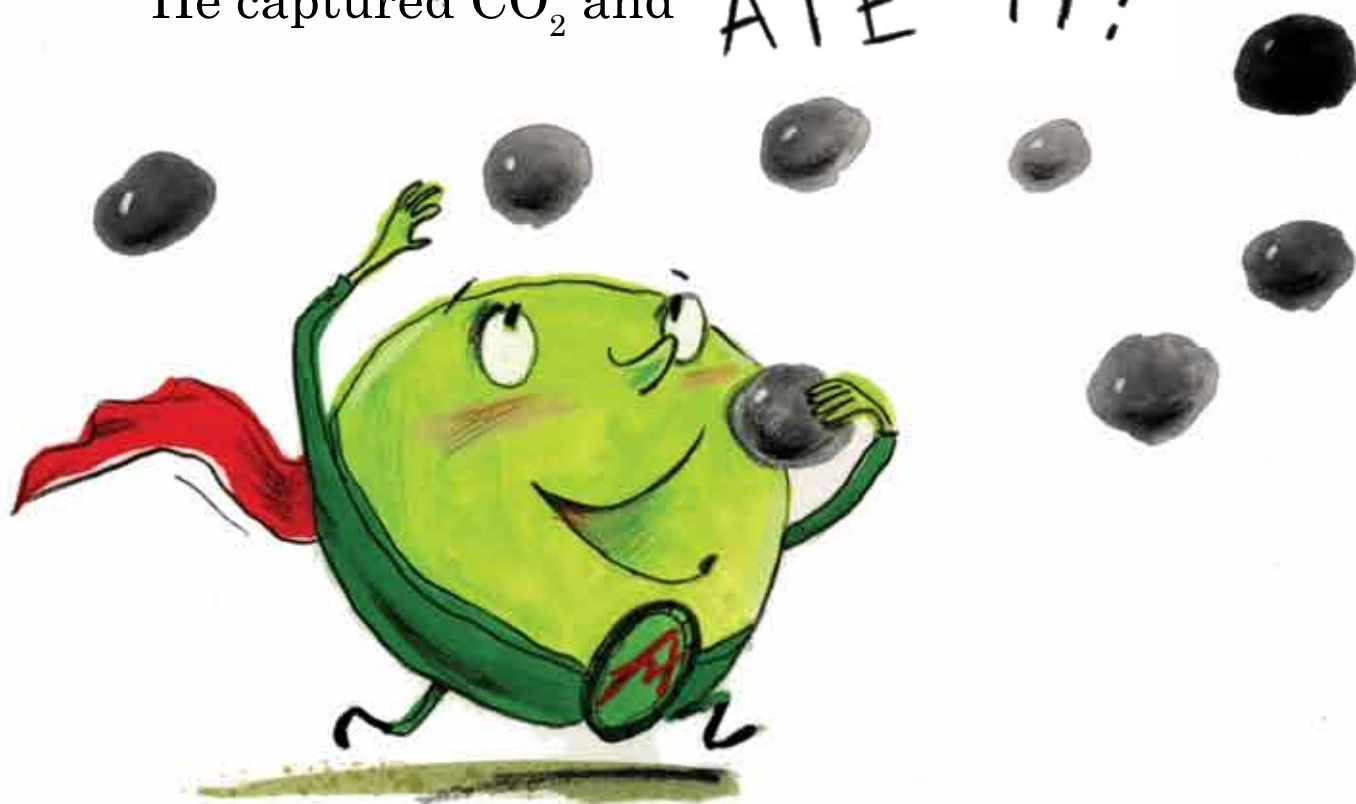
And OOOH... out popped
two oxygen atoms into the air.

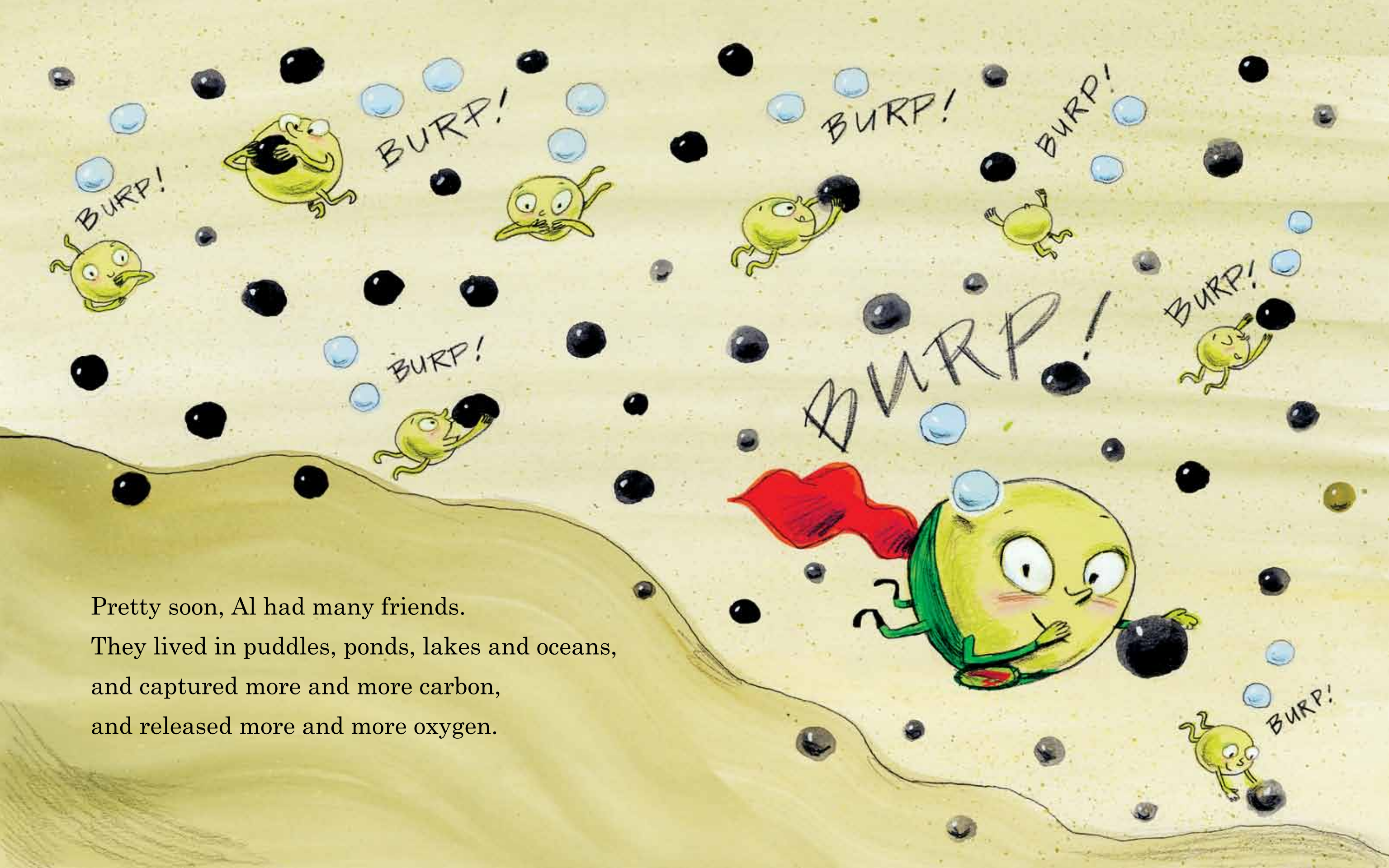
Al got his energy from the sun.

And what did he do with all his energy?

He played his favorite game,

He captured CO₂ and **ATE IT!**



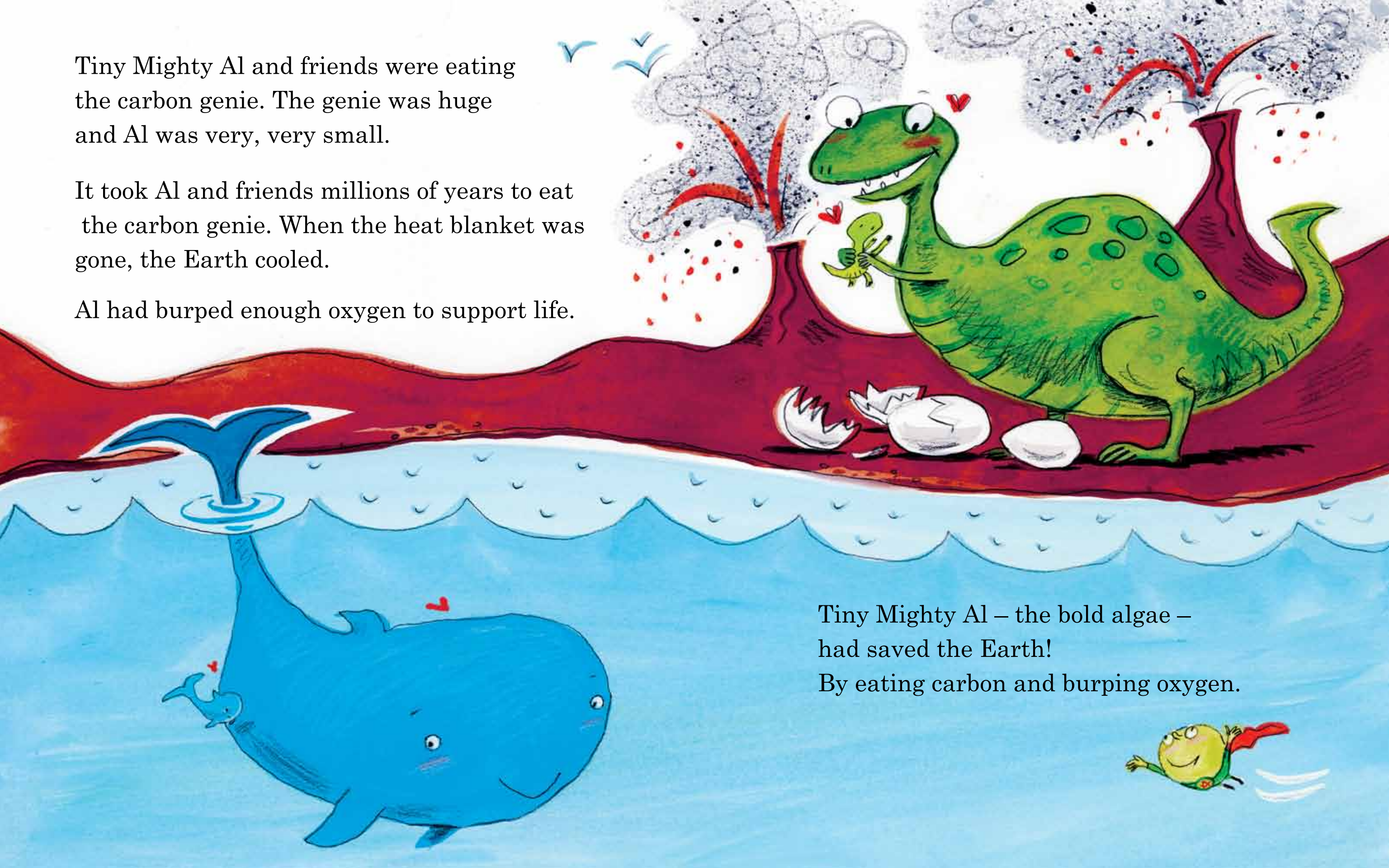


Pretty soon, Al had many friends.
They lived in puddles, ponds, lakes and oceans,
and captured more and more carbon,
and released more and more oxygen.

Tiny Mighty Al and friends were eating the carbon genie. The genie was huge and Al was very, very small.

It took Al and friends millions of years to eat the carbon genie. When the heat blanket was gone, the Earth cooled.

Al had burped enough oxygen to support life.



Tiny Mighty Al – the bold algae –
had saved the Earth!
By eating carbon and burping oxygen.

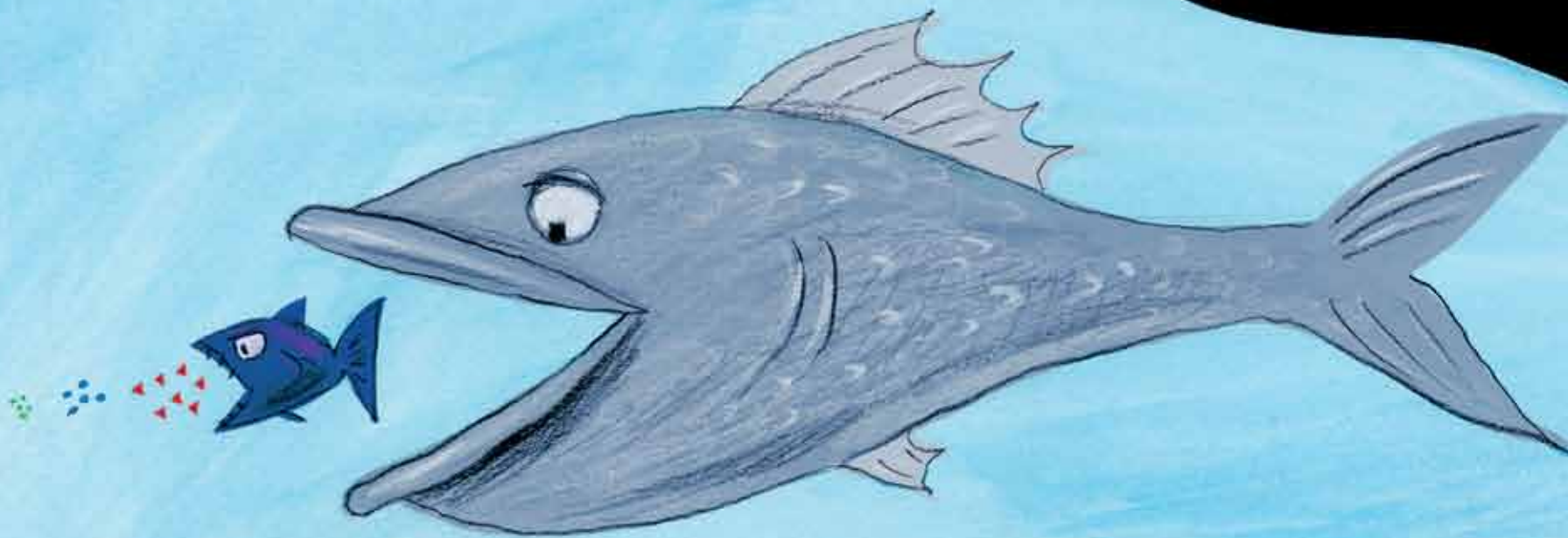
Tiny Mighty Al had made life possible
but he was not done helping us.
Now the Earth was cool and had oxygen.

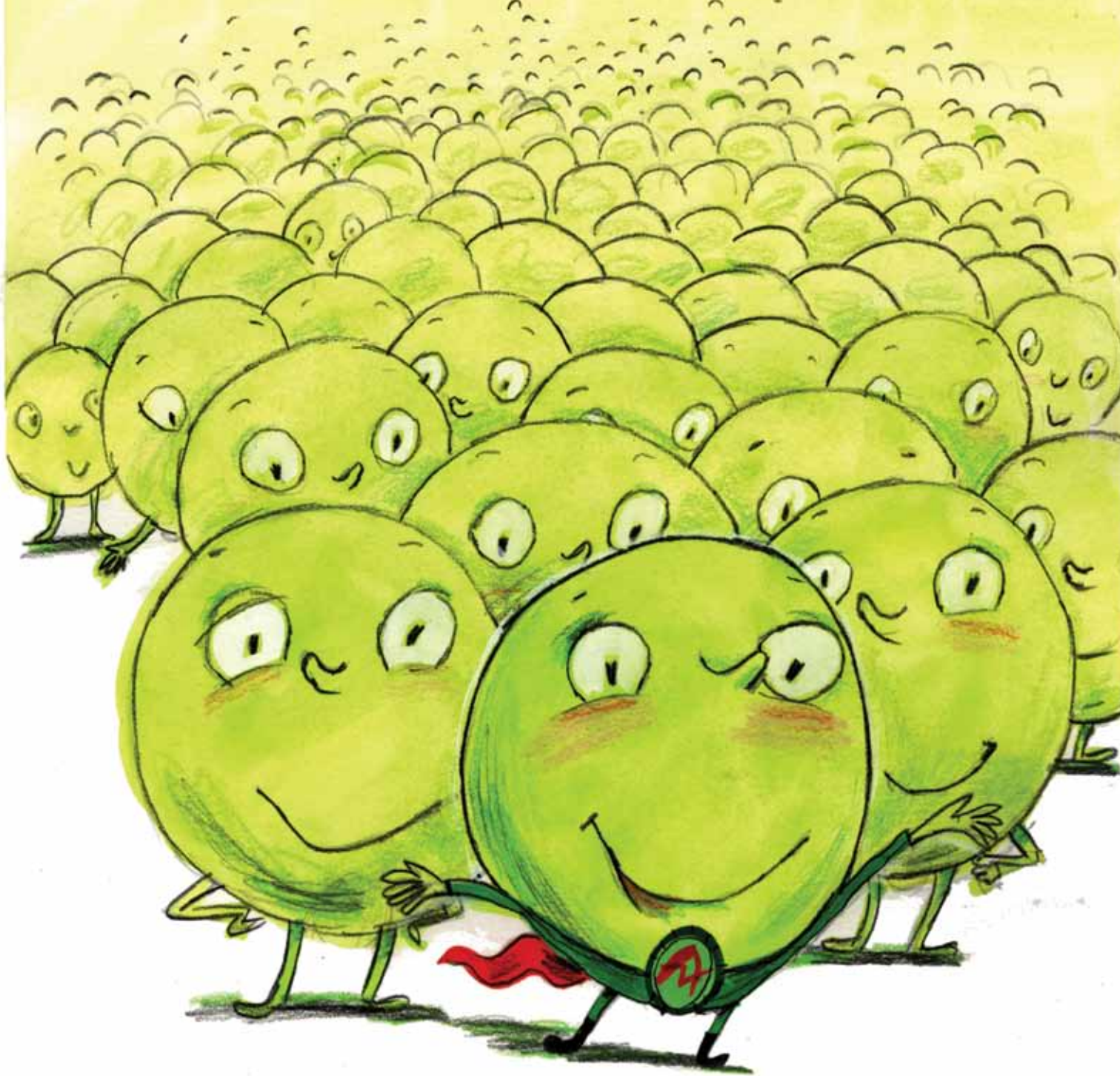
But there was no food!
All creatures needed food to eat.

So Tiny Mighty Al
became the first food on Earth.
Al became the bottom of the food chain.

Everything lunched on Al,
from the smallest fish to the
largest blue whale.

If it weren't for Al,
what would all our creatures eat?



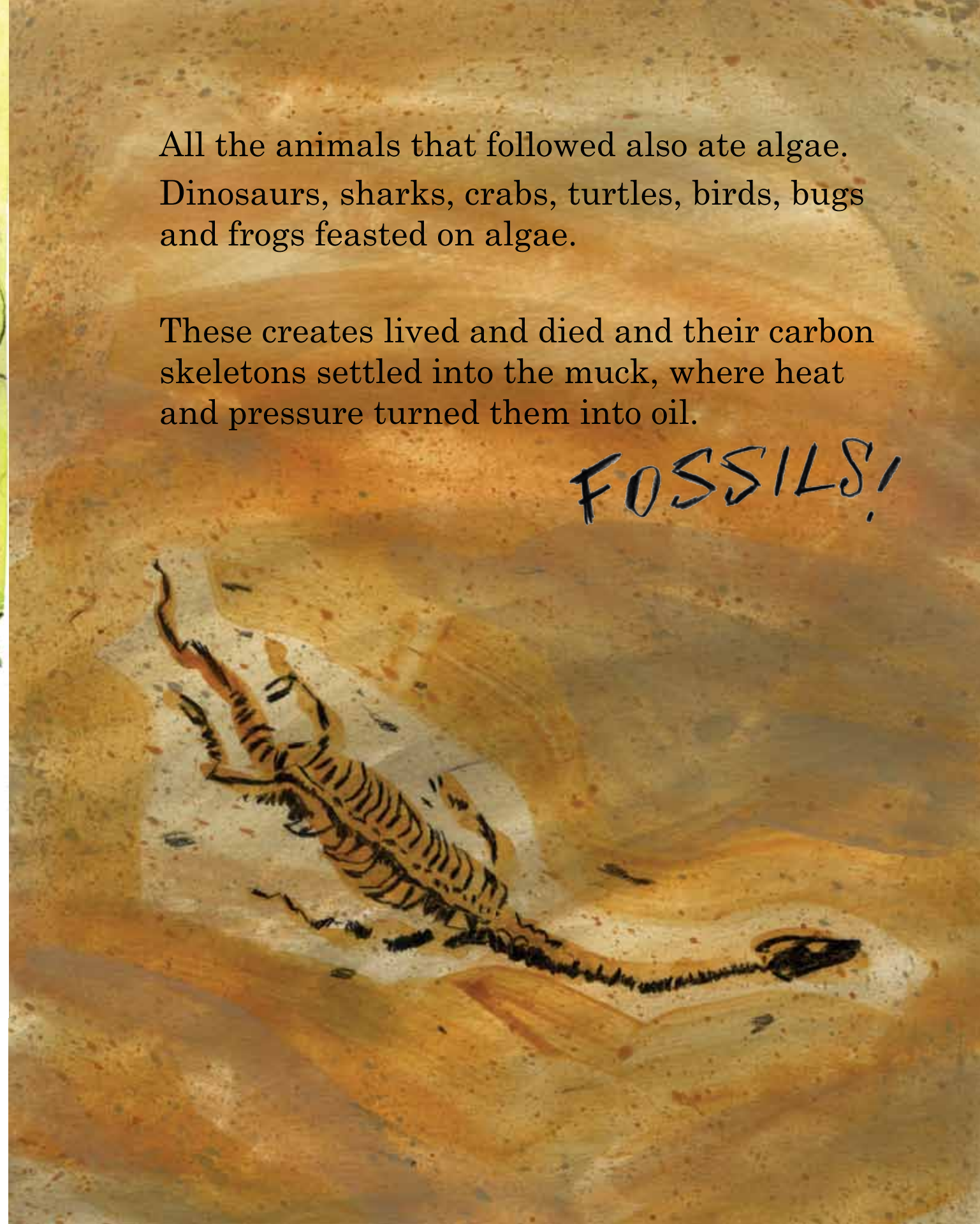


Al developed an amazing ability. He learned to grow faster than animals could eat him. Algae became the fastest growing plant on Earth.

All the animals that followed also ate algae. Dinosaurs, sharks, crabs, turtles, birds, bugs and frogs feasted on algae.

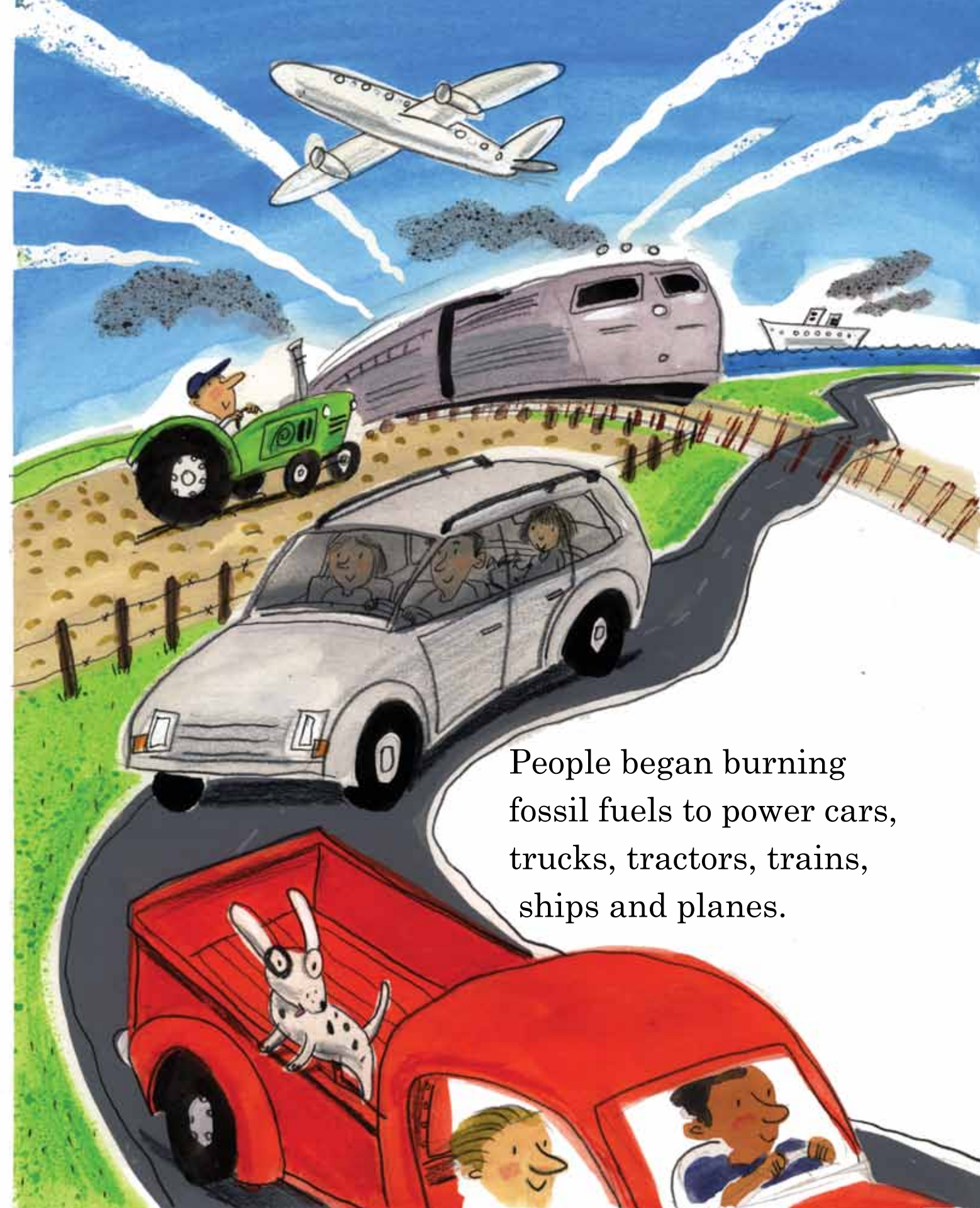
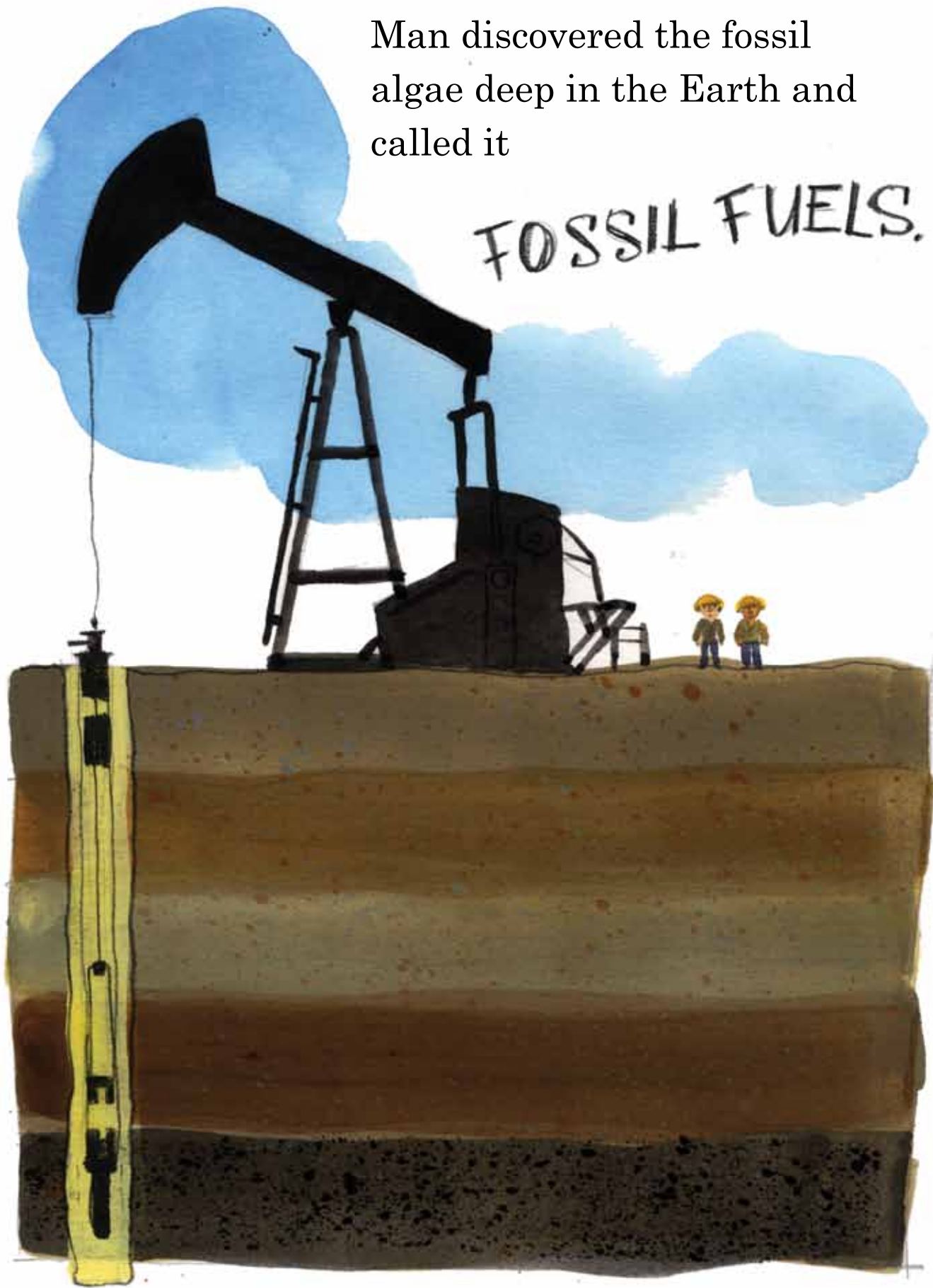
These creatures lived and died and their carbon skeletons settled into the muck, where heat and pressure turned them into oil.

FOSSILS!




Man discovered the fossil
algae deep in the Earth and
called it

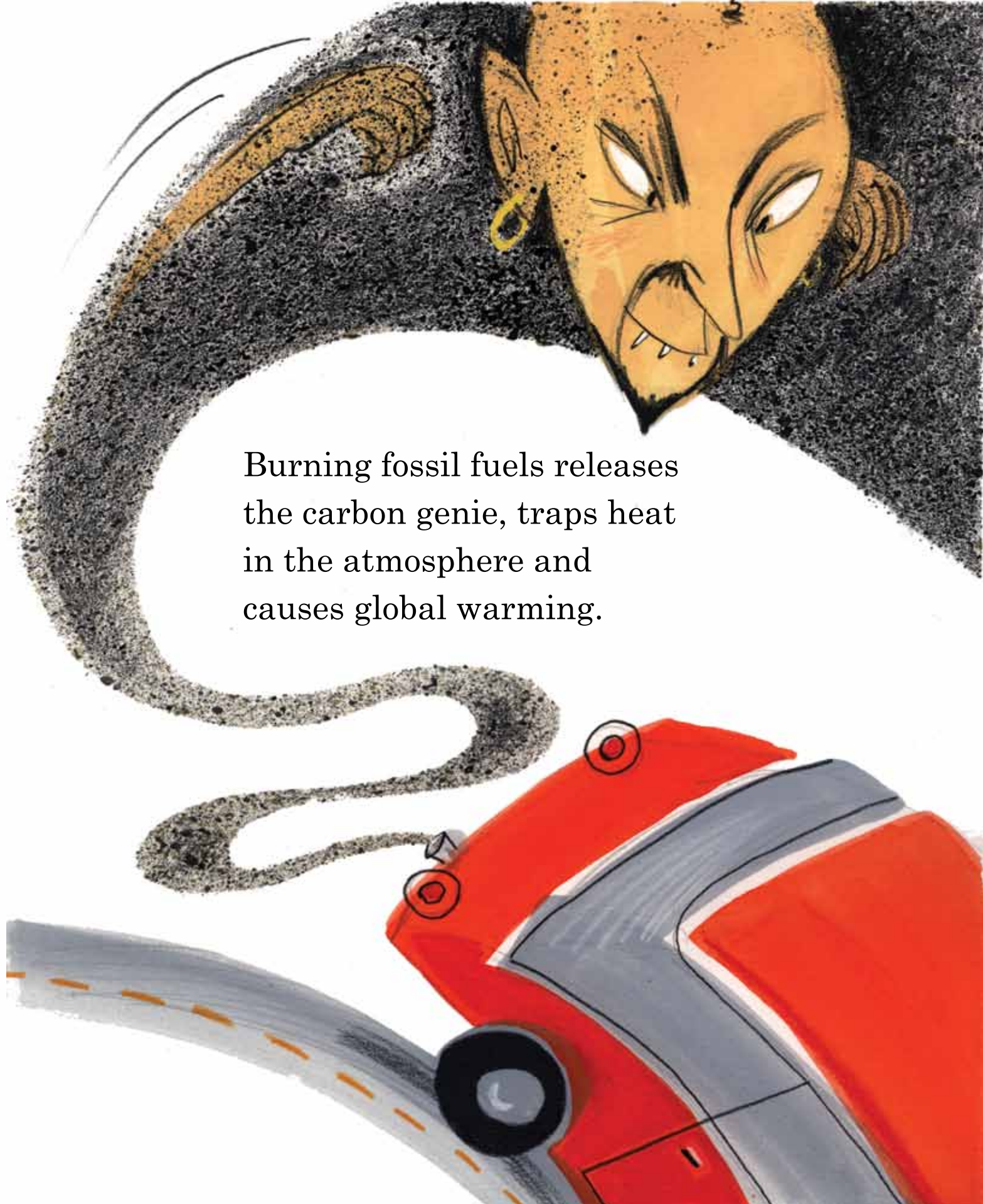
FOSSIL FUELS.



People began burning
fossil fuels to power cars,
trucks, tractors, trains,
ships and planes.



Burning fossil fuels pollutes
our air with carbon and
makes it hard to breathe
because there is too much
carbon in our air.



Burning fossil fuels releases
the carbon genie, traps heat
in the atmosphere and
causes global warming.

The Earth is getting hotter again because we are burning fossil fuels.

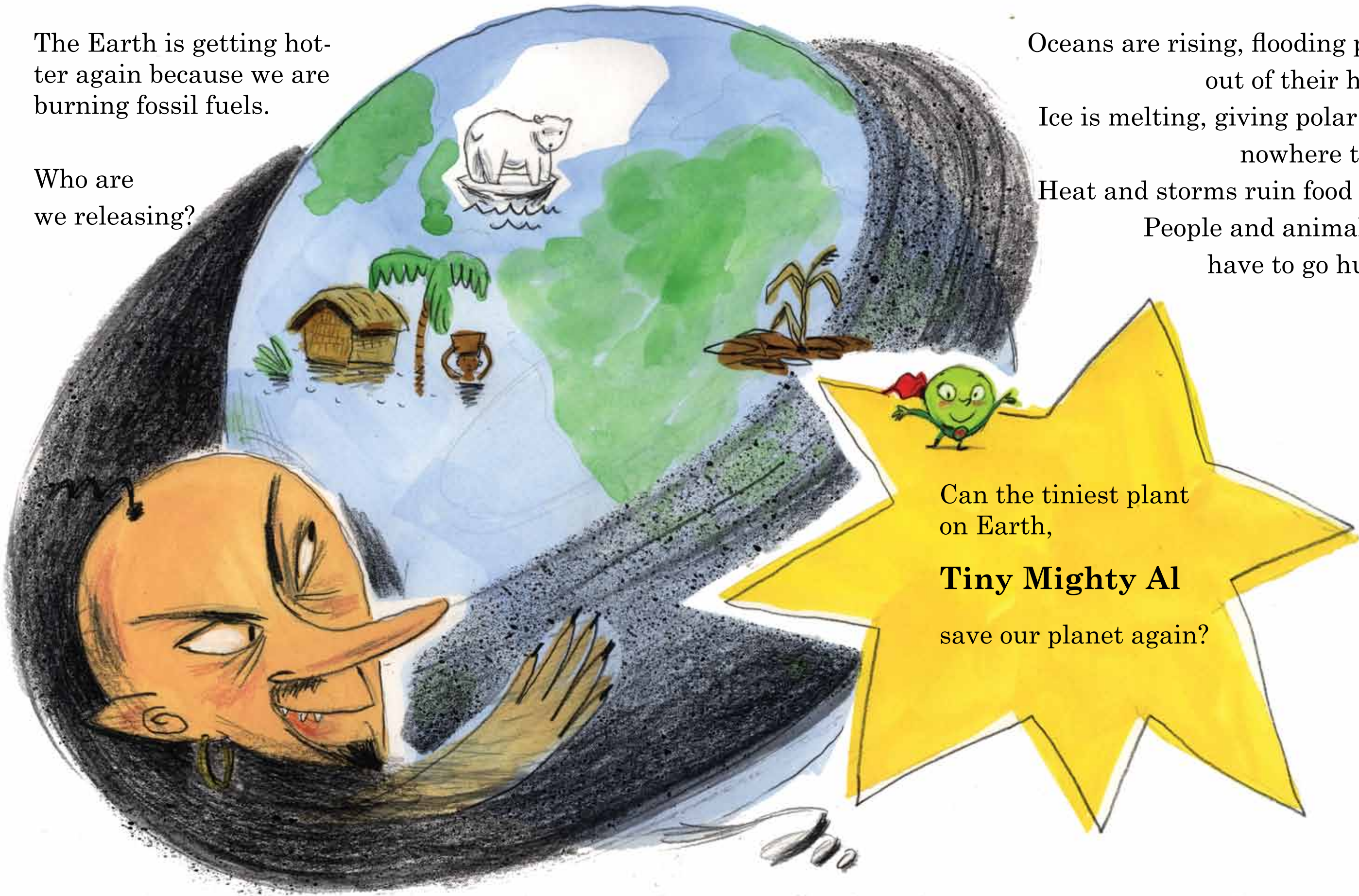
Who are we releasing?

Oceans are rising, flooding people out of their homes.

Ice is melting, giving polar bears nowhere to live.

Heat and storms ruin food crops.

People and animals will have to go hungry.



Can the tiniest plant
on Earth,

Tiny Mighty Al

save our planet again?

TOGETHER, we can save the EARTH!

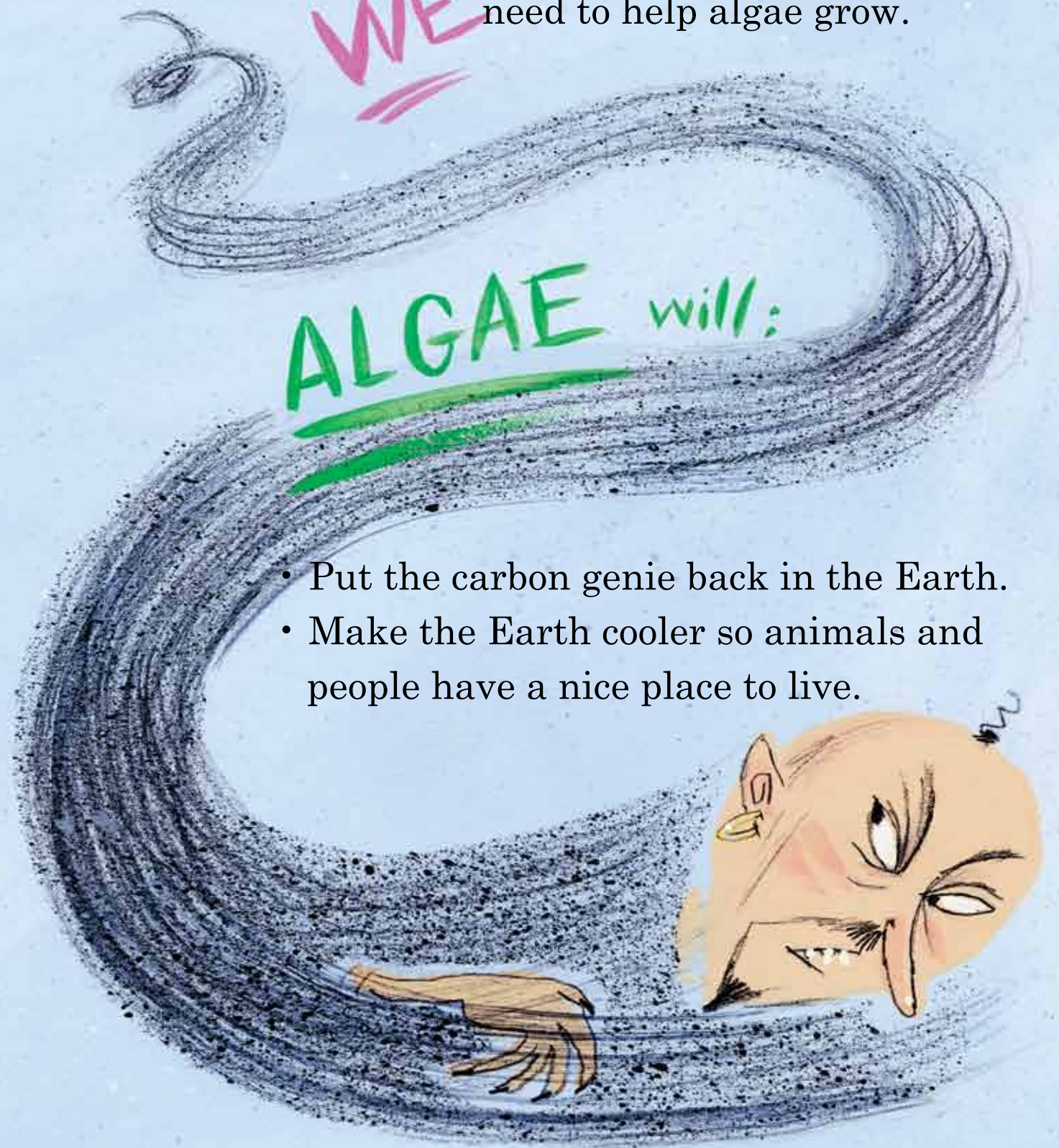
But Tiny Mighty Al needs our help.



WE need to help algae grow.

ALGAE will:

- Put the carbon genie back in the Earth.
- Make the Earth cooler so animals and people have a nice place to live.



Algae create healthy, good food for:

- People, animals and plants.
- Birds, fish, frogs, dolphins and whales.

Algae can give us:

- Clean air and clean water.
- Healthy vitamins and medicines.
- Paper, cloth and plastic.

Algae can give us clean fuels,
that do not release the carbon genie.

Fuel for:

- Cars, trucks and tractors.
- Ships, trains and planes.
- Cooking and heating.

Ice cream



Cookies



Pies



Cheese



Bread

Algae foods:

- Are low fat
- Fill you up
- Taste great!



Chips



Salads



Soups



Milk shakes



Salsa

Can the tiniest plant on Earth.
Tiny Mighty Al, save us again?



You bet he can.
If we work together!
Will you help Tiny Mighty Al?

How can you _____
help Tiny Mighty Al save our Planet?

1. Learn about animals and plants.
 - Study plants and animals at your school.
 - Visit a farm, zoo, and aquarium.
 - Explore your yard, parks and gardens.
2. Learn about science.
 - Ask you teacher about amazing science!
 - Visit your science center and museums.
 - Use your library and watch nature programs.
3. Discover amazing algae.
 - Ask you teacher about algae.
 - Talk to your friends about algae.
 - Use algae for a science project!
4. Save energy and water.
 - Walk, ride your bike or take a bus.
 - Find ways to save energy and water.
 - Recycle trash at home and at school.

