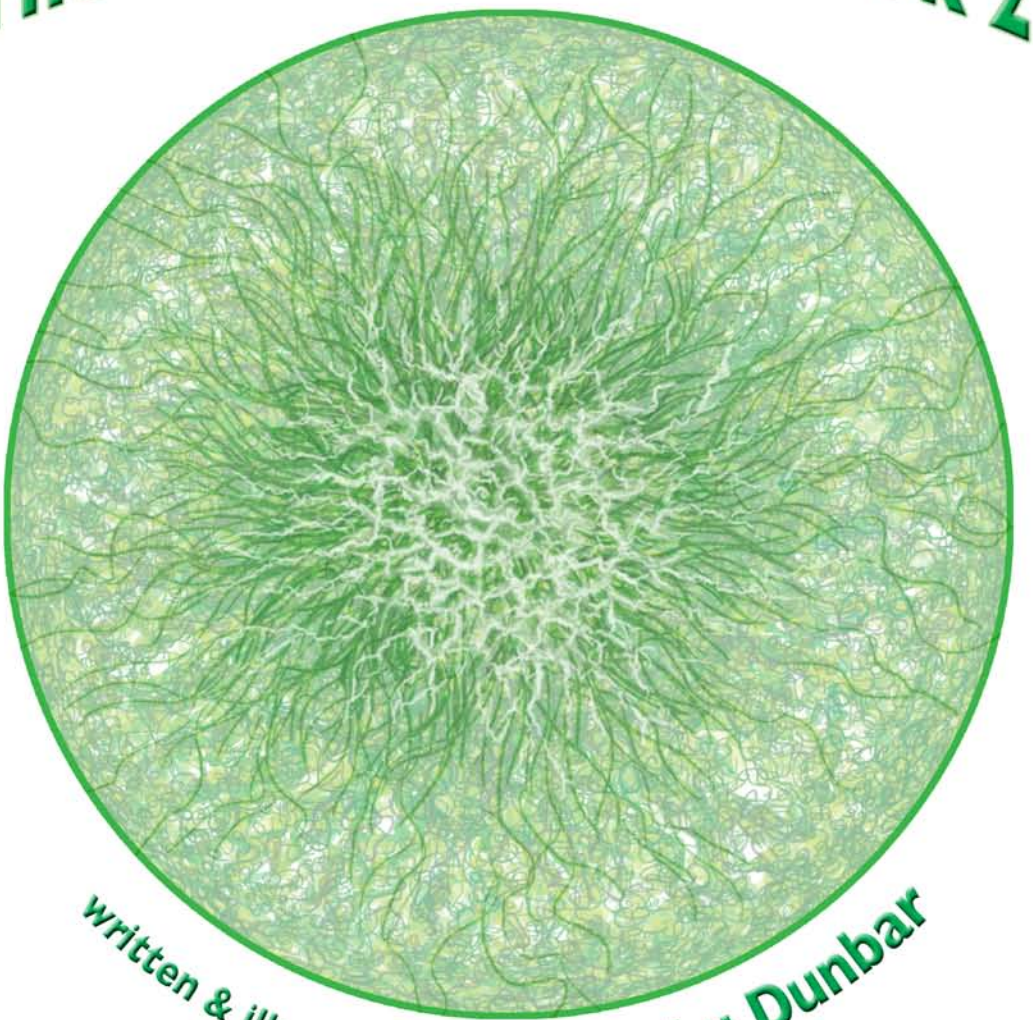
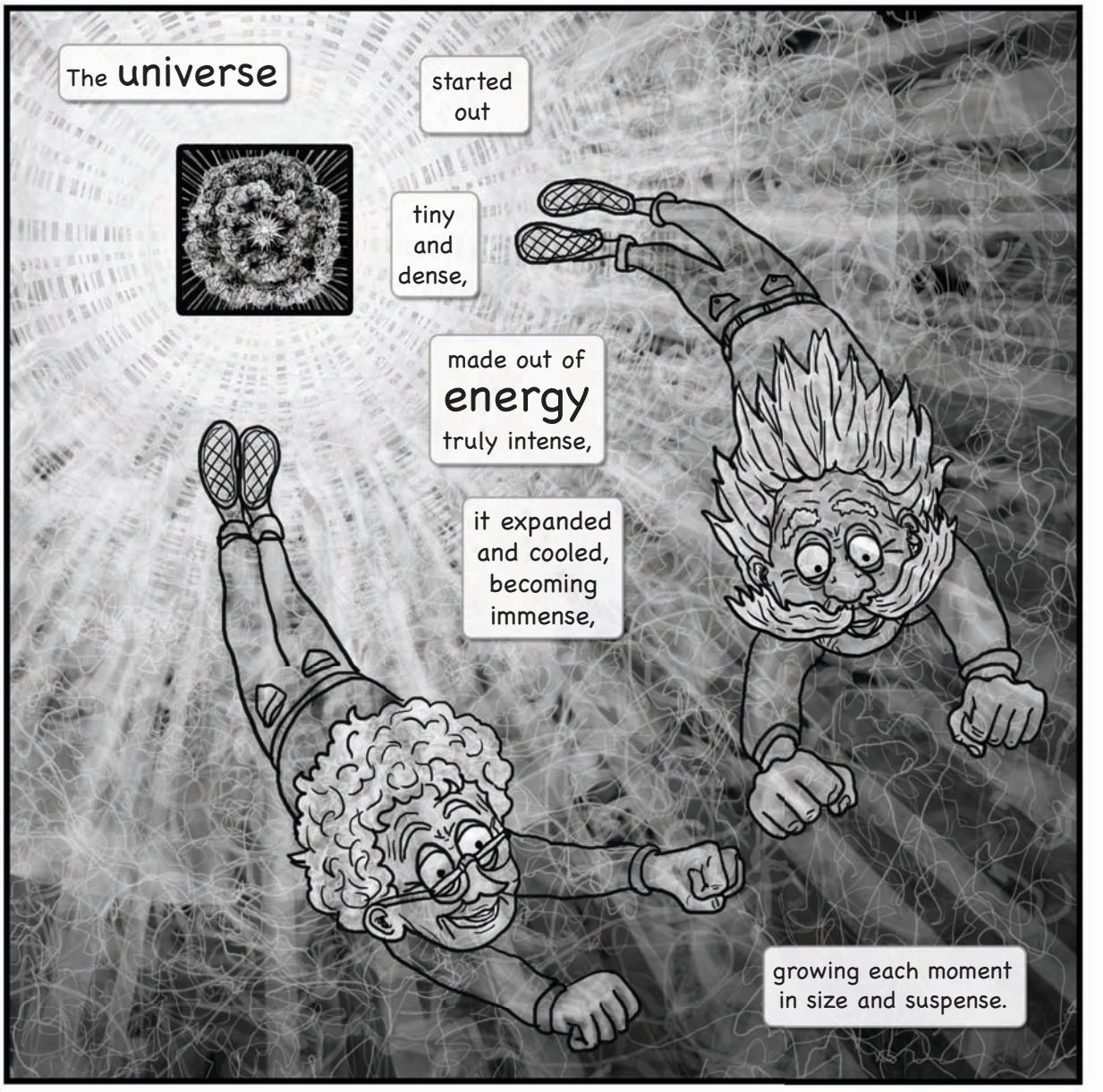
It's Alive!

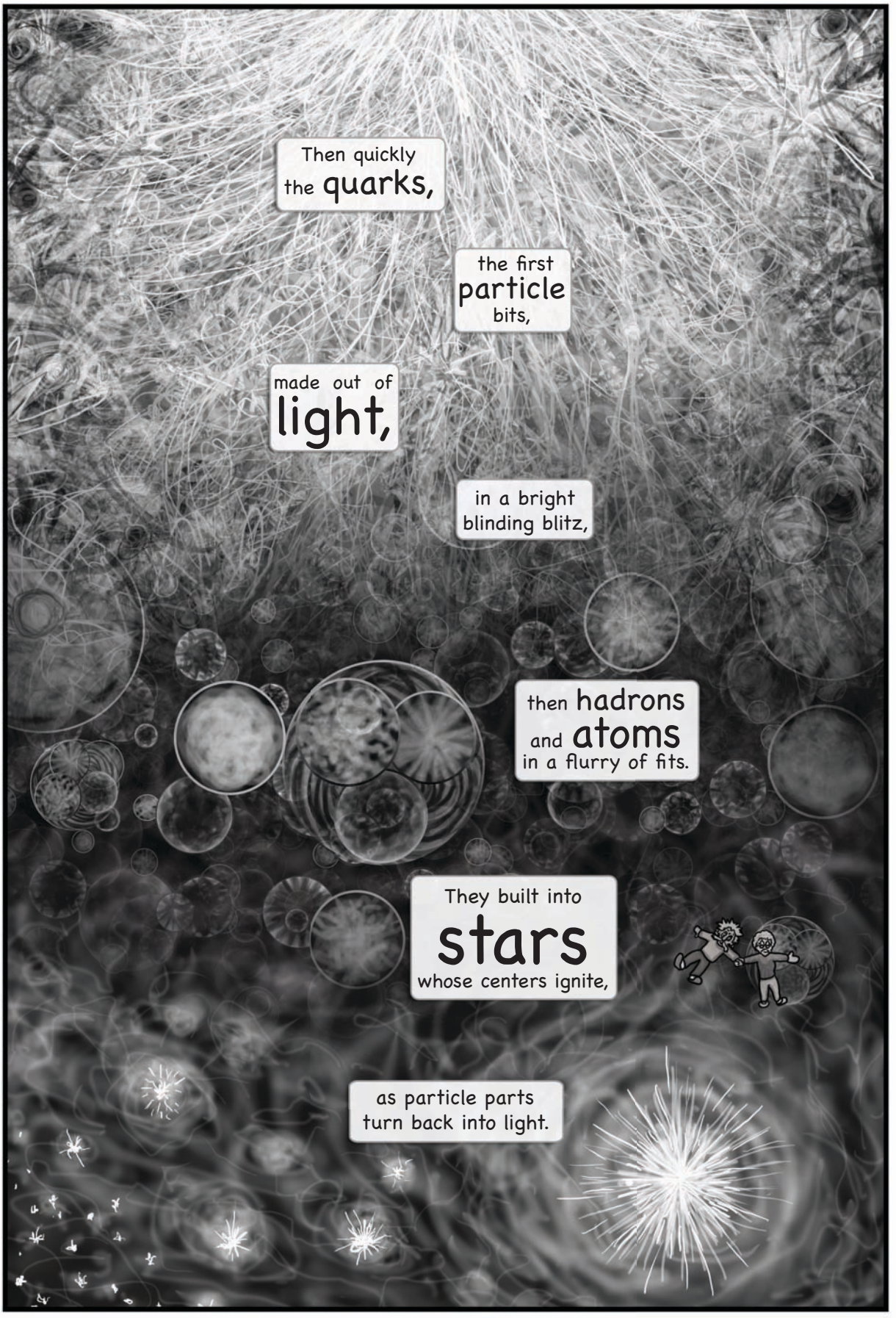
The Universe Verse: Book 2

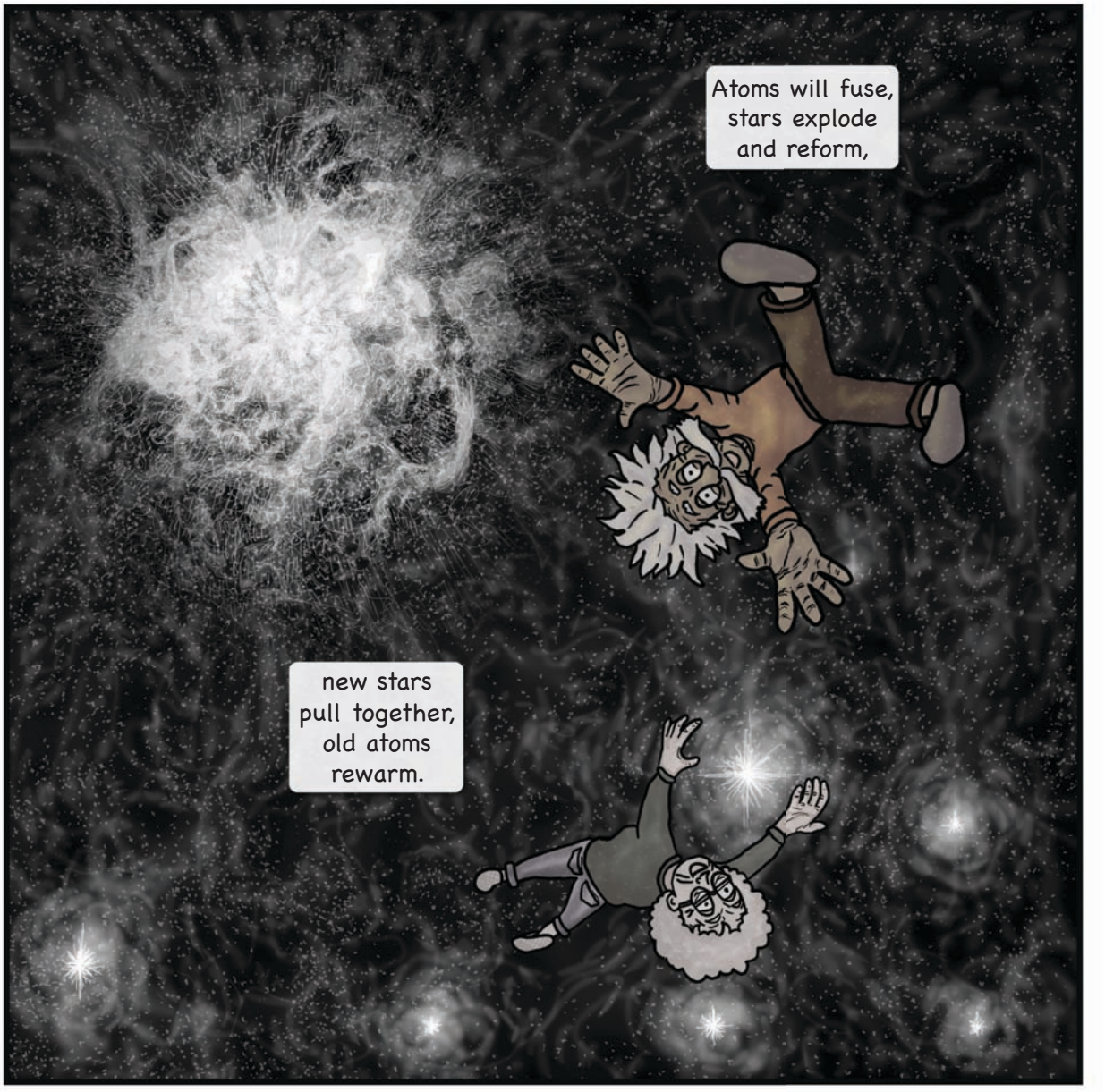


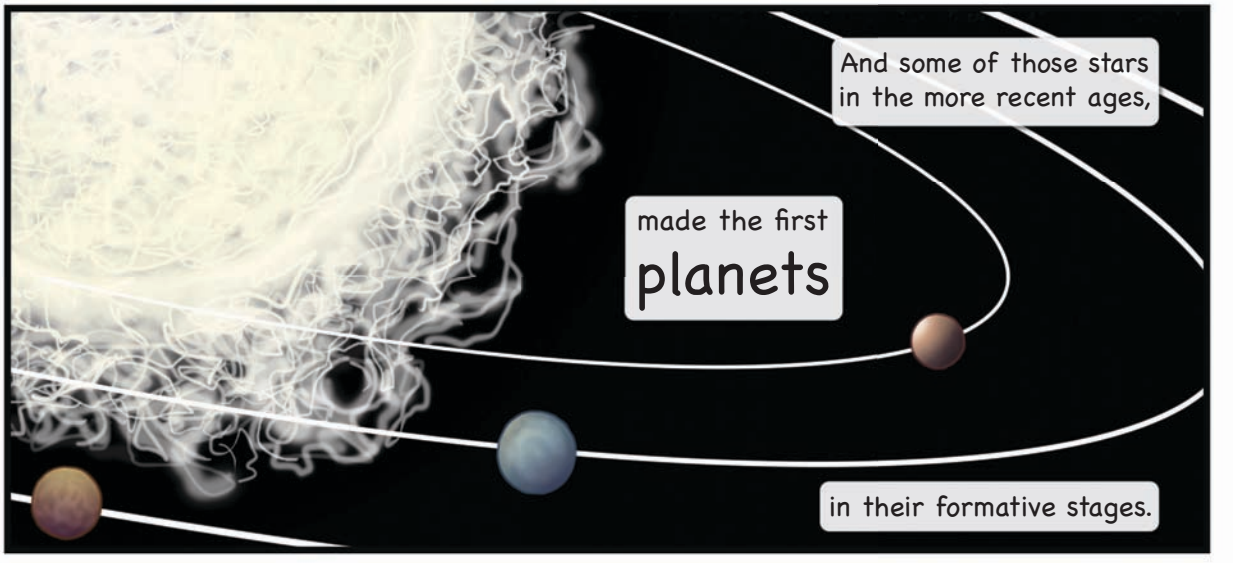
written & illustrated by James Lu Dunbar

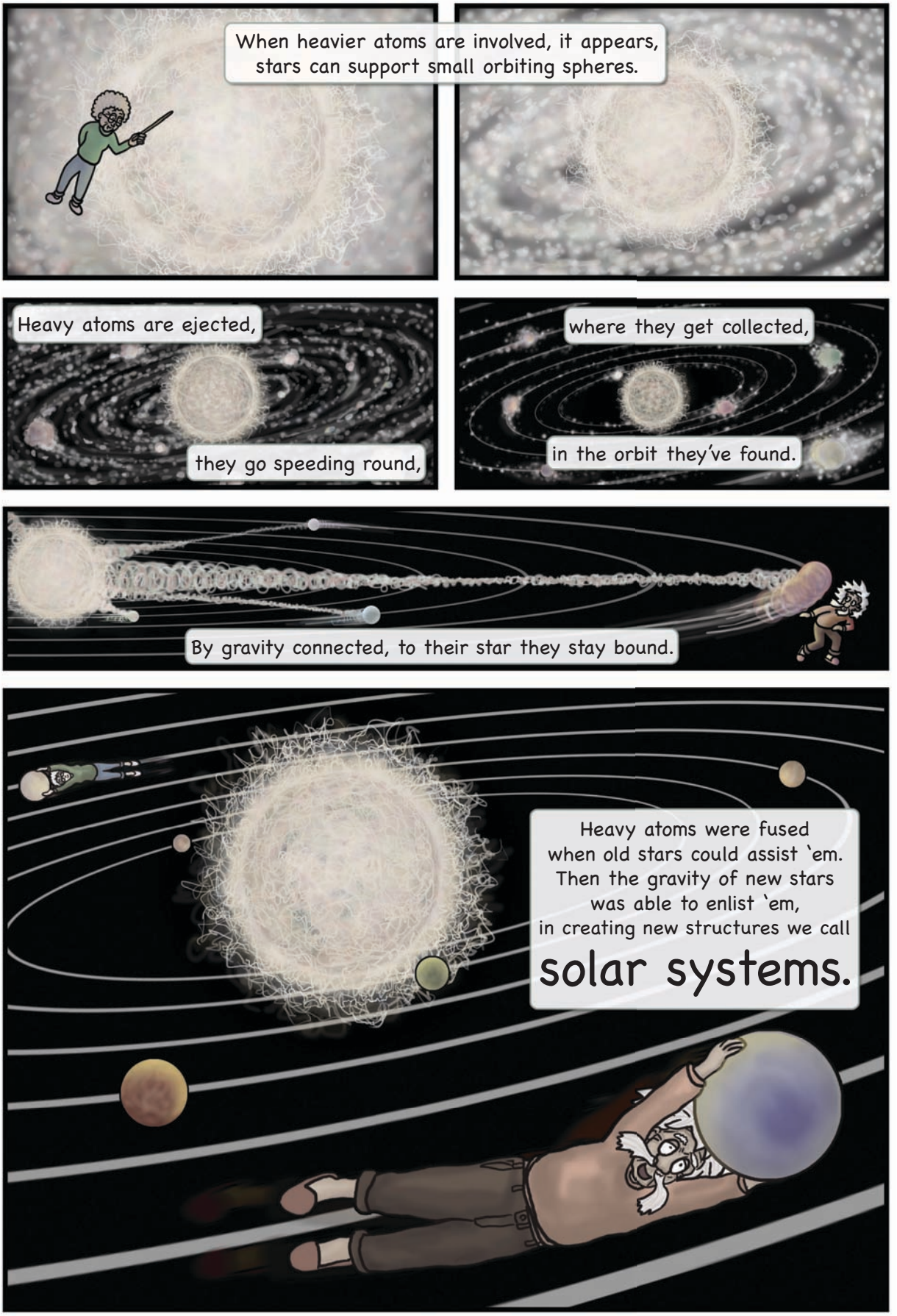

The universe
started out
tiny and dense,
made out of energy truly intense,
it expanded and cooled, becoming immense,
growing each moment in size and suspense.

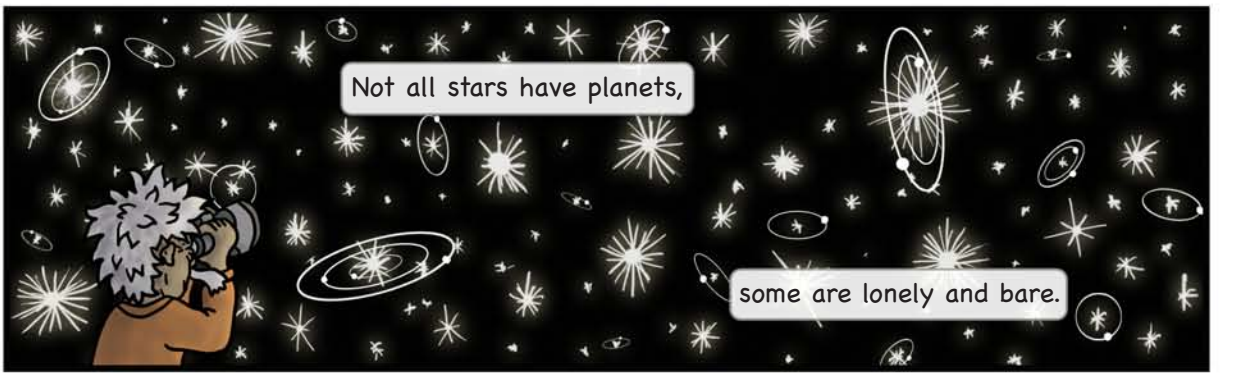

And it didn't take long for things to get weird,
as fundamental forces just up and appeared.


Then quickly the quarks,
the first particle bits,
made out of light,
in a bright blinding blitz,
then hadrons and atoms in a flurry of fits.
They built into stars whose centers ignite,
as particle parts turn back into light.

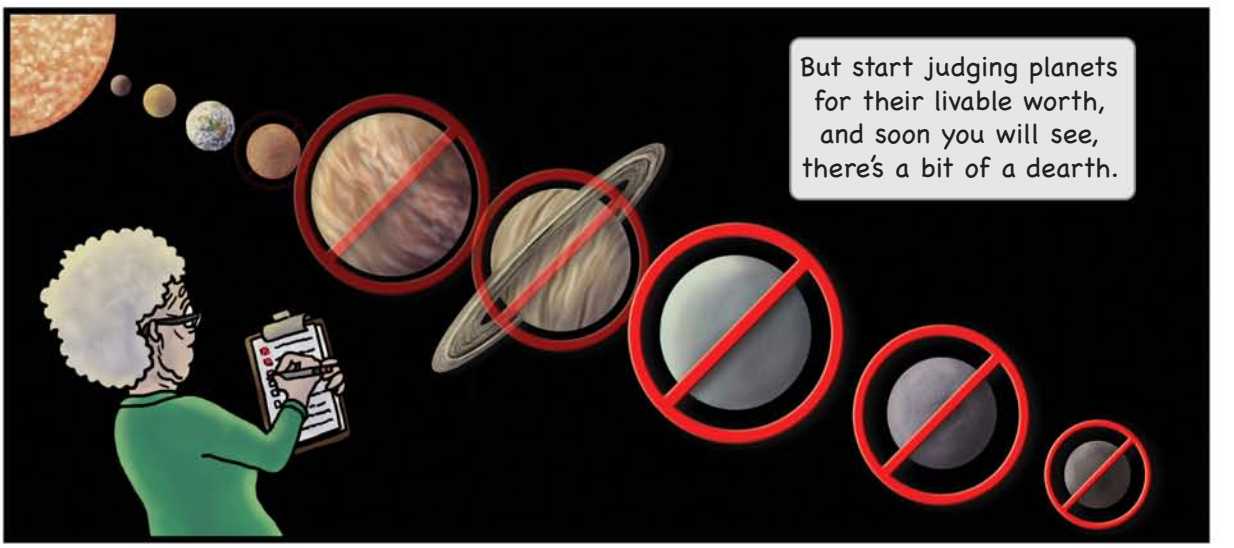

Atoms will fuse, stars explode and reform,
new stars pull together, old atoms rewarm.

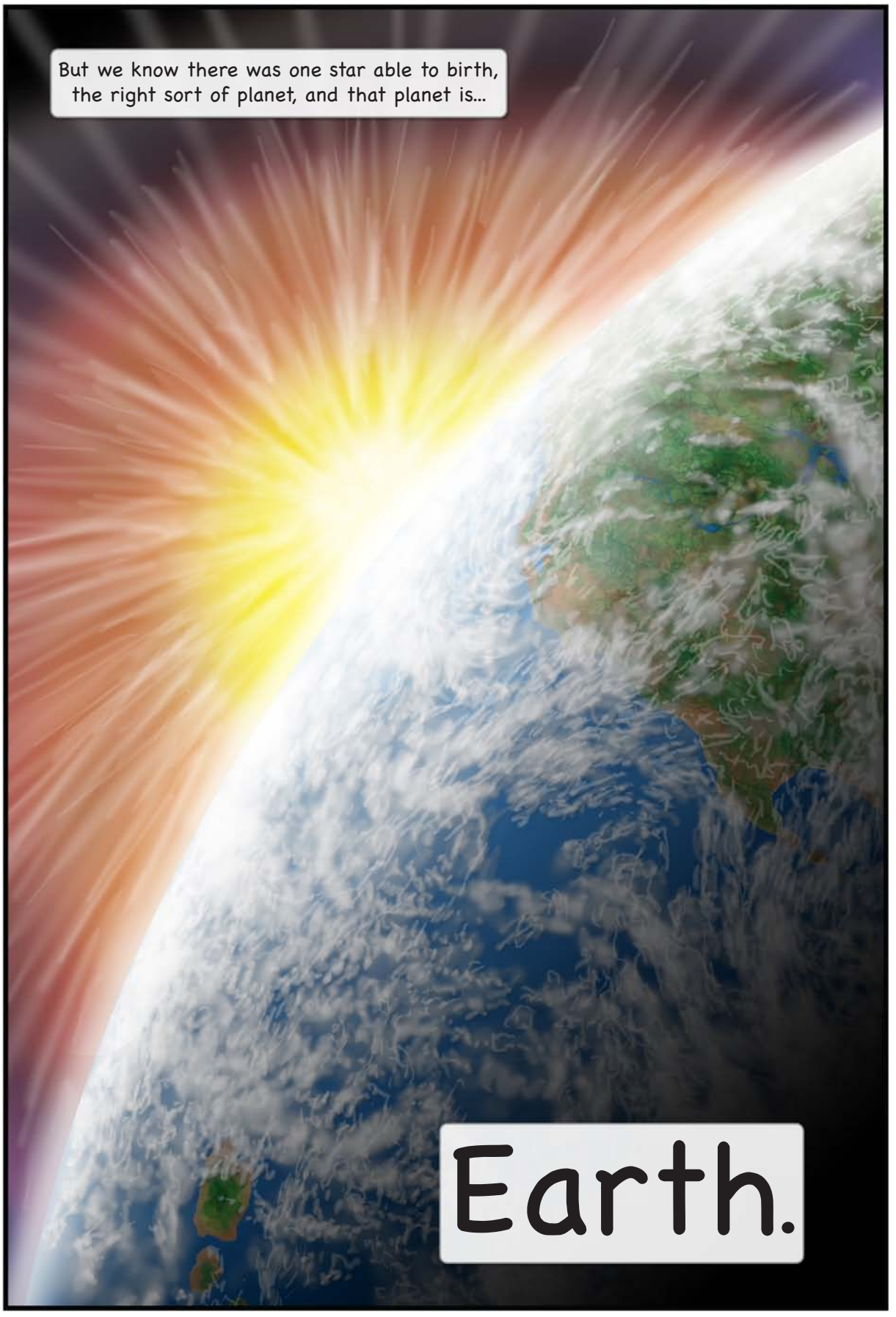

And some of those stars in the more recent ages,
made the first
planets
in their formative stages.

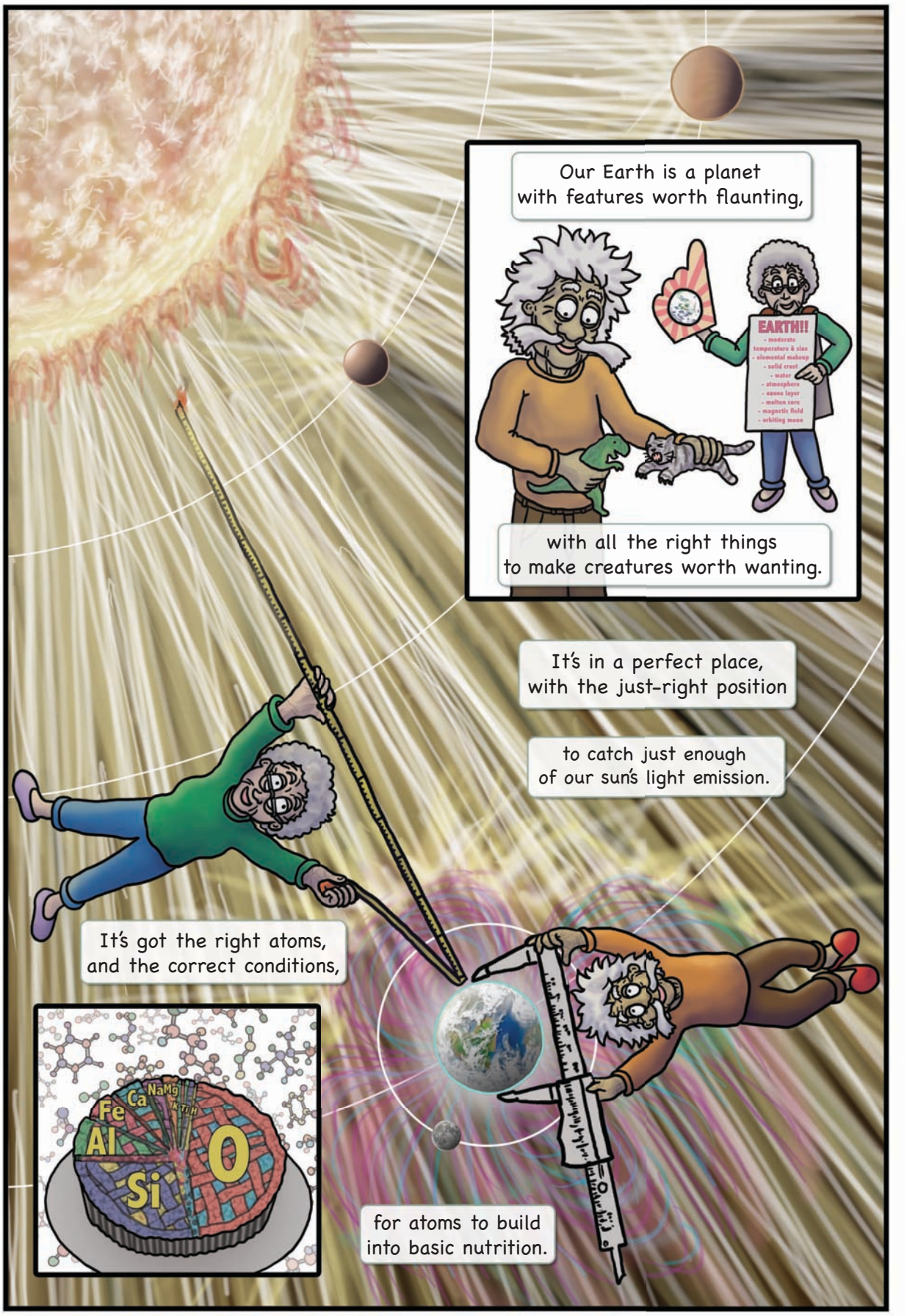

When heavier atoms are involved, it appears,
stars can support small orbiting spheres.
Heavy atoms are ejected,
they go speeding round,
where they get collected,
in the orbit they've found.
By gravity connected, to their star they stay bound.
Heavy atoms were fused
when old stars could assist 'em.
Then the gravity of new stars
was able to enlist 'em,
in creating new structures we call
solar systems.

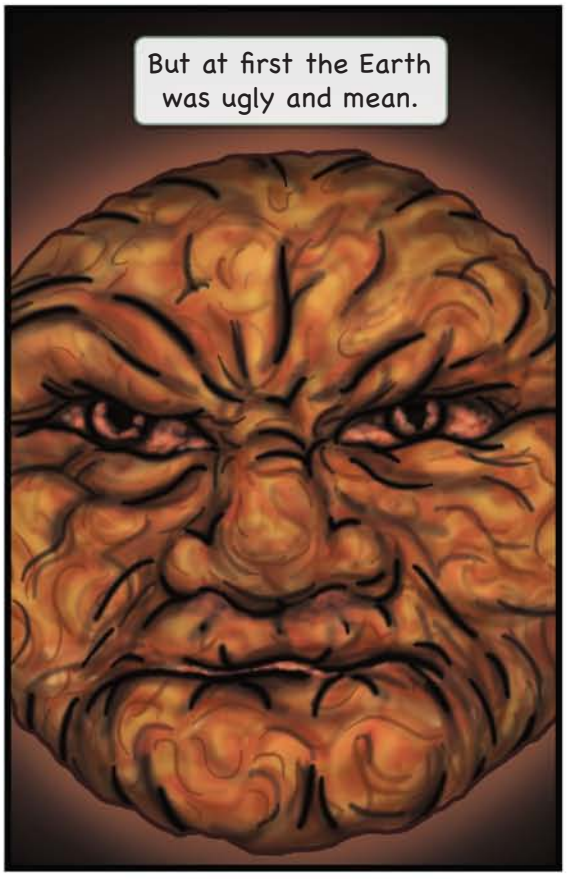

Not all stars have planets,
some are lonely and bare.


But there are so many stars that we need not despair.
There are billions of stars, so there are planets to spare.


But start judging planets for their livable worth, and soon you will see, there's a bit of a dearth.

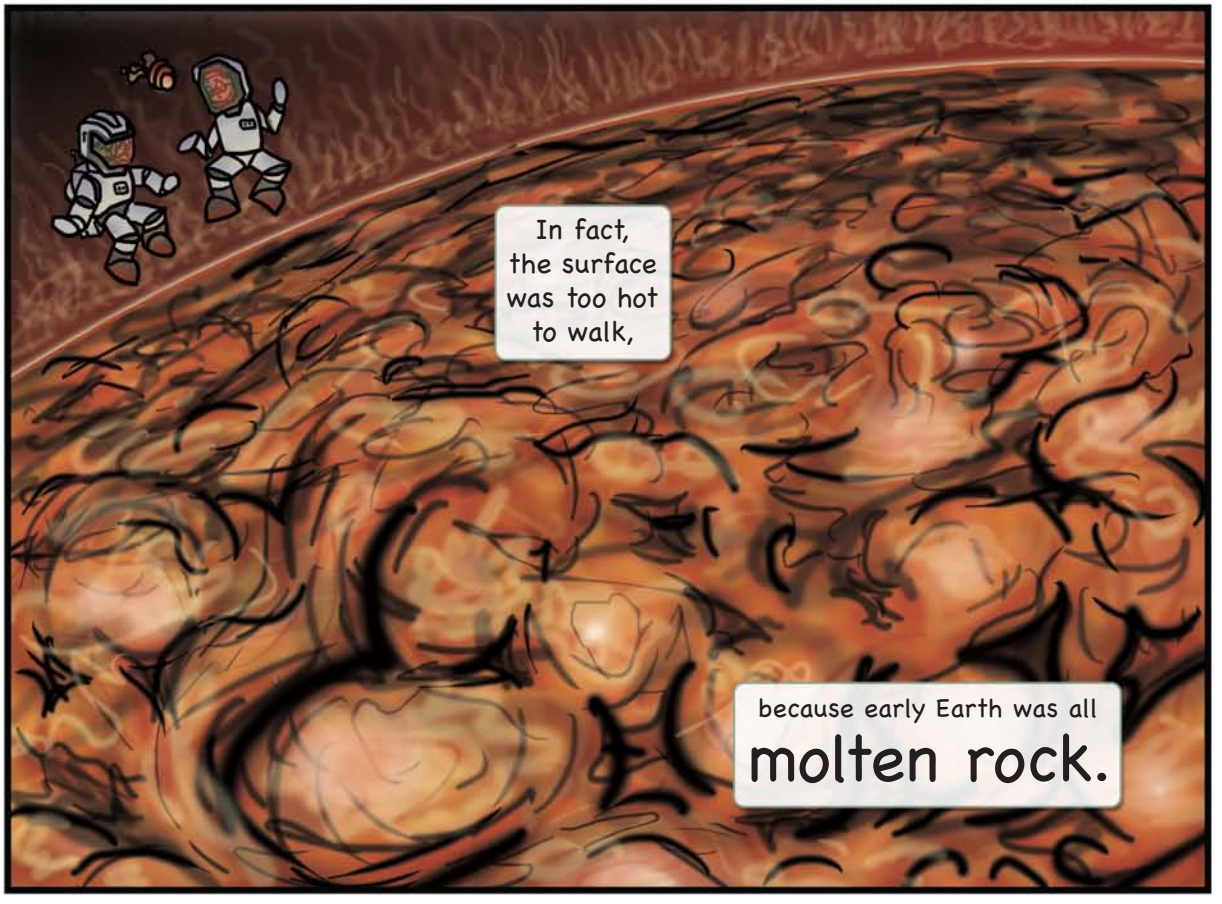

But we know there was one star able to birth, the right sort of planet, and that planet is...
Earth.

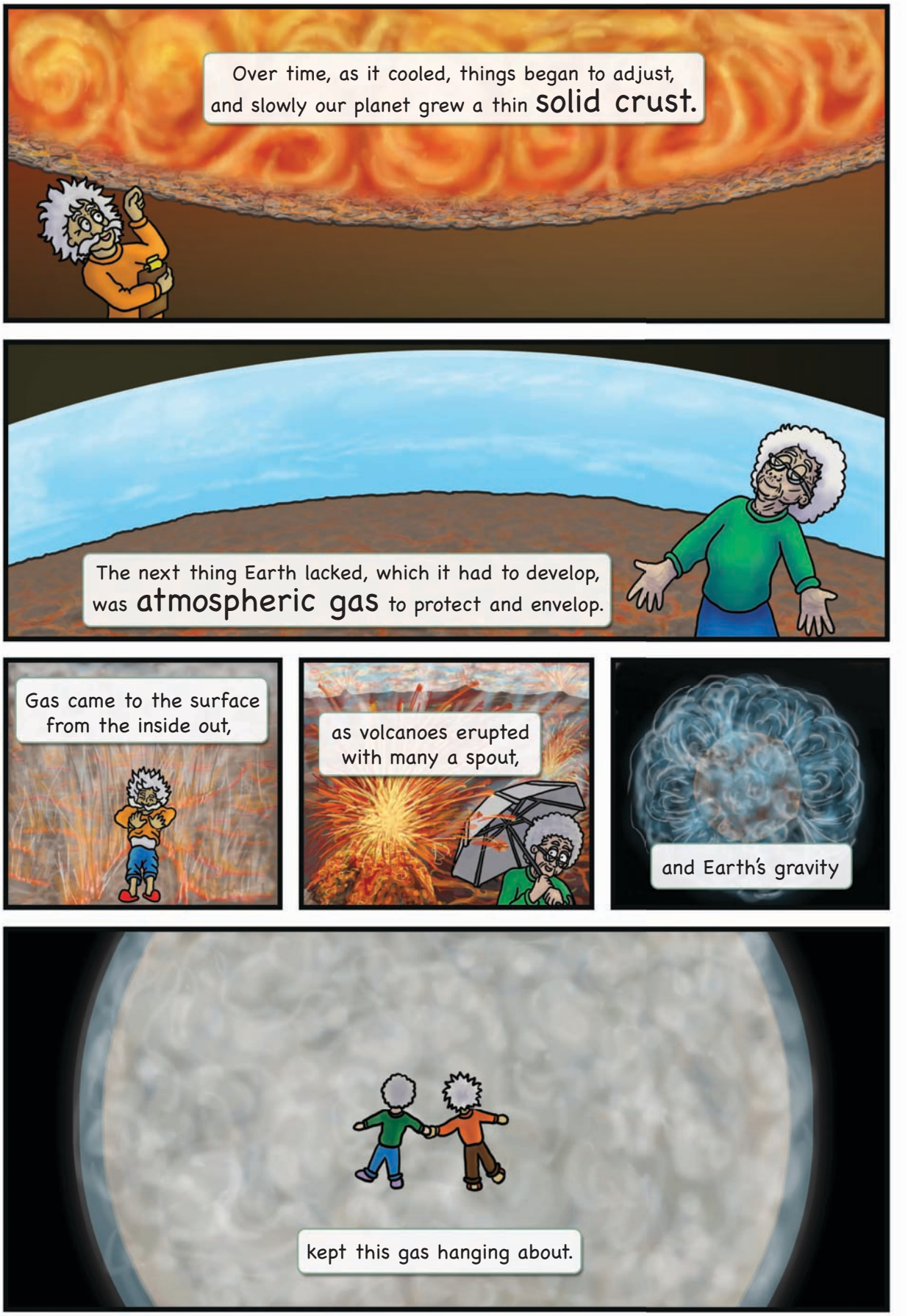

Our Earth is a planet
with features worth flaunting,
EARTH!!
- moderate temperature & size
- elemental makeup
- solid crust
- water
- atmosphere
- ozone layer
- molten core
- magnetic field
- orbiting moon
with all the right things
to make creatures worth wanting.
It's in a perfect place,
with the just-right position
to catch just enough
of our sun's light emission.
It's got the right atoms,
and the correct conditions,
Fe
Ca
Na
Mg
Al
O
Si
for atoms to build
into basic nutrition.

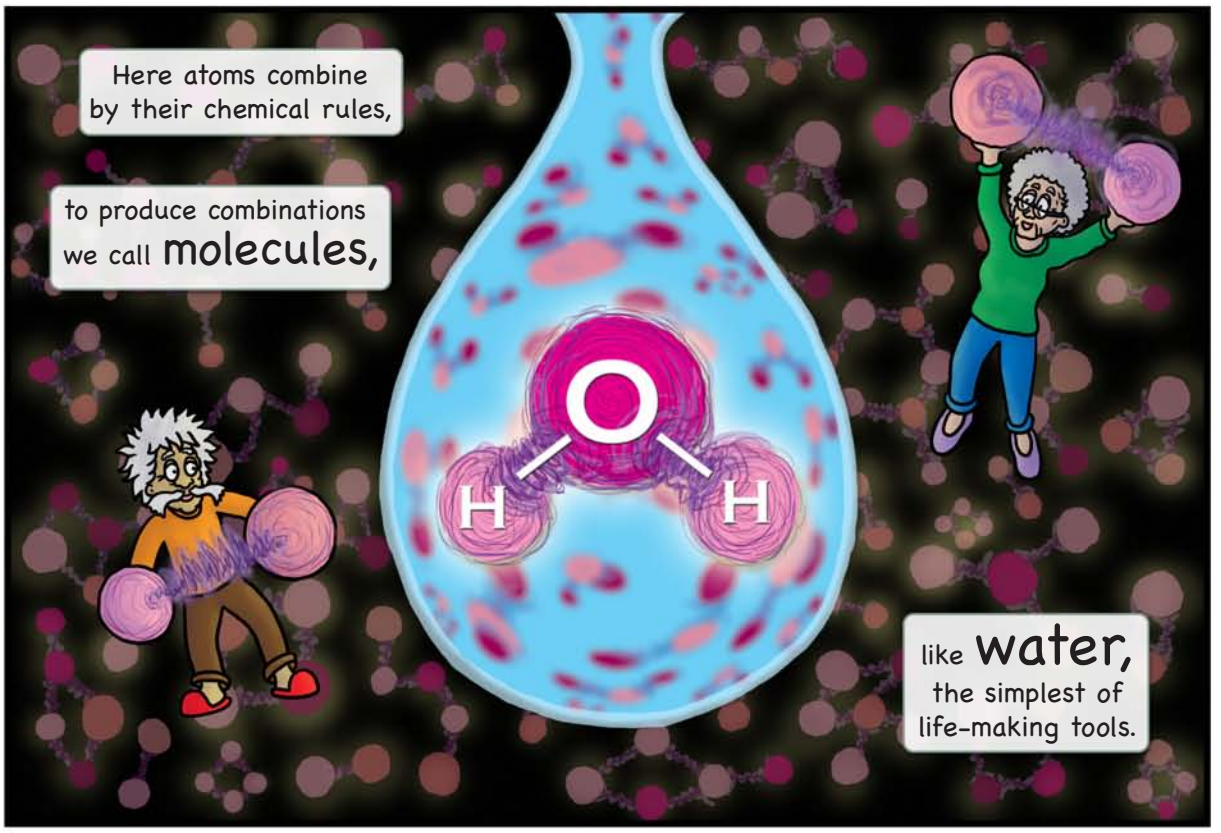

But at first the Earth was ugly and mean.


It was nothing compared with today's lively scene.

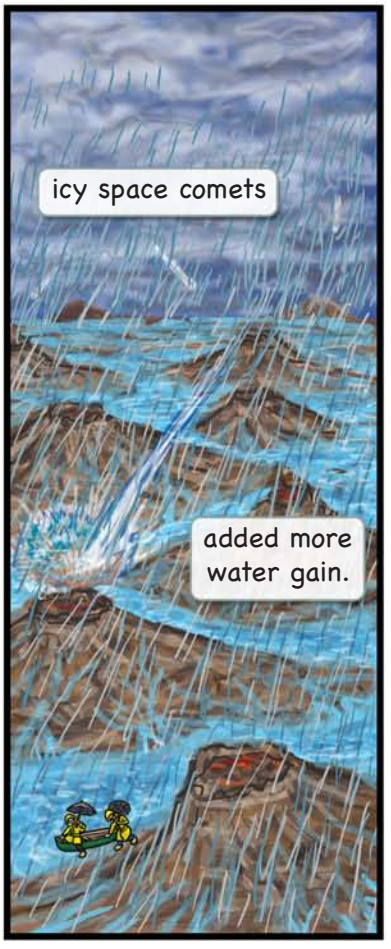

Nothing was living,
not one measly bean.

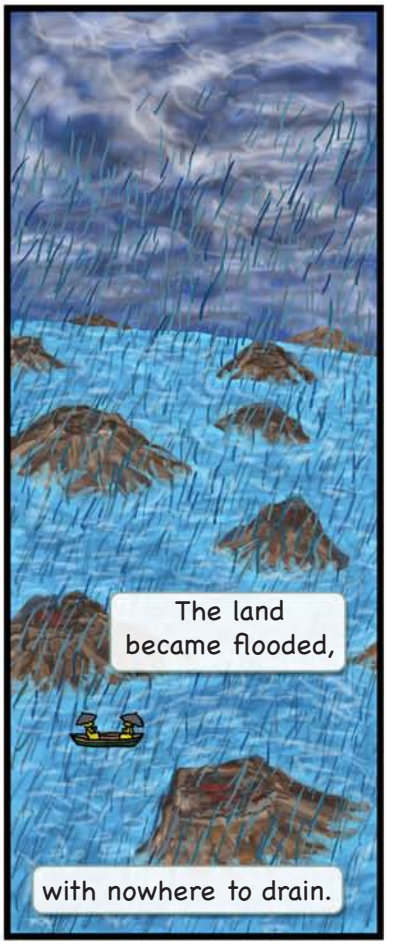

In fact, the surface was too hot to walk,
because early Earth was all
molten rock.

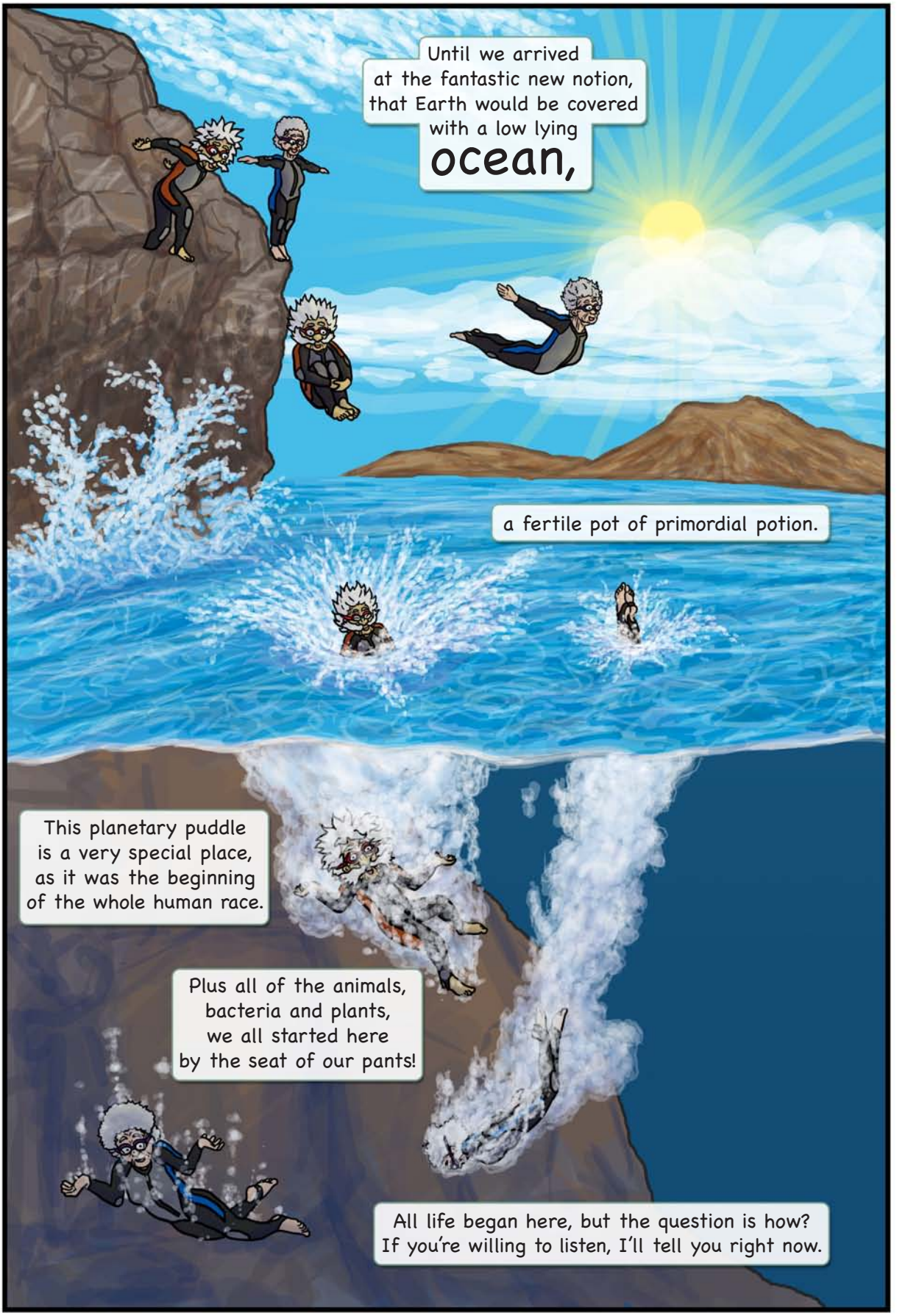

Over time, as it cooled, things began to adjust, and slowly our planet grew a thin solid crust.
The next thing Earth lacked, which it had to develop, was atmospheric gas to protect and envelop.
Gas came to the surface from the inside out,
as volcanoes erupted with many a spout,
and Earth's gravity
kept this gas hanging about.


Here atoms combine by their chemical rules,
to produce combinations we call molecules,
O
H
H
like water, the simplest of life-making tools.


As the Earth cooled, it started to rain,


icy space comets
added more water gain.


The land became flooded,
with nowhere to drain.


Until we arrived at the fantastic new notion, that Earth would be covered with a low lying ocean,
a fertile pot of primordial potion.
This planetary puddle is a very special place, as it was the beginning of the whole human race.
Plus all of the animals, bacteria and plants, we all started here by the seat of our pants!
All life began here, but the question is how? If you're willing to listen, I'll tell you right now.