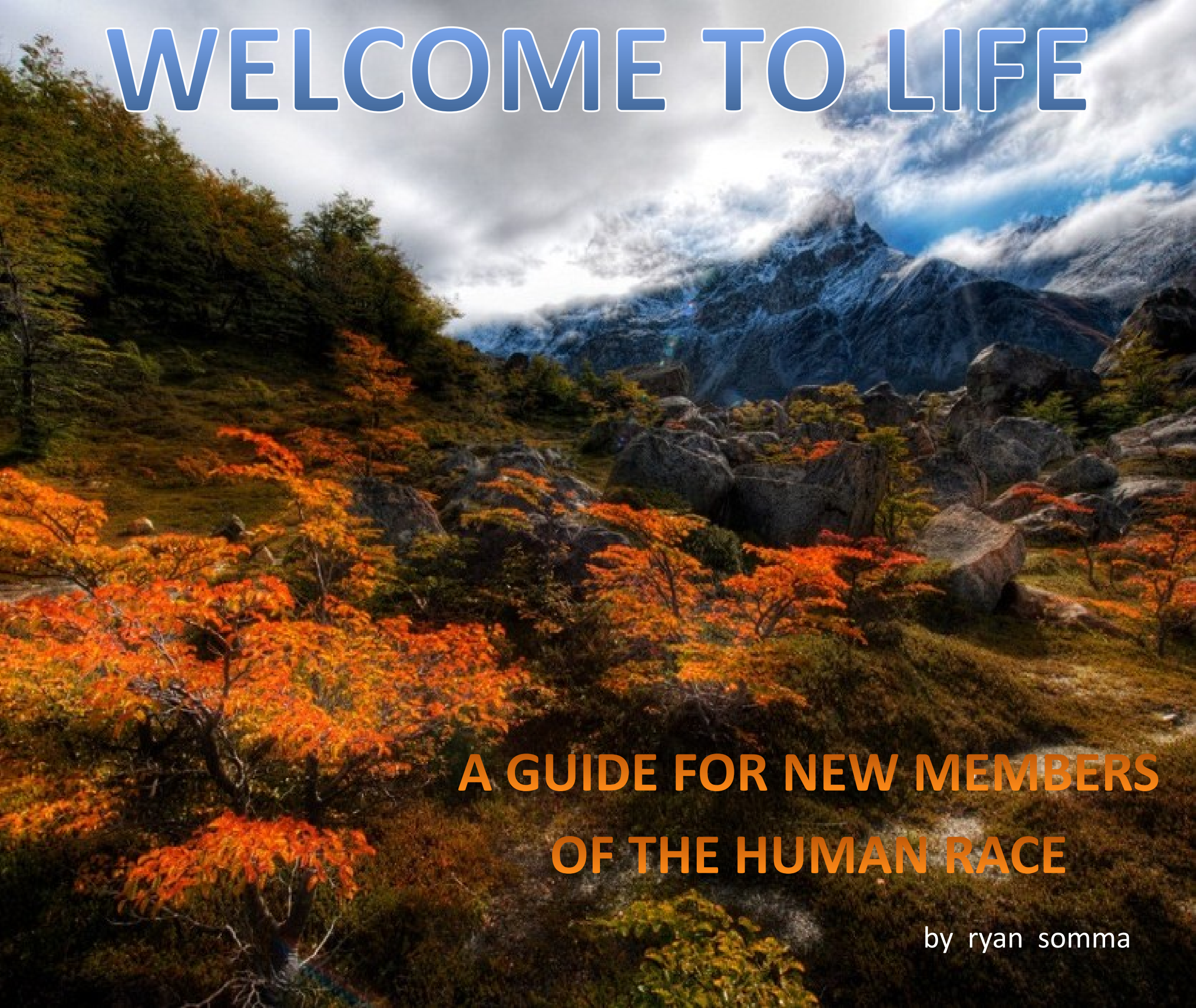
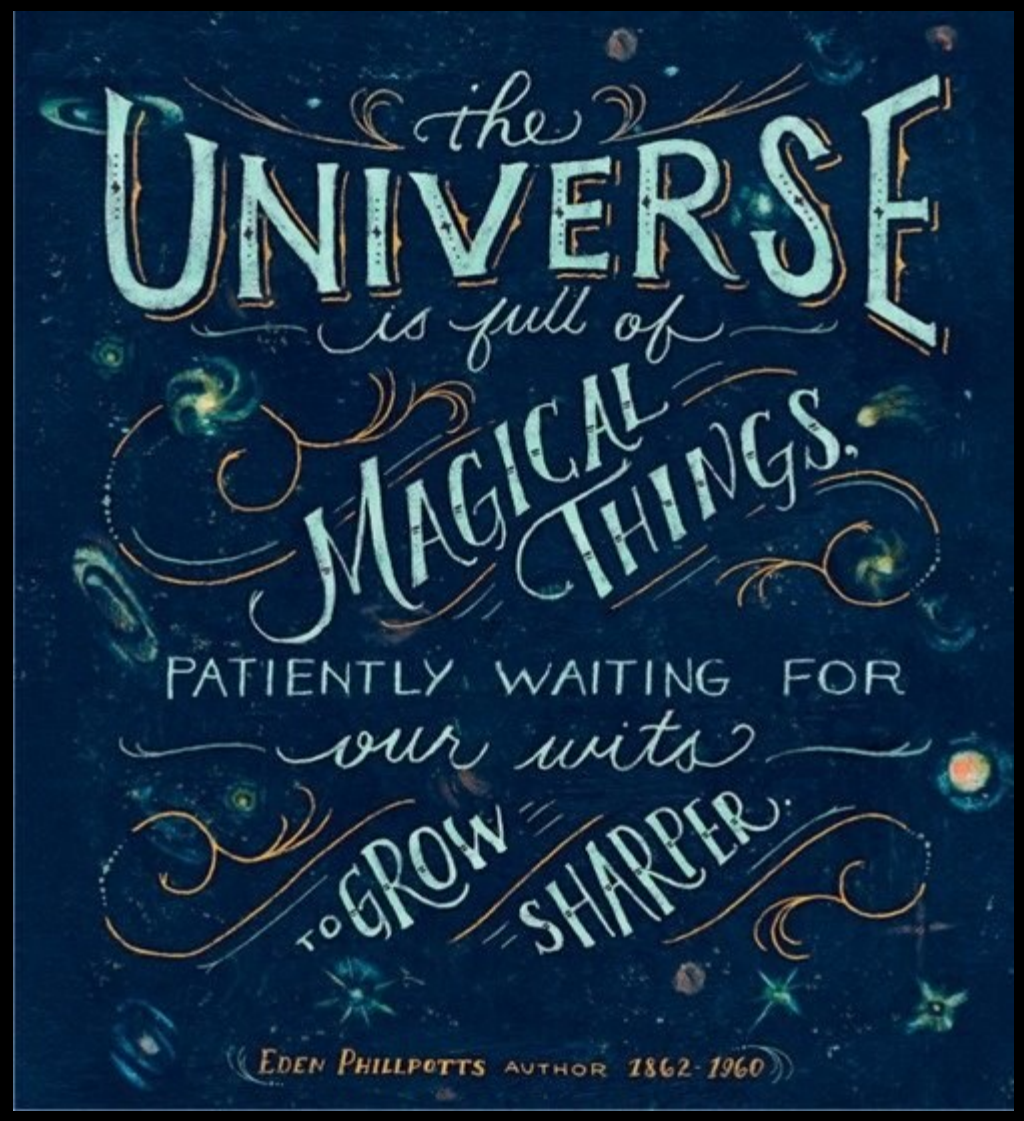
WELCOME TO LIFE



A GUIDE FOR NEW MEMBERS OF THE HUMAN RACE

by ryan somma



SO HERE YOU ARE, LIVING ON A PLANET WE CALL…

EVERYTHING AROUND YOU ALL THE WAY UP TO THE TOP OF THE CLOUDS IS PART OF EARTH.

THAT BIG BRIGHT HOT BALL IN THE SKY DURING THE DAY IS

THE

SUN

OUR EARTH GOES AROUND THE SUN.

EVERY TIME YOU HAVE A BIRTHDAY, THE EARTH HAS GONE ALL THE WAY AROUND THE SUN SINCE YOUR LAST BIRTHDAY!

THE SUN IS A STAR. SO ARE THE OTHER TWINKLING DOTS OF LIGHT IN THE SKY AT NIGHT.

THE BIG GLOWING CIRCLE IN THE SKY AT NIGHT? THAT IS THE

MOON

THE MOON IS LIKE A PLANET,
BUT IT GOES AROUND THE EARTH.
THE SUN SHINES ON IT TO MAKE IT BRIGHT.

SOME OF US HAVE **WALKED** ON THE MOON!

SOME OF THE BRIGHT SPOTS IN THE NIGHT SKY ARE PLANETS TOO.
THEY DON'T TWINKLE, BUT THEY DO GO AROUND THE SUN

THE SUN AND OTHER STARS GO AROUND THE MILKY WAY.

THE MILKY WAY IS A **GALAXY**.

GALAXIES HAVE **HUNDREDS OF BILLIONS** OF STARS IN THEM.

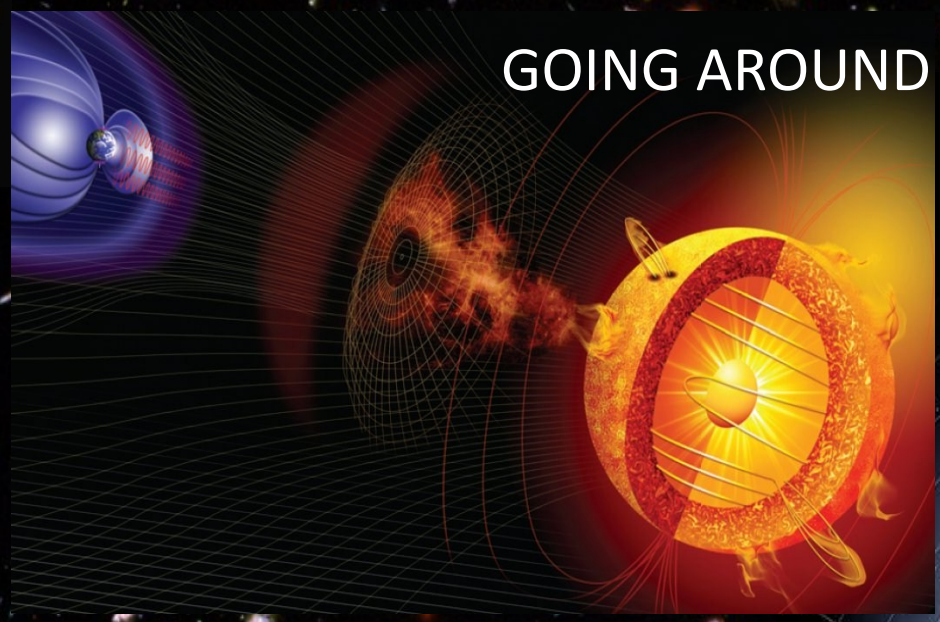
THE SKY IS FILLED WITH GALAXIES. THERE ARE OVER 10,000 GALAXIES ON THIS PAGE AND IT WOULD TAKE 23,700,000 PAGES TO COVER THE NIGHT SKY. ALL OF THESE GALAXIES FILLED WITH STARS CIRCLED BY PLANETS CIRCLED BY MOONS ARE PART OF THE...

UNIVERSE

THE UNIVERSE IS EVERYTHING THERE IS.

SO HOW DID YOU GET HERE?

ON A PLANET…



GOING AROUND A STAR…

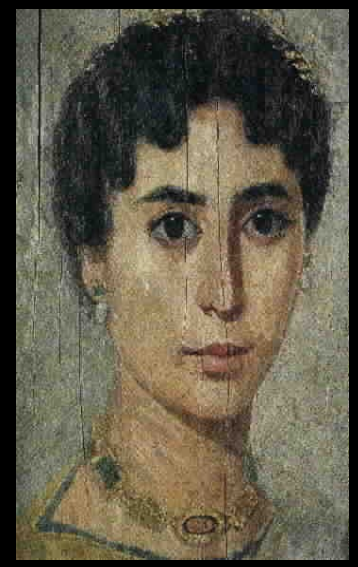
GOING AROUND A GALAXY…

…IN A UNIVERSE FULL OF GALAXIES?

YOU CAME FROM INSIDE YOUR MOMMY.
YOUR MOMMY CAME FROM INSIDE YOUR GRANDMOMMY.
YOUR GRANDMOMMY CAME FROM INSIDE YOUR GREAT GRANDMOMMY.
ON AND ON, BACK THROUGH TIME…

100 BA*

200 BA



1700 BA

2200 BA

3300 BA

25,000 BA

…GREAT GREAT GREAT GREAT GREAT GREAT GREAT GREAT GREAT GREAT GREAT…
OVER 100,000 GREAT-GRANDMOMMIES AGO
TO A MOMMY WHO LOOKED SOMETHING LIKE THIS:

*BA = “Birthdays Ago”

BUT IT DOESN'T STOP THERE!

SHE CAME FROM INSIDE HER MOMMY,
WHO CAME FROM INSIDE HER GRANDMOMMY,
WHO CAME FROM INSIDE HER GREAT-GRANDMOMMY…

ONE MOMMY LOOKED LIKE THIS…

20,000,000 BA

…ANOTHER MOMMY LIKE THIS…

60,000,000 BA

…AND ANOTHER LIKE THIS

210,000,000 BA

ON AND ON…

295,000,000 BA

…BACK THROUGH TIME…

375,000,000 BA

…CHANGING AND CHANGING

480,000,000 BA

GETTING MORE AND MORE SIMPLE OVER HUNDREDS OF MILLIONS OF YEARS

530,000,000 BA

550,000,00 BA

1,500,000,000 BA

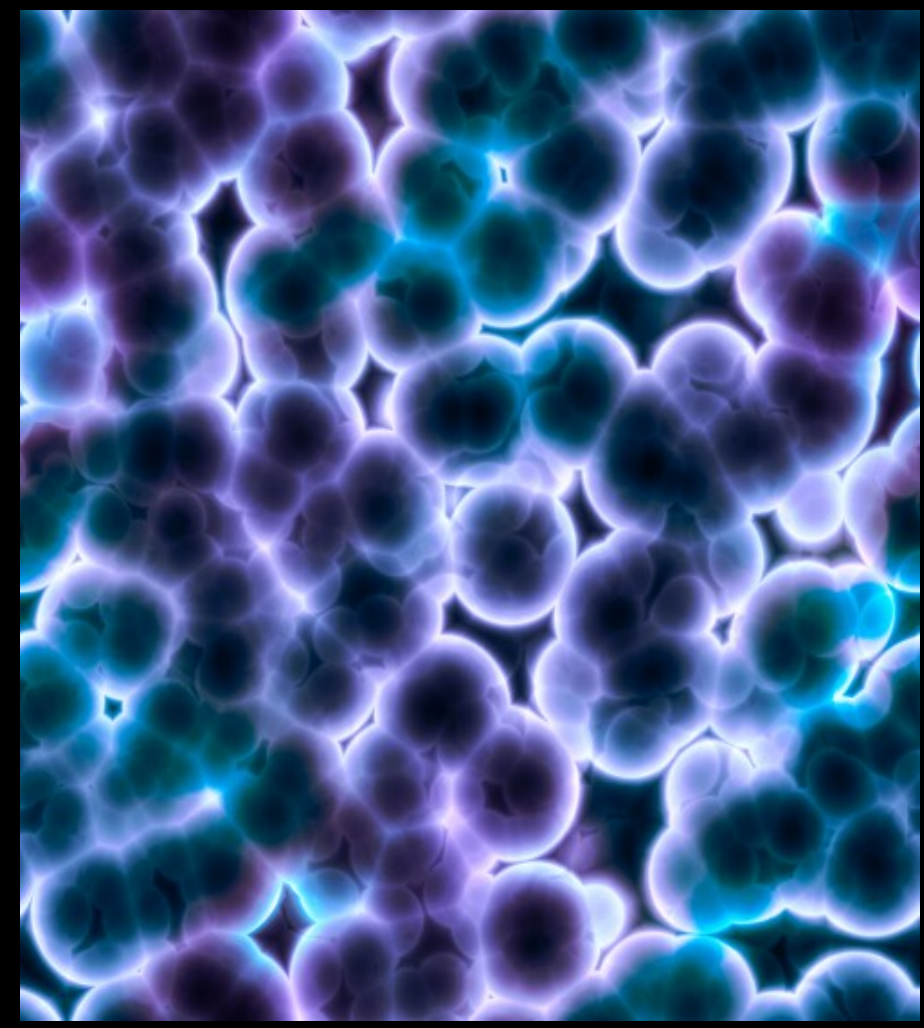
ALL THE WAY BACK TO THIS

A SINGLE CELL

3,500,000,000 BA

HOW DID A SINGLE CELL BECOME HOMO SAPIENS?

FOR 2,000,000,000 BIRTHDAYS ON EARTH, ALL LIVING THINGS WERE SINGLE CELLS.



THEN SOME CELLS STARTED WORKING TOGETHER.
THIS MADE THEM STRONGER THAN THE SINGLE CELLS, SO THEY MULTIPLIED

SOME TEAMS OF CELLS FORMED PLANTS
THAT EAT SUNLIGHT

OTHERS FORMED ANIMALS,
THAT EAT PLANTS.

DIFFERENT THINGS WORKED FOR
DIFFERENT KINDS OF LIFE.

ANIMALS AND PLANTS KEPT ON CHANGING, TRYING OUT DIFFERENT THINGS.

SOME ANIMALS, LIKE CRABS,
WORE THEIR SKELETONS
ON THE OUTSIDE.

OTHER ANIMALS, LIKE FISH,
WORE THEIR SKELETONS
ON THE INSIDE.

DIFFERENT THINGS WORKED FOR DIFFERENT KINDS OF LIFE.

ALL OF THIS WAS HAPPENING IN THE EARTH'S OCEANS, WHICH WERE GETTING PRETTY CROWDED…

SO SOME PLANTS AND ANIMALS GREW TO LIVE ON THE LAND.

CRABS AND OTHER ANIMALS
WITH OUTSIDE SKELETONS
BECAME BUGS AND INSECTS.

FISH AND OTHER ANIMALS
WITH INSIDE SKELETONS
BECAME AMPHIBIANS AND REPTILES

SOME LIZARDS BECAME DINOSAURS AND BIRDS AND TINY MAMMALS.

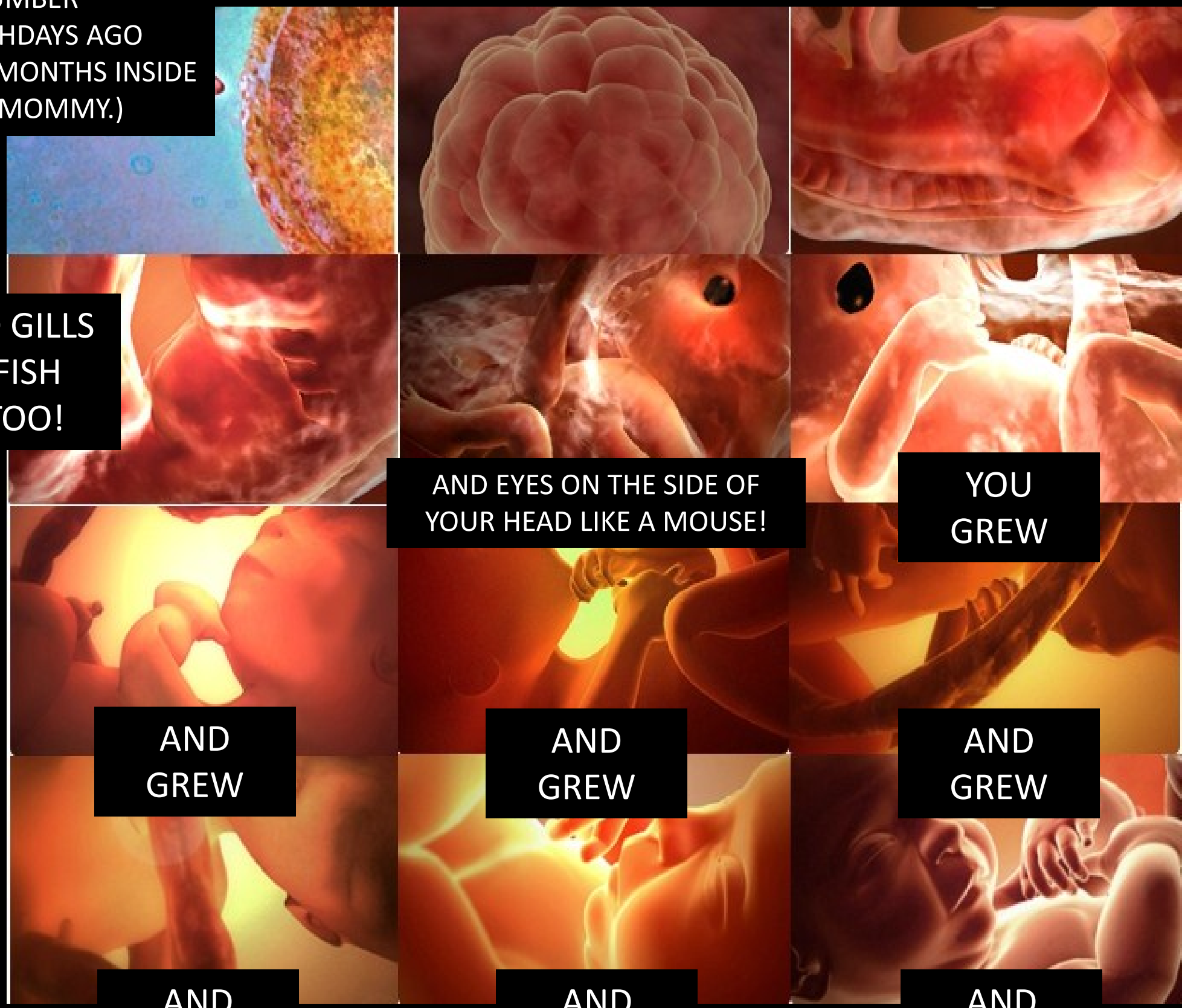
SOME TINY MAMMALS BECAME ELEPHANTS, DOGS, CATS, WHALES, AND MONKEYS.

SOME MONKEYS EVENTUALLY BECAME *HOMO SAPIENS*!

THIS WAS YOU YOUR NUMBER OF BIRTHDAYS AGO (PLUS NINE MONTHS INSIDE YOUR MOMMY.)

A FEW HOURS LATER YOU GREW UP TO BE THIS

YOU HAD A TAIL LIKE A LIZARD ONCE!



YOU HAD GILLS LIKE A FISH ONCE TOO!

AND EYES ON THE SIDE OF YOUR HEAD LIKE A MOUSE!

YOU GREW

AND GREW

AND GREW

AND GREW

AND GREW

AND GREW

YOU ARE *HOMO SAPIENS*!

BIG BRAIN!

LOTS OF TEAMS OF CELLS!

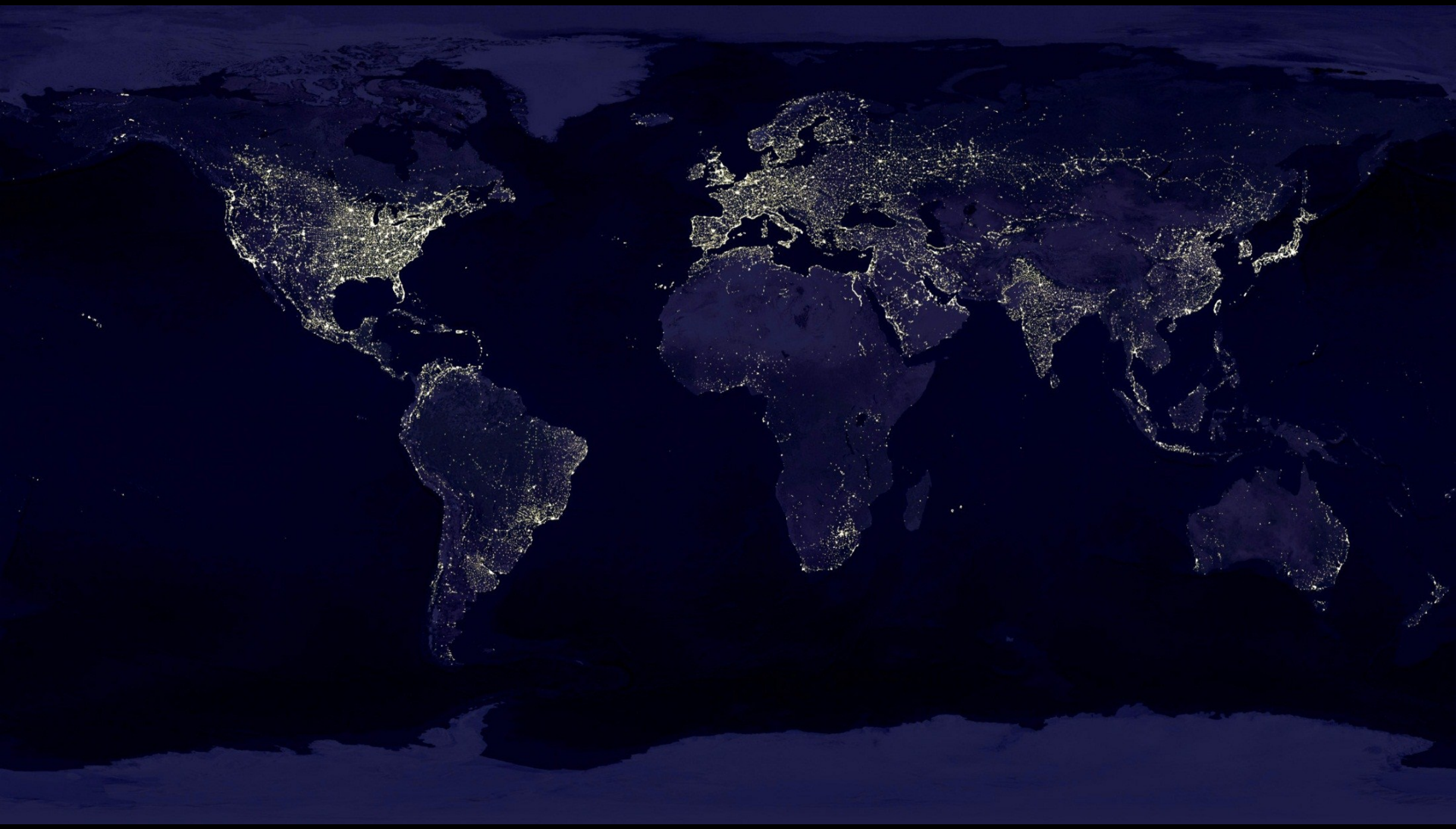
OPPOSABLE THUMBS!

WARM BLOODED!

SKELETON ON THE INSIDE!

WALKS ON TWO FEET!

THERE ARE OVER 7,000,000,000 *HOMO SAPIENS*
ON PLANET EARTH



(PLUS A FEW OUT IN SPACE)
AND ANOTHER FOUR ARE BORN EVERY SECOND!

EVERY *HOMO SAPIENS* IS UNIQUE.

BUT WE ARE ALL PART OF A TEAM CALLED

CIVILIZATION

NEW YORK

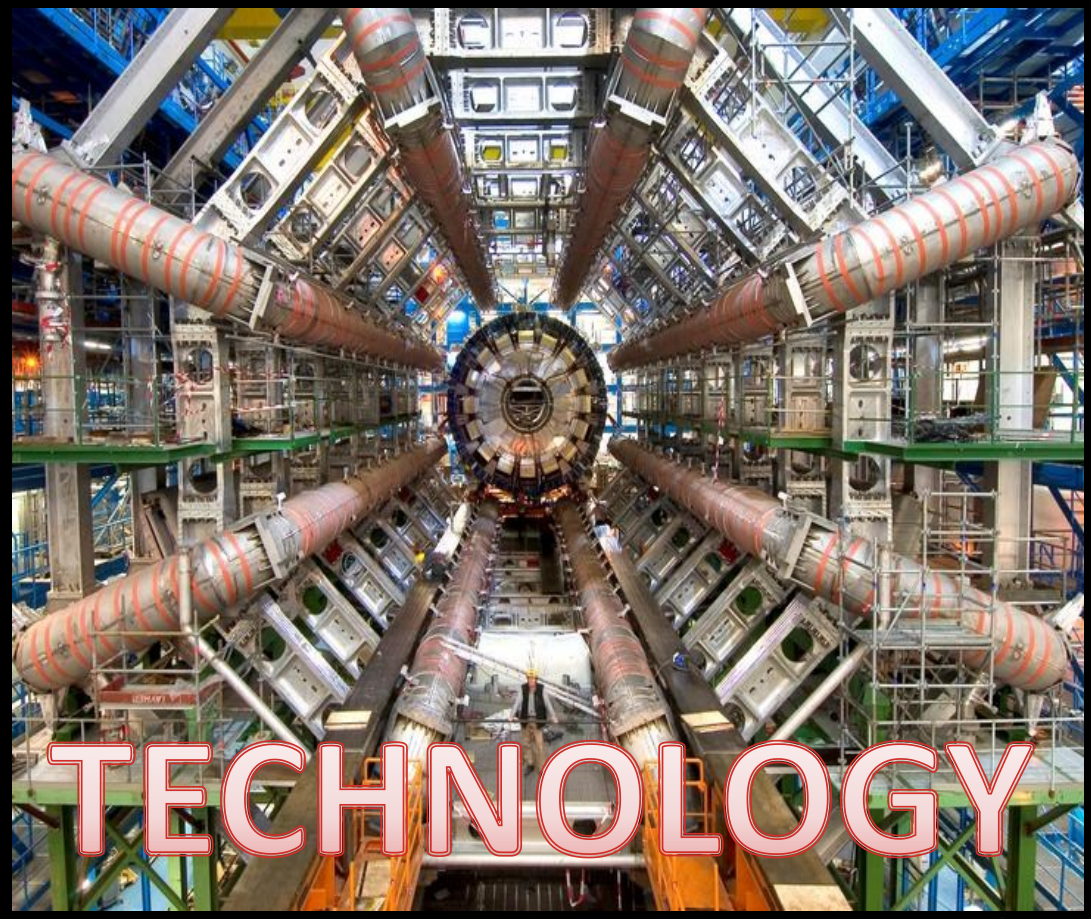
DUBAI

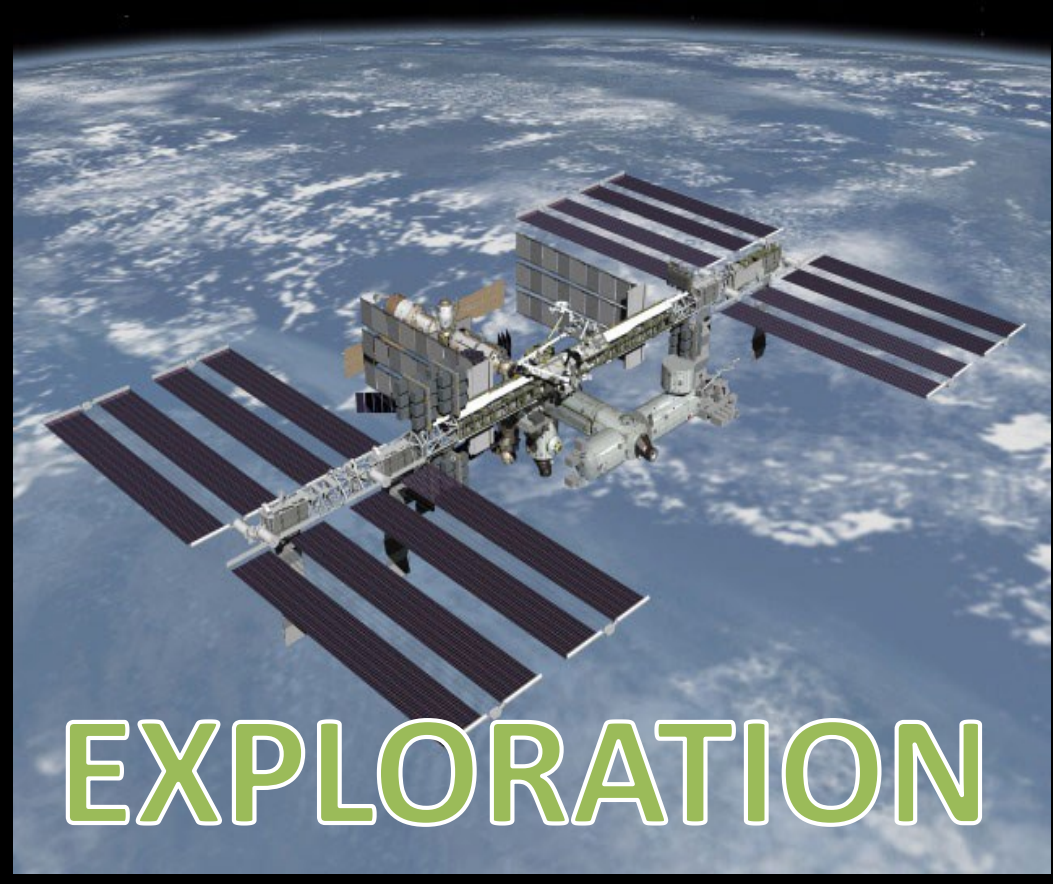
RIO DE JANERO

HONG KONG

OUR CIVILIZATION ISN’T PERFECT

BUT WE ARE ALWAYS WORKING TO MAKE IT BETTER





EVERY BIRTHDAY WE ARE SMARTER THAN WE WERE ON THE LAST BIRTHDAY,
JUST LIKE YOU GET SMARTER TOO

AS YOUR GUARDIAN
MY PURPOSE IS TO HELP YOU GROW UP
TO BE AS GOOD AS ME AT LIFE AND CONTRIBUTING TO CIVILIZATION.

YOUR PURPOSE IS TO GROW UP TO BE

EVEN BETTER THAN ME!

HOPEFULLY THIS BOOK HAS FILLED YOU WITH **QUESTIONS**
HERE'S SOME OF MY FAVORITE QUESTIONS

- WHERE DID THE DINOSAURS GO? (HINT: LOOK UP IN THE SKY AND TREES)
- WHY DOESN'T THE MOON ALWAYS LOOK ROUND?
- CAN YOU FIND YOUR HOUSE ON GOOGLE EARTH?
- IS THERE LIFE ON OTHER PLANETS? (HINT: SETI, EXOPLANETS)
- DOES THE EARTH HAVE A BIRTHDAY? (HINT: EQUINOXES, SOLSTICES)
- WHAT DOES IT MEAN THAT FOUR HOMO SAPIENS ARE BORN EVERY SECOND? (TRY COUNTING IN MULTIPLES OF FOUR)
- CAN YOU FIND THE PLANETS ON GOOGLE SKY?
- CAN YOU FIND AND NAME THE ANIMALS AND PLANTS IN THIS BOOK?
- EVERYTHING ON EARTH IS POWERED BY THE SUN, EVEN YOU. CAN YOU FIGURE OUT HOW YOU ARE POWERED BY THE SUN? CAN YOU FIGURE OUT HOW A CAR, LIGHT BULB, OR RIVER RUNS ON THE SUN?
- WHAT MAKES IT COLD IN THE WINTER AND WARM IN THE SUMMER?
- ANIMALS AND PLANTS CHANGING OVER BILLIONS OF YEARS IS CALLED "EVOLUTION," IS LIFE STILL EVOLVING TODAY? ARE PEOPLE EVOLVING STILL?
- WHERE DID THE FIRST CELL COME FROM?

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