Spacetime



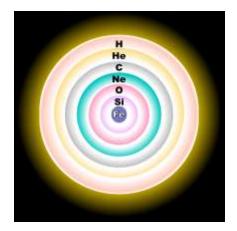
The Big Bang

When: 13,800 Million years ago

Gift: Everything that exists

started at the Big Bang

Elements

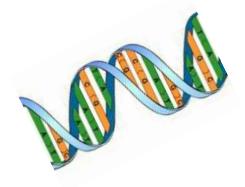


Stars and Supernovae

When: ~ 13,200 Million years ago

Gift: Elements, including C, N, O, P, S, Ca, Fe used for life

Bits that Copy



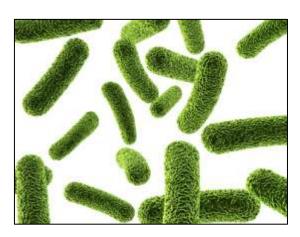
RNA & DNA

When: ~4,000 Million years ago

Gift: Heredity – that kids get

DNA from parents

Life!

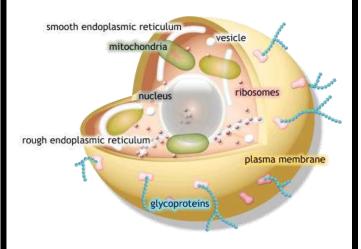


Bacteria (Prokaryotes)

When: ~4,000 Million years ago

Gift: Metabolism, breathing

Cells like Ours



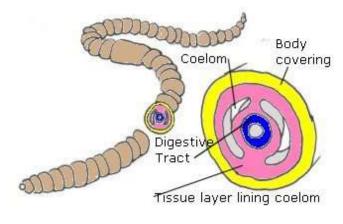
Eukaryotes

When: ~2,000 Million years ago

Gift: mt DNA, protist sexual

reproduction

Animals

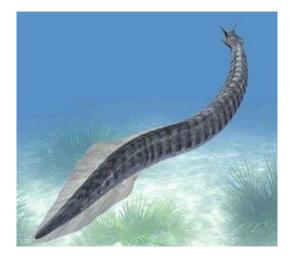


Worms

When: ~600 Million years ago

Gift: Heart, organs

Animals with Heads



Pikaia

When: ~530 Million years ago

Gift: a Head

Fish



Jawless Fish-Haikouichthys

When: ~520 Million years ago

Gift: Mouth, ear

Fish with Jaws

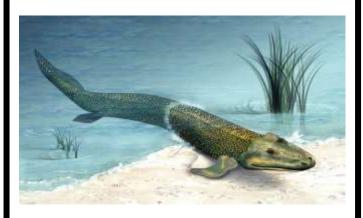


Placoderms

When: ~480 Million years ago

Gift: Jaws, tongue, later - teeth

"Fish-amanders"



Tiktaalik

(Sarcoptergii/Tetrapoda)

When: ~375 Million years ago

Gift: Limbs, lungs

Land Animals



Reptiles

When: ~300 Million years ago

Gift: Lizard brain, amniotic sac,

life on land, dry skin

Becoming Mammals



Dimetrodon (Synapsids)

When: ~280 Million years ago

Gift: Varied teeth, earbones

(evolved from jawbones)

Furry Lizards



Cynodonts

When: ~220 Million years ago

Gift: Hair, milk?, body, heat

Mammals



Juromaia & Eomaia

When: ~140 Million years ago

Gift: Breastfeeding, live birth,

mammal brain

Primates



Eosimias, Proconsul,

When: ~30 Million years ago

Gift: Hands, arms, monkey brain

Hominids

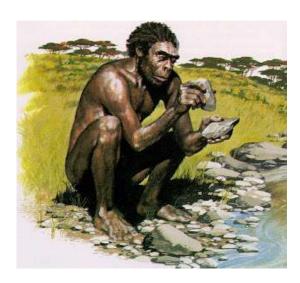


Lucy (A. afarensis)

When: ~3 Million years ago

Gift: Walking upright, teamwork

Toolmakers

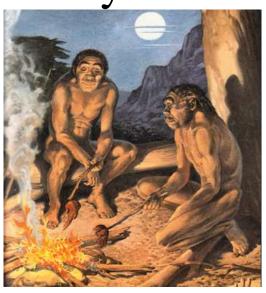


Homo habilis

When: ~1.8 Million years ago

Gift: Specialized tool use

Storytellers



Homo erectus

When: ~1 Million years ago Gift: Fire, cooking, Human

Brain, language

Explorers



Homo sapiens

When: ~ 100,000 years ago

Gift: Human global diversity

Learners & Teachers



Homo sapiens

When: $\sim 30,000$ years ago

Gift: Collective learning –

knowledge, later - science

Domesticators



Homo sapiens

When: \sim 20,000 years ago

Gift: Dogs, cats, farms & food

Community Builders



Homo sapiens

When: 1000? 100? 20? years ago

Gift: Interconnectivity -

Worldwide Human community, Importance of all life on Earth

Parents & Grandparents

Put pictures from your family album here.

And everyone who helped raise you

When: $0 \text{ to } \sim 90 \text{ years ago}$

Gift: Much of who you are and

your abilities

You pick an ancestor:

XX/la o m .		
When:		
Gift:		