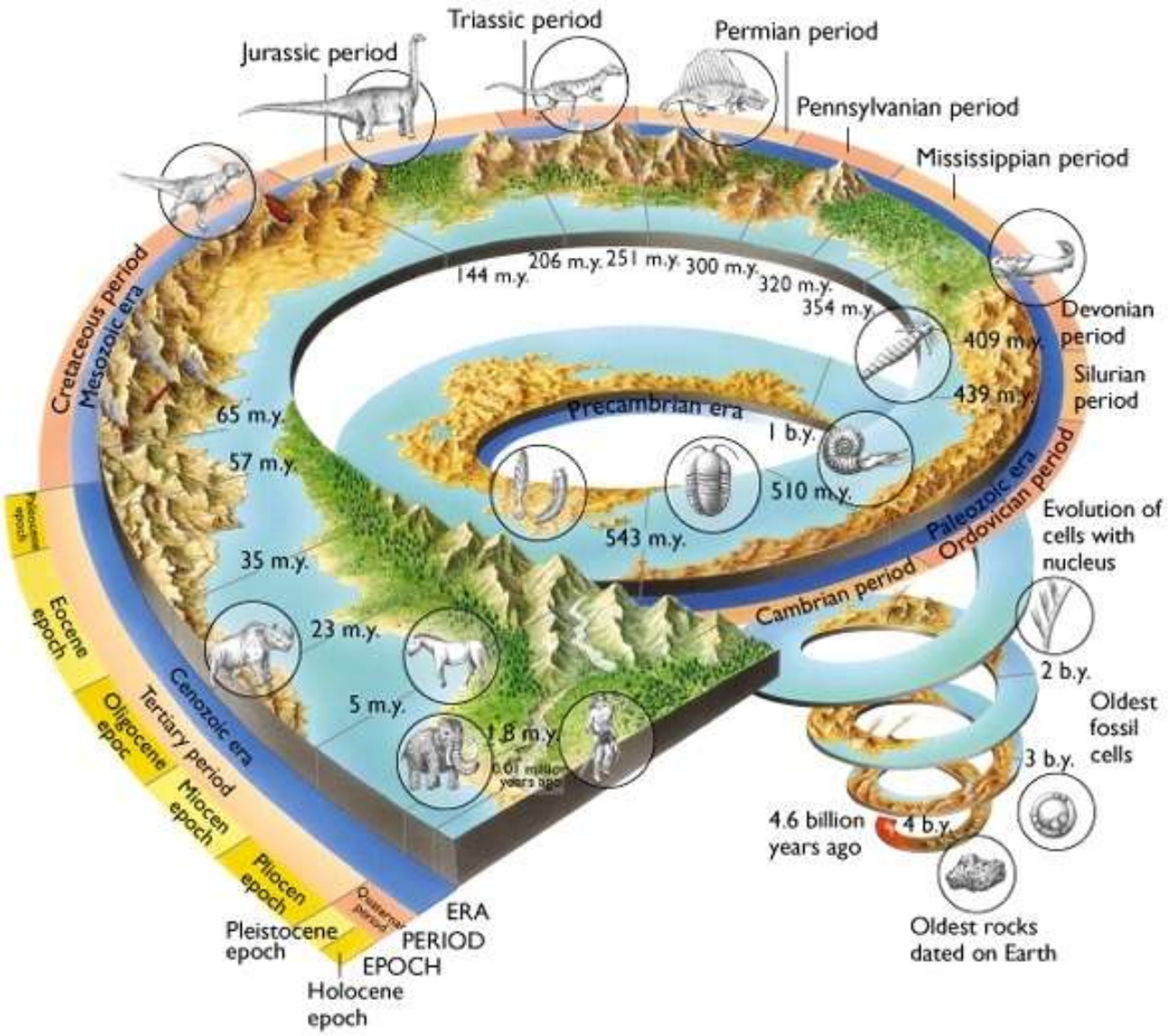
Geologic Time

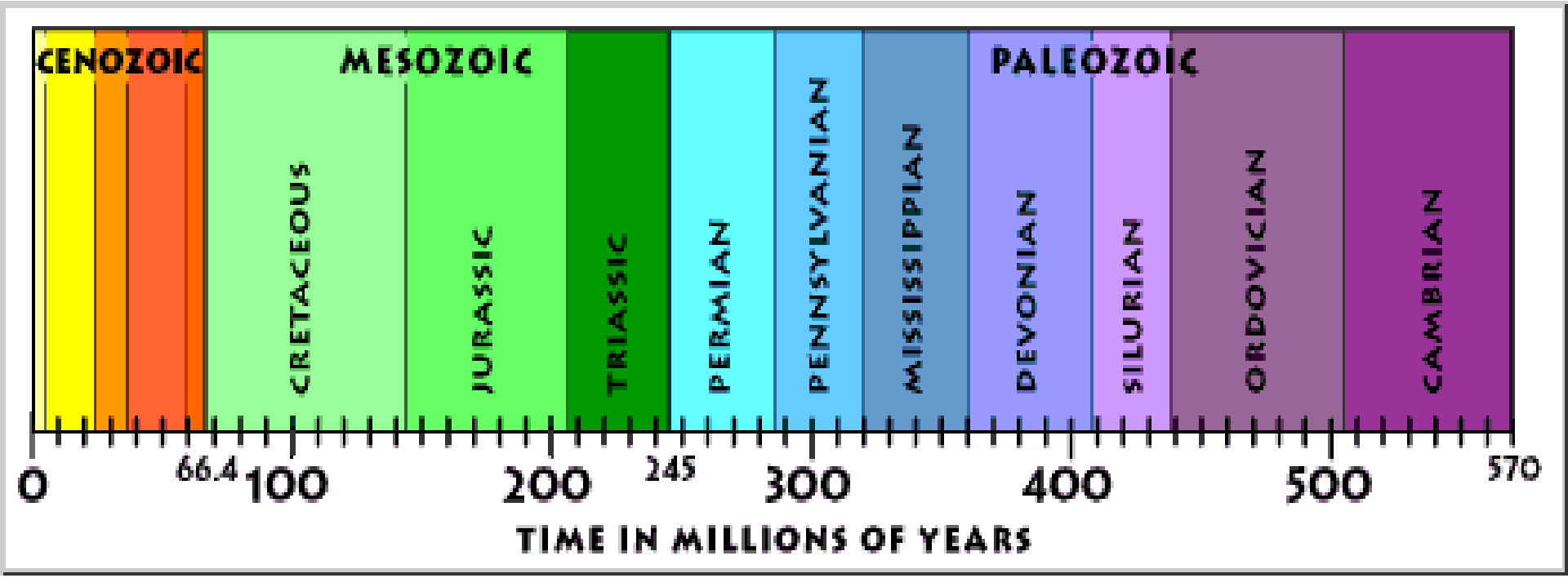
Mr. Skirbst

Geologic Time



Geologic Time Scale

Describing and dividing major events of Earth's history



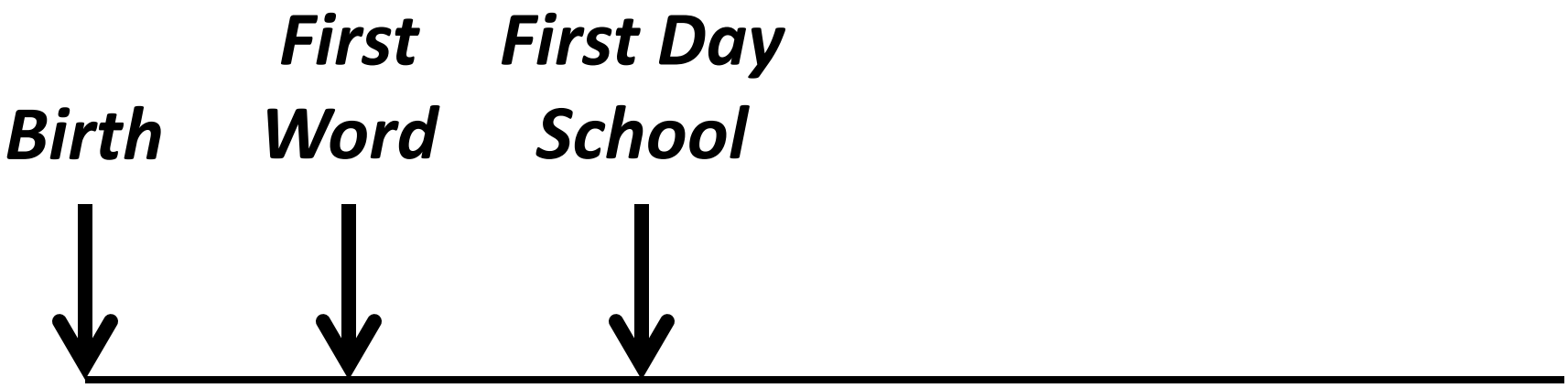
Like a timeline of your life!

Like a timeline of your life!

Birth

Like a timeline of your life!

Like a timeline of your life!



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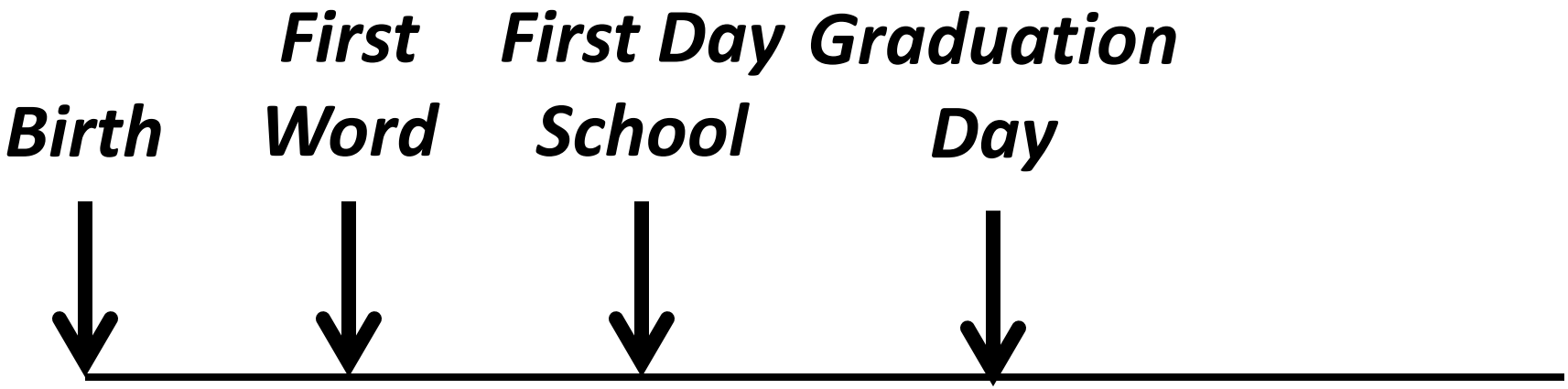
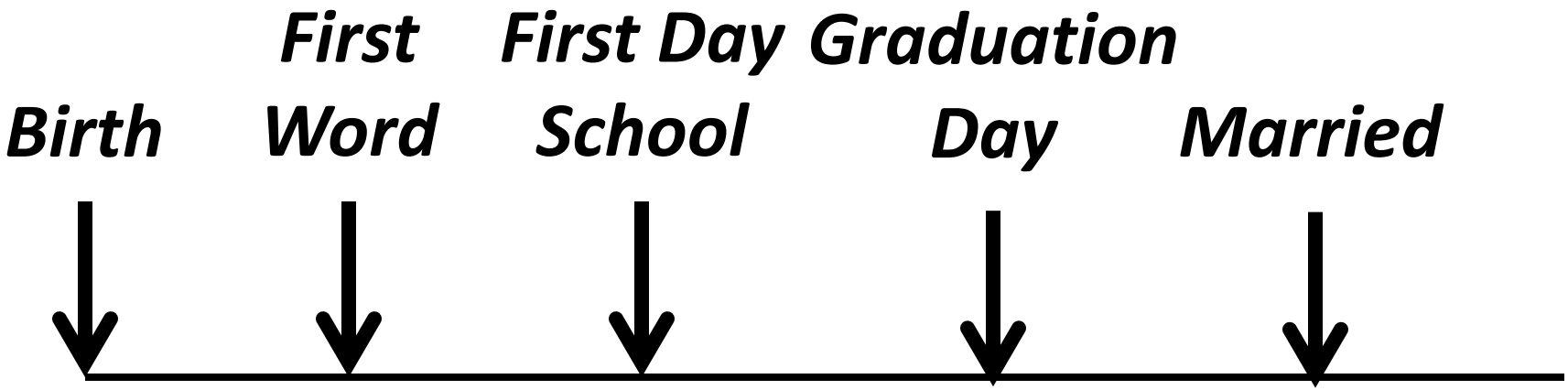


Like a timeline of your life!



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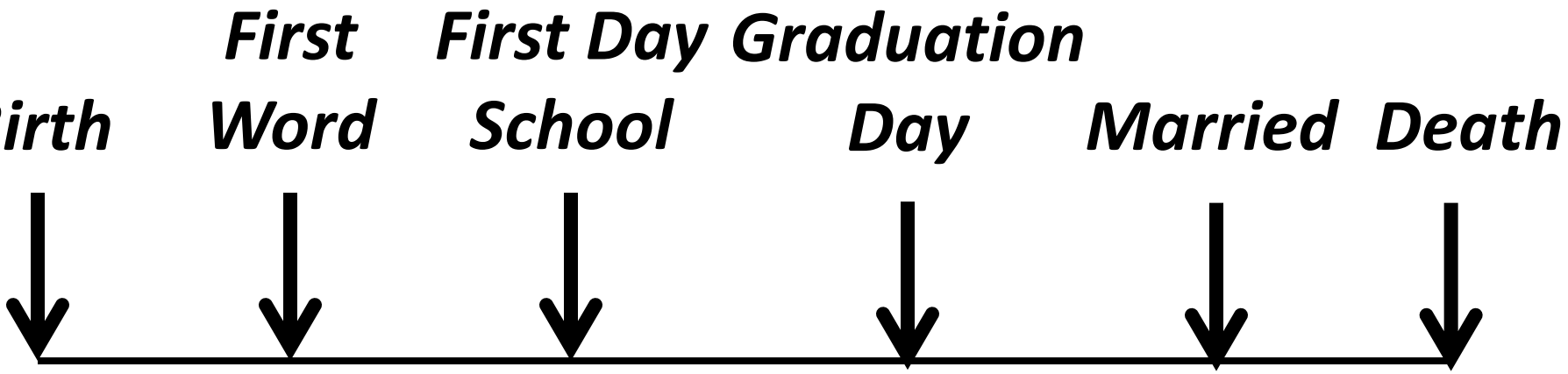


Geologic Time Scale

Geologic Time Scale

Era - longest division of geologic time

Geologic Time Scale

Era - longest division of geologic time

4 Major Eras

Geologic Time Scale

Era - longest division of geologic time

4 Major Eras

Period – sub-divisions of eras

Geologic Eras

Geologic Eras

1. *Precambrian - early Earth*

Geologic Eras

1. Precambrian
2. ***Paleozoic "old life"***

Geologic Eras

1. Precambrian
2. Paleozoic
3. ***Mesozoic "middle life"***

Geologic Eras

1. Precambrian
2. Paleozoic
3. Mesozoic
4. ***Cenozoic "current life"***

Precambrian Era

~ 4.6 bya – 570 mya

Precambrian Era

~ 4.6 bya – 570 mya

(bya= billion years ago

mya = million years ago)

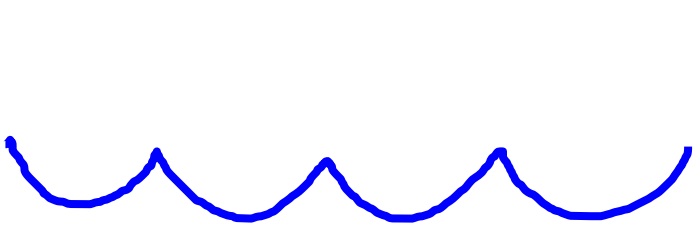
Precambrian Era

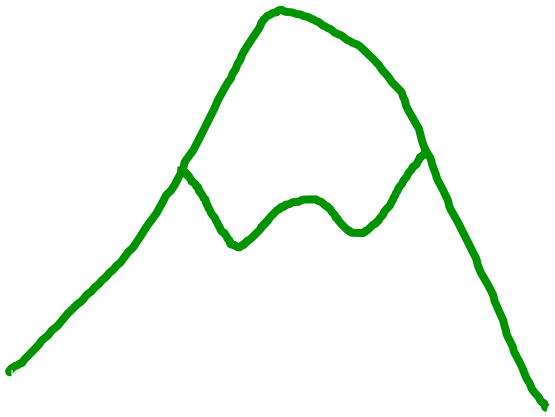
* ***Earth formed***

Precambrian Era

* Earth formed

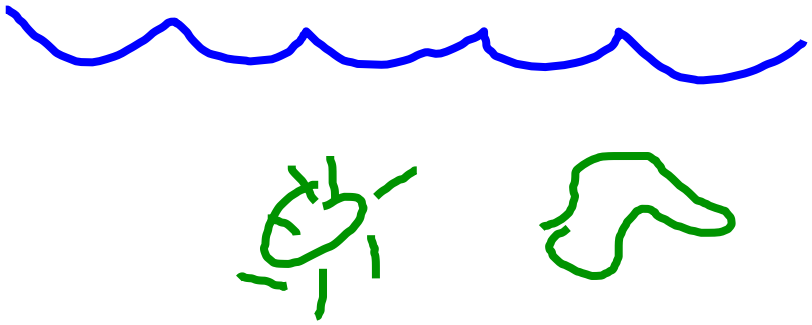
* ***Seas and mountains formed***





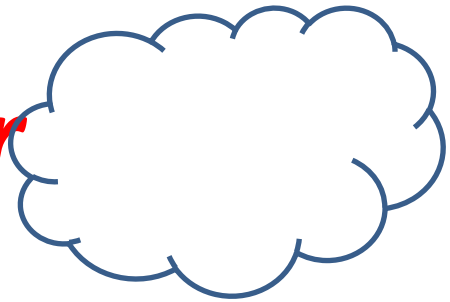
Precambrian Era

* Earth formed
* Seas and mountains formed
* ***Simple life-forms in sea***



Precambrian Era

* Earth formed
* Seas and mountains formed
* Simple life-forms in sea
* ***Oxygen builds up in air***



Paleozoic Era

570 mya – 225 mya

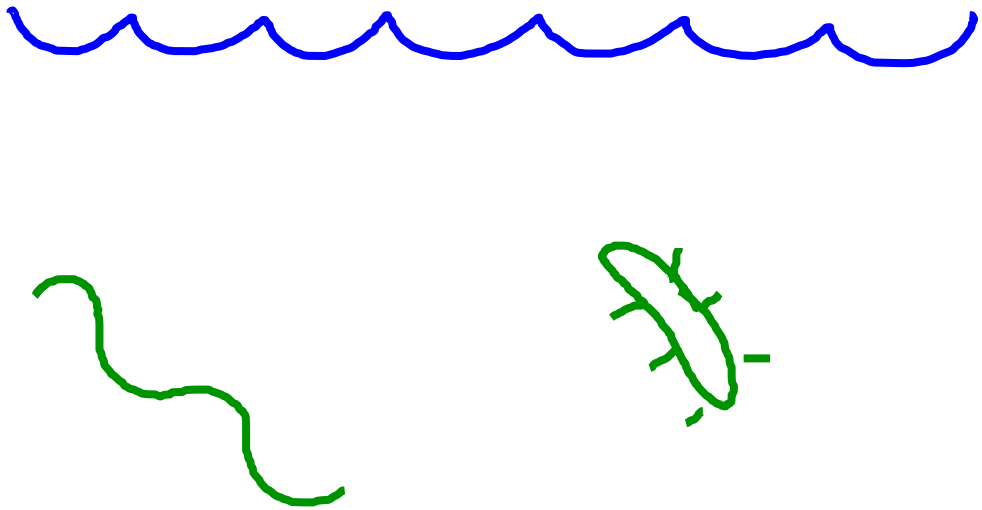
Paleozoic Era

570 mya – 225 mya

Divided into 6 periods based on major events

Periods of Paleozoic Era

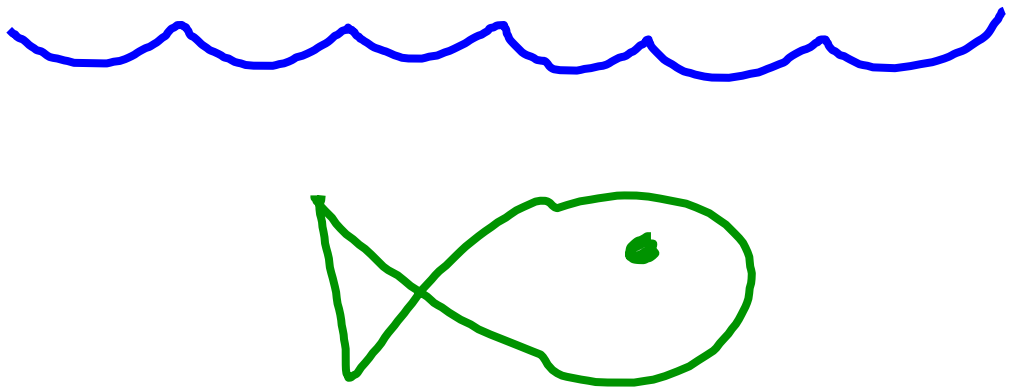
Cambrian – sea-dwelling inverts.



Periods of Paleozoic Era

Cambrian – sea-dwelling inverts.

Ordovician – first fish appear

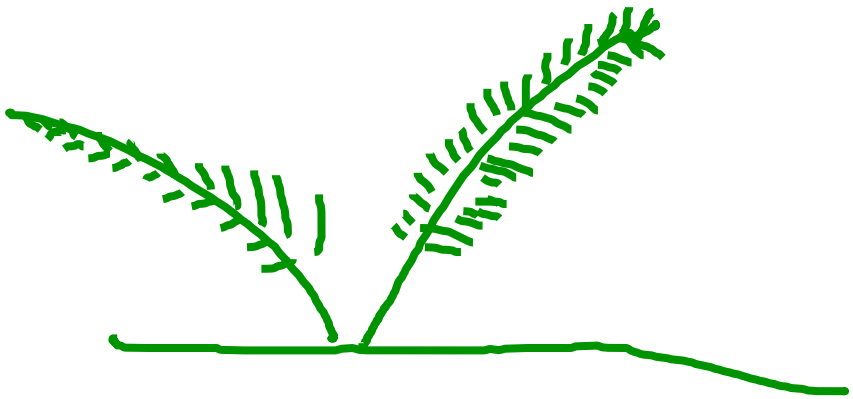


Periods of Paleozoic Era

Cambrian – sea-dwelling inverts.

Ordovician – first fish appear

Silurian – first land plants



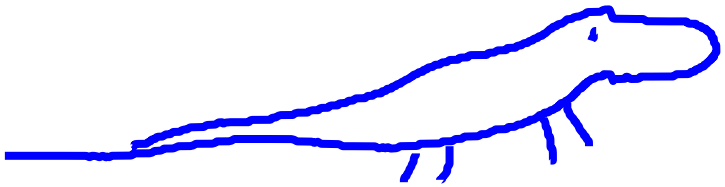
Periods of Paleozoic Era

Cambrian – sea-dwelling inverts.

Ordovician – first fish appear

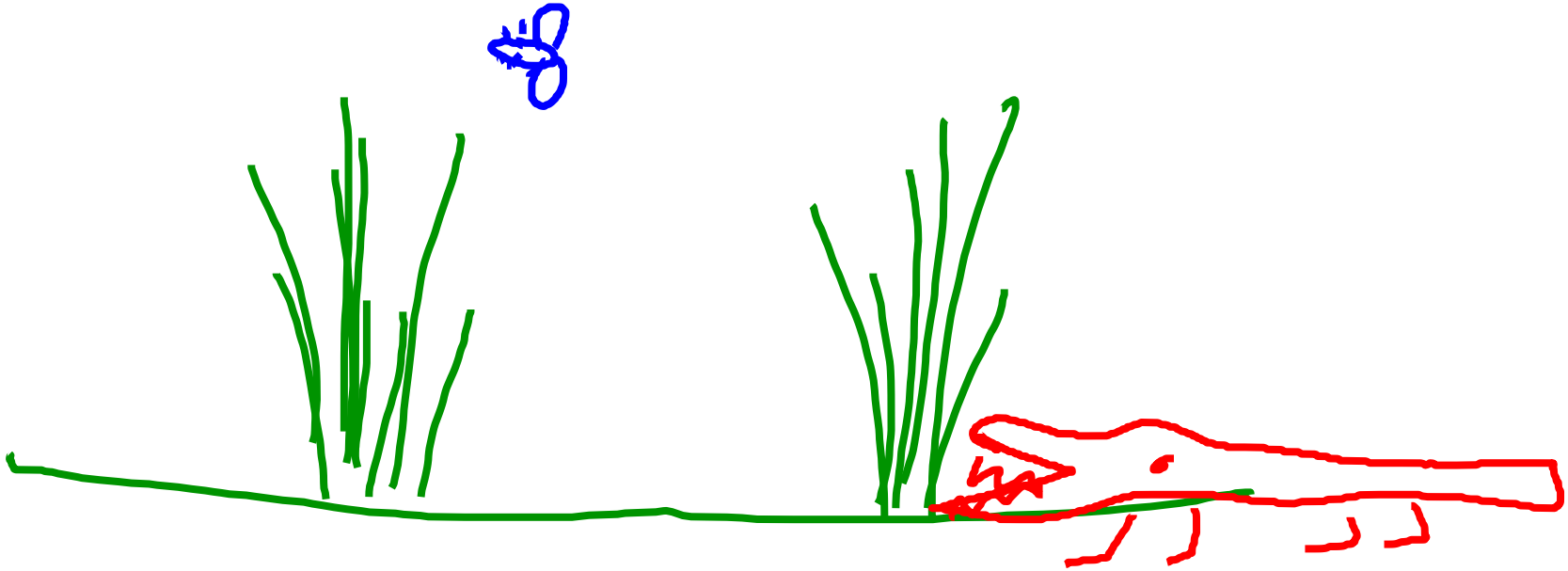
Silurian – first land plants

Devonian – first amphib. + forests



Periods of Paleozoic Era

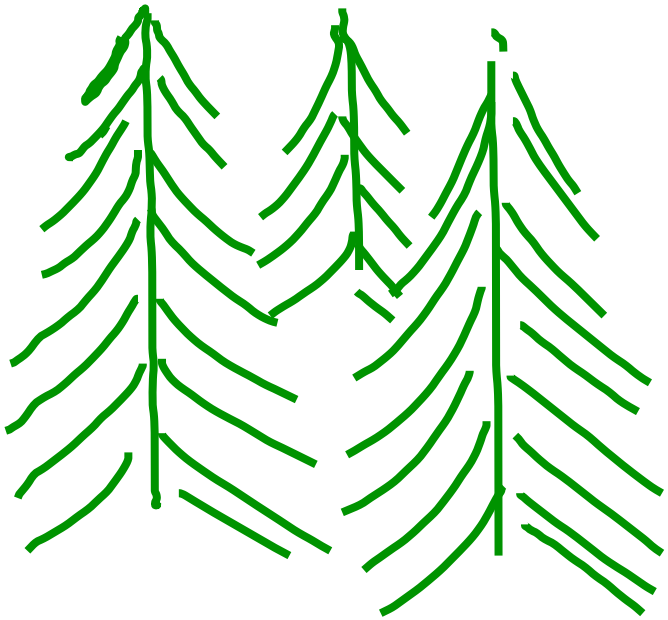
Carboniferous – swamps, ferns, insects, reptiles

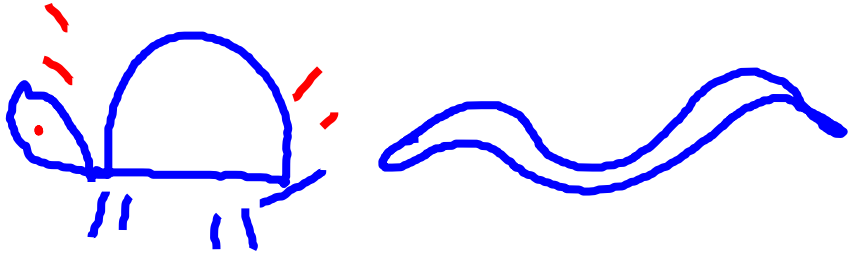


Periods of Paleozoic Era

Carboniferous – swamps, ferns etc

Permian – conifers, lots of reptiles





Periods of Paleozoic Era

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Silurian – first land plants

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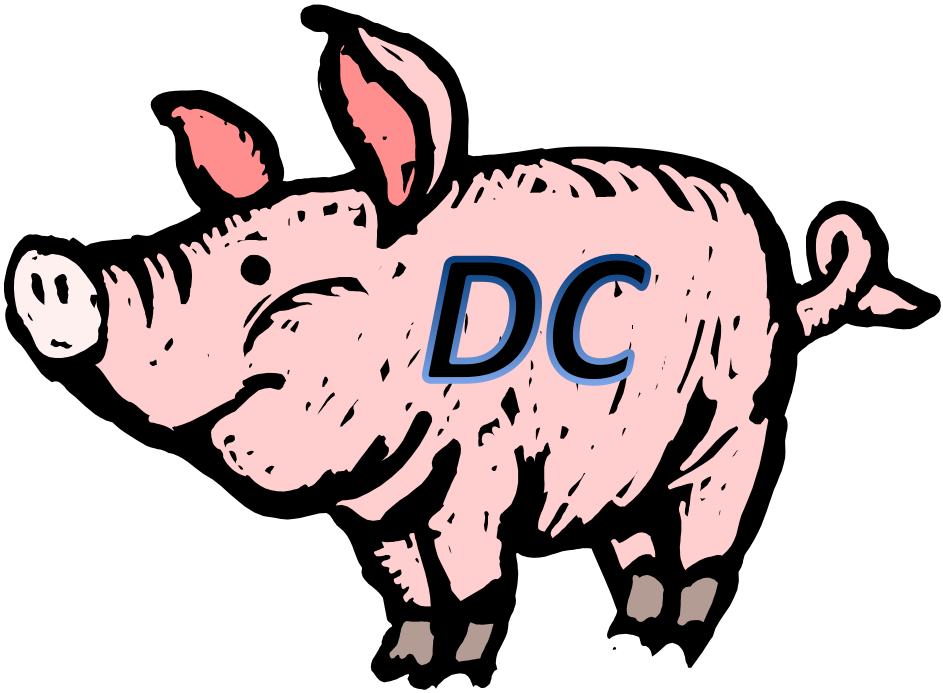
Carboniferous – swamps, ferns etc

Permian – conifers, lots of reptiles

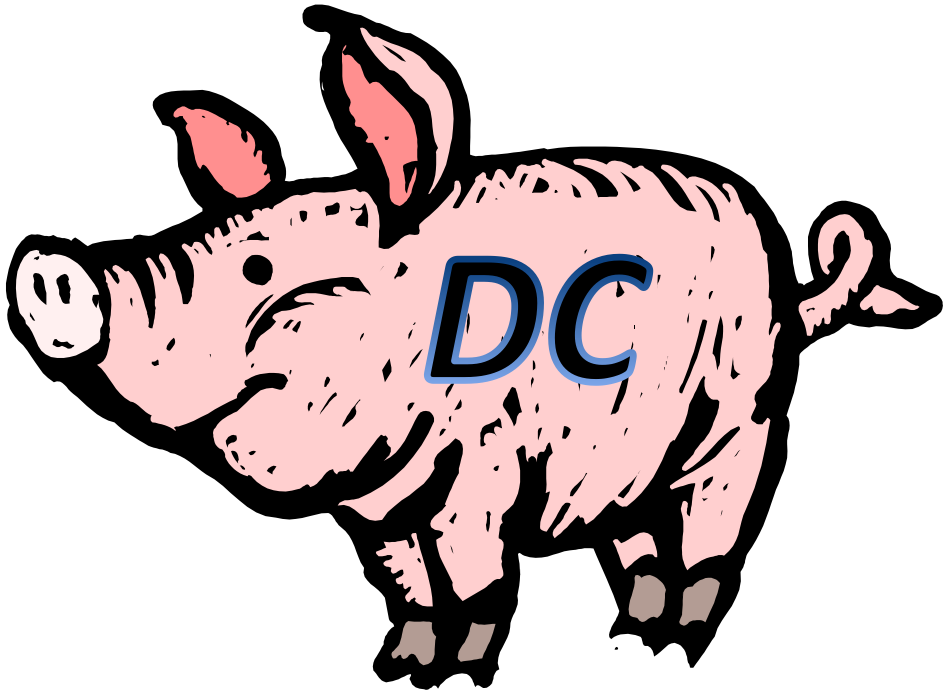
Periods of Paleozoic Era

Memory aid: "COSDCP"



Periods of Paleozoic Era

Memory aid: “COSDCP”



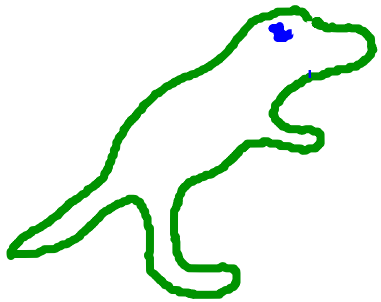
“Come Over,” Said DC Pig

Mesozoic Era

225 mya – 65 mya

Periods of Mesozoic Era

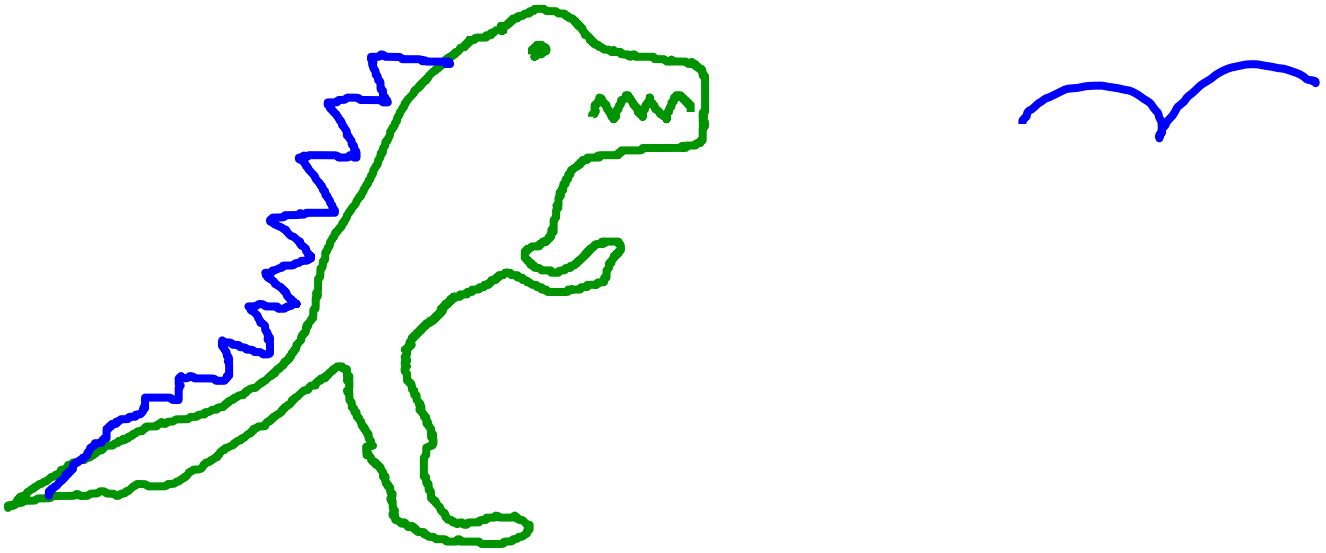
Triassic – 1st dinosaurs + mammals



Periods of Mesozoic Era

Triassic – 1st dinosaurs + mammals

Jurassic – 1st birds + big dinos



Periods of Mesozoic Era

Triassic – 1st dinosaurs + mammals

Jurassic – 1st birds + big dinos

Cretaceous – 1st flowers + dinos die out

Periods of Mesozoic Era

Triassic

Jurassic

Cretaceous

Periods of Mesozoic Era

Tiger Juggling Chainsaws

Triassic

Jurassic

Cretaceous

Extinction Theory

- *Explains the mass extinction*

C-T Boundary

Proposed by Walter & Luis Alvarez

C-T Boundary

*Proposed by Walter & Luis Alvarez

Radioactive sediment found between Cretaceous & Tertiary Periods.

C-T Boundary

*Proposed by Walter & Luis Alvarez

*Radioactive sediment found between **C**retaceous & **T**ertiary Periods.

Due to asteroid collision

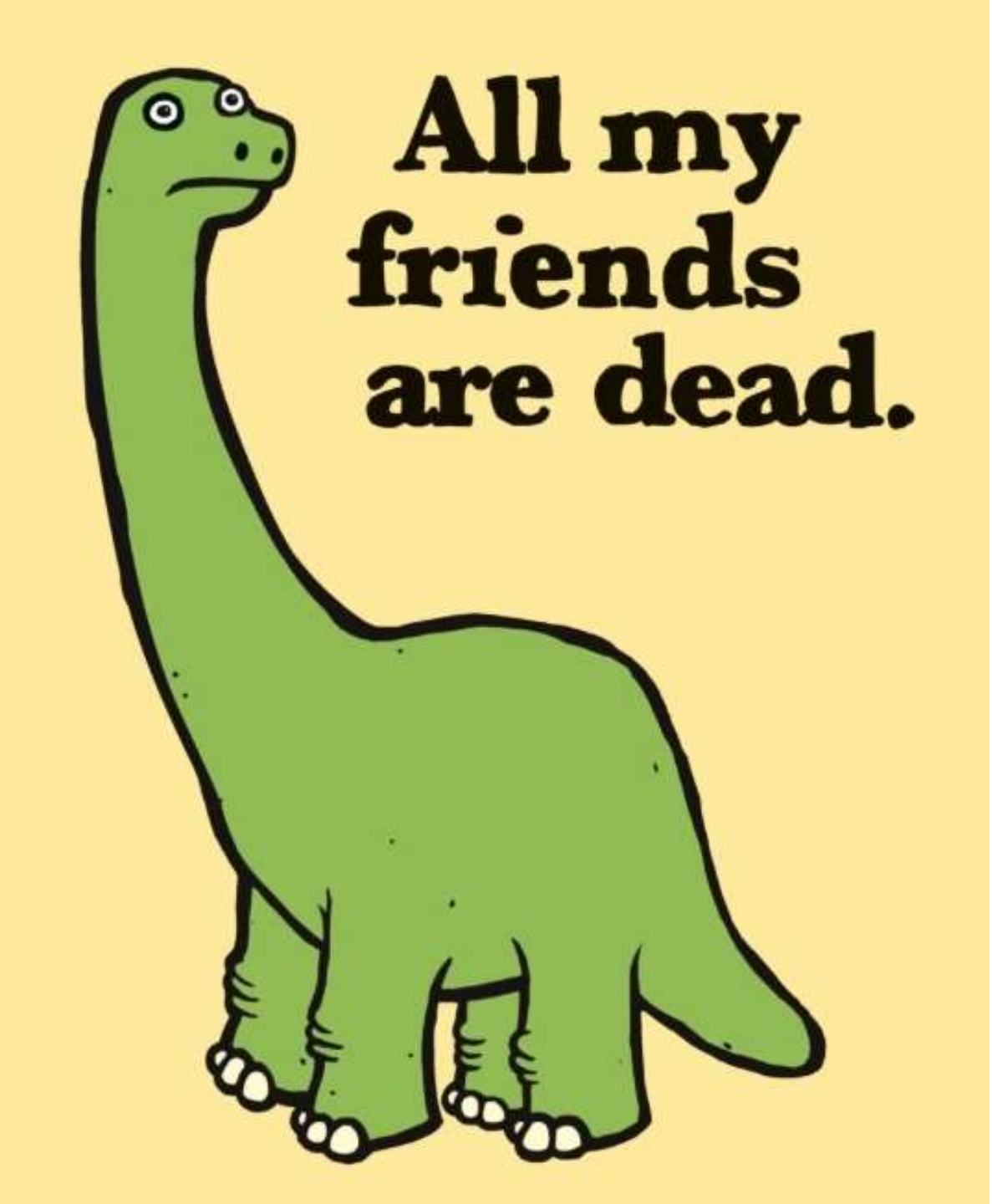
C-T Boundary

*Proposed by Walter & Luis Alvarez

*Radioactive sediment found between **C**retaceous & **T**ertiary Periods.

*Due to asteroid collision

Caused dinosaur extinction


All my
friends
are dead.

Cenozoic Era

65 mya – Present

Periods of Cenozoic Era

Tertiary – mammals, present-day features

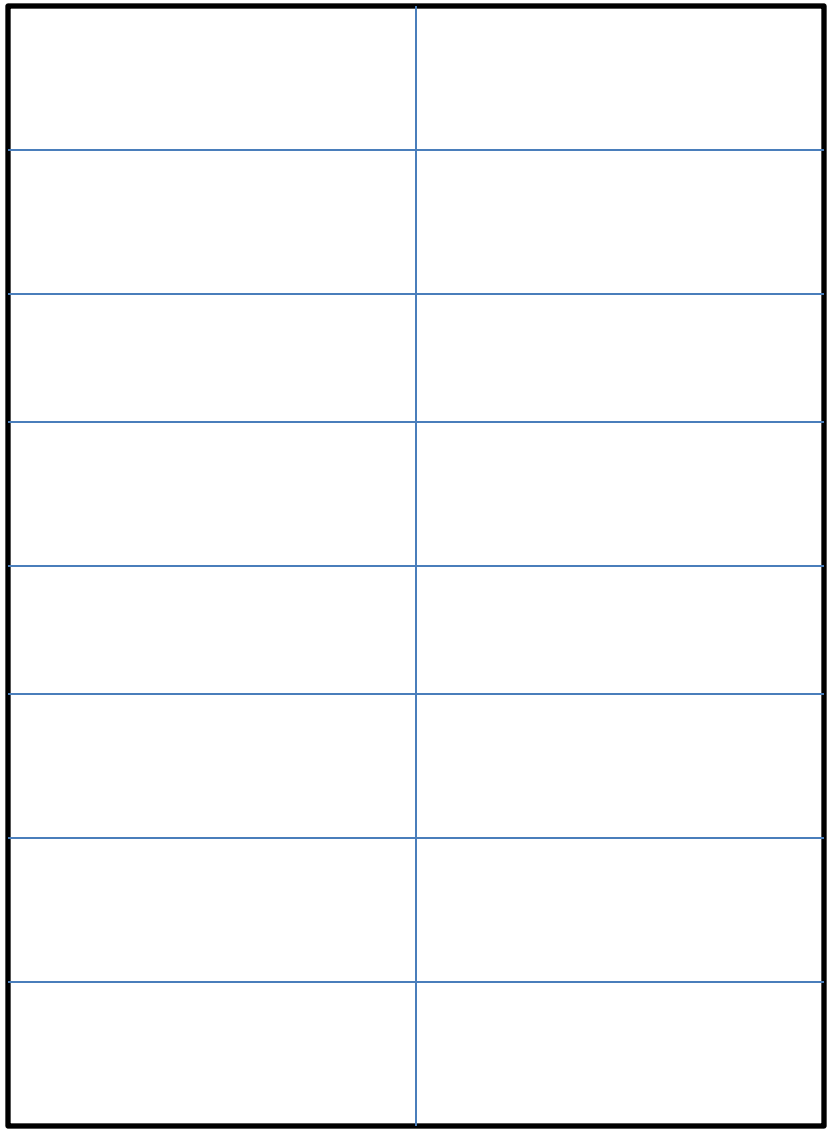
Periods of Cenozoic Era

Tertiary – mammals, present-day features

Quaternary – humans, ice ages

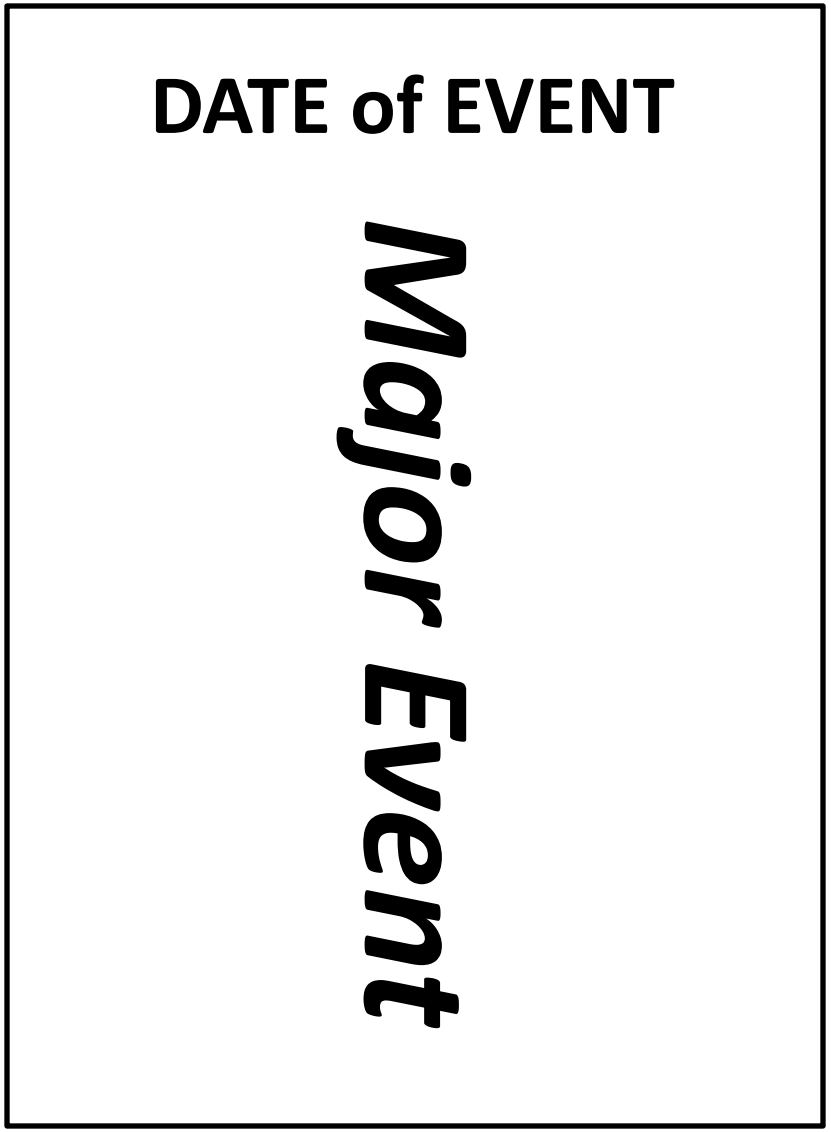
Geologic Time Scale

Geologic Time Lab

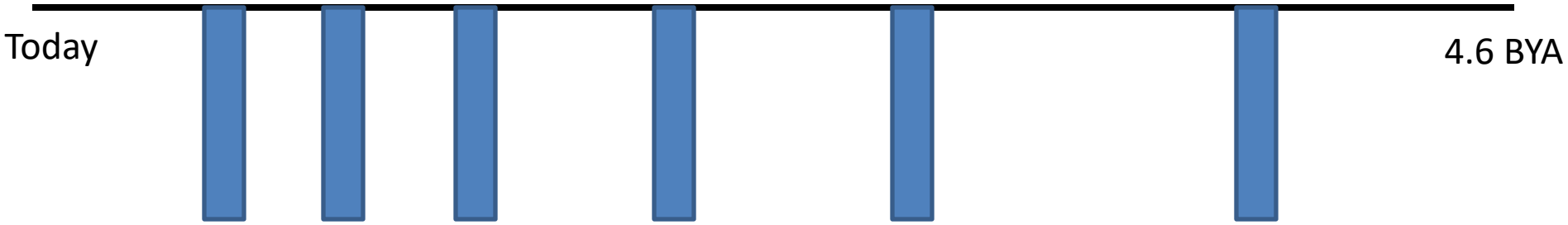


Geologic Time Lab

Color code according to Era



Geologic Time Lab



Geologic Time Lab