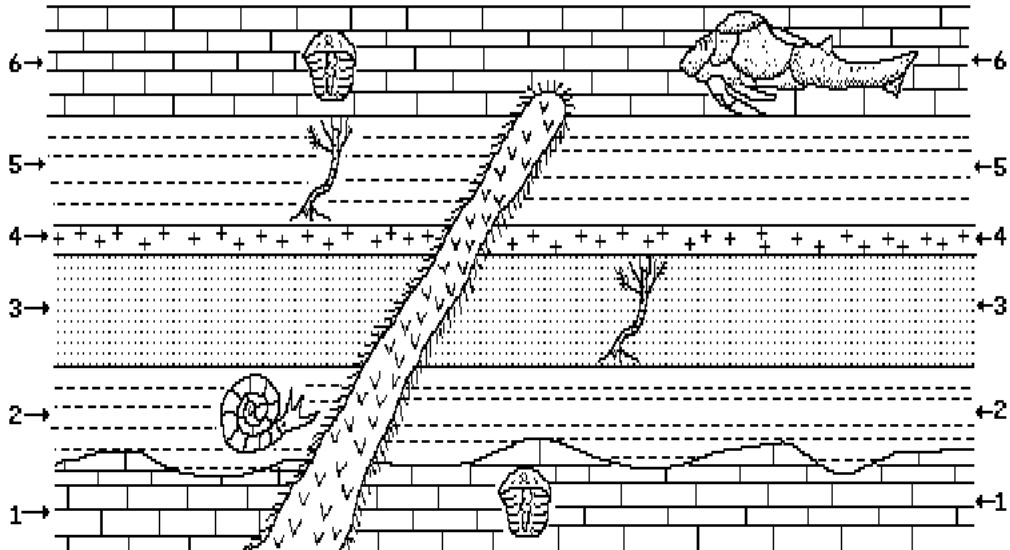
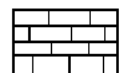
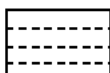




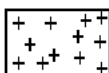
Key:



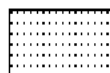
LIMESTONE



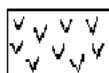
SHALE



VOLCANIC
ASH



SANDSTONE



BASALT



CONTACT
METAMORPHISM

Models of Fossils:



ARMORED FISH



ECHINODERMS
(CRINOIDS)



MOLLUSKS

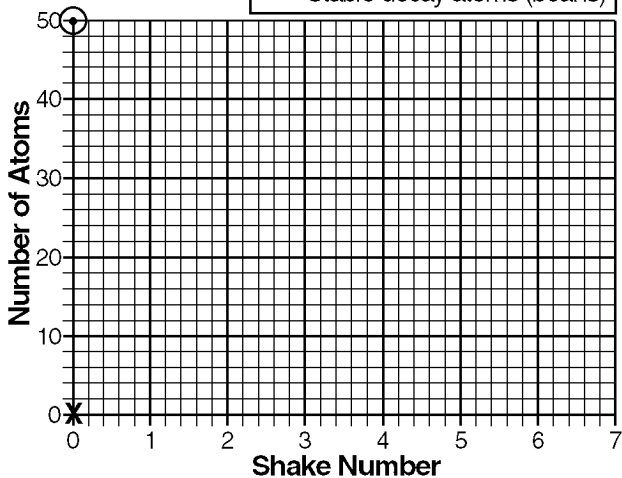


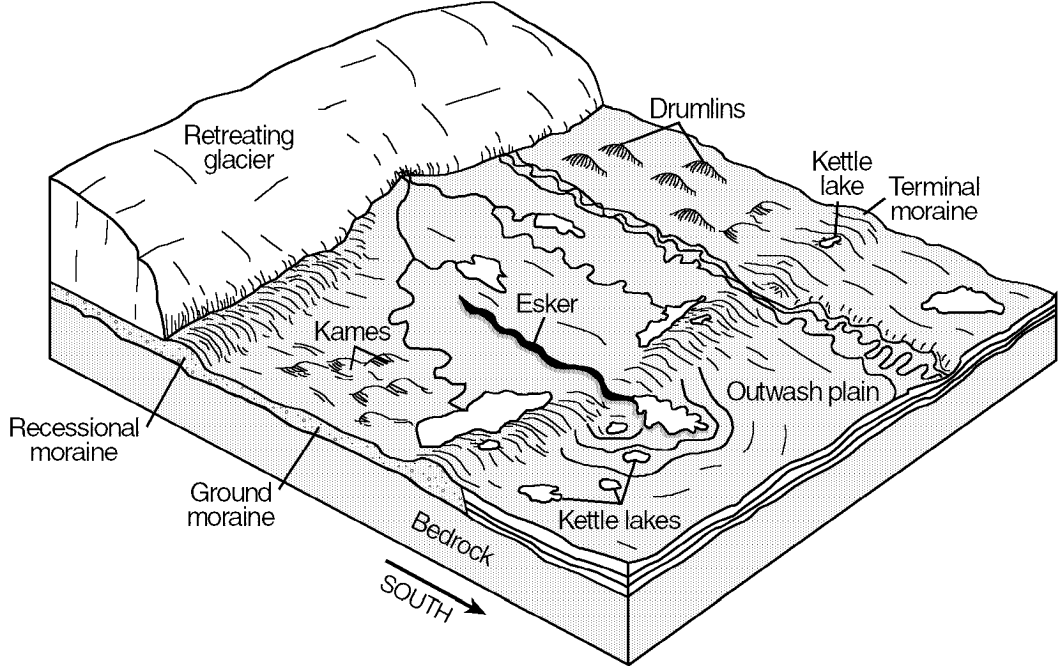
TRILOBITES

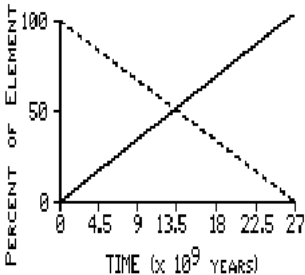
KEY:

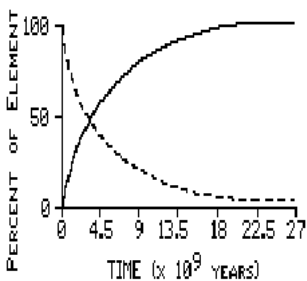
— Radioactive atoms (pennies)
..... Stable decay atoms (beans)

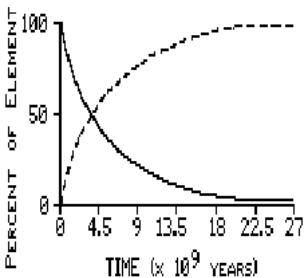
Shake Number	Number of Radioactive Atoms (pennies)	Number of Stable Decay Atoms (beans)
0	50	0
1	25	25
2	14	36
3	7	43
4	5	45
5	2	48
6	1	49
7	0	50

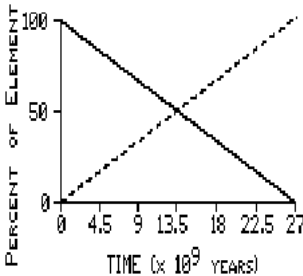








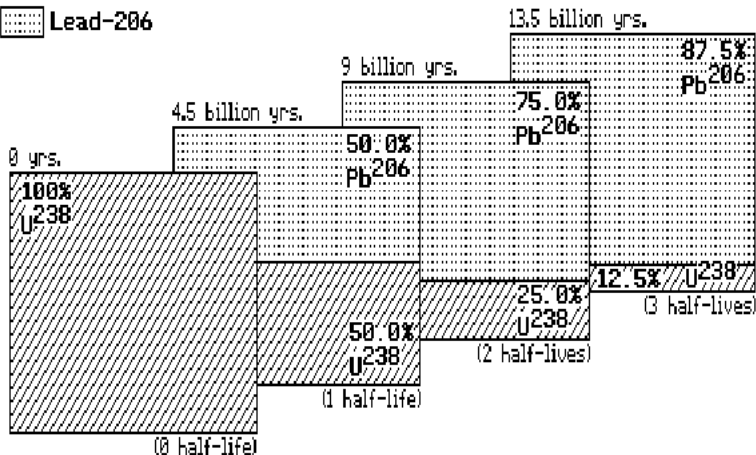


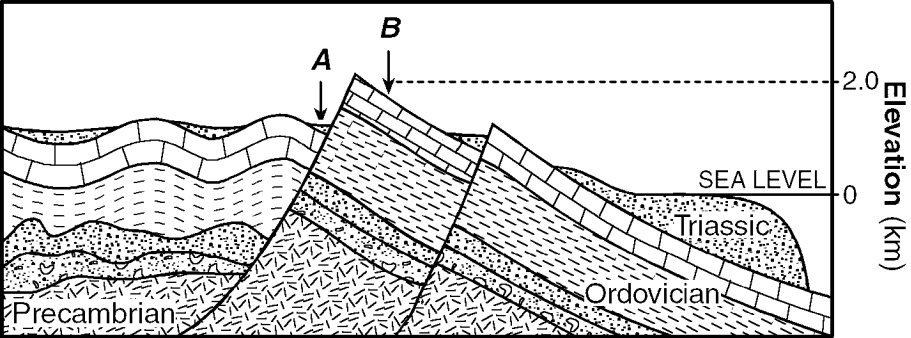


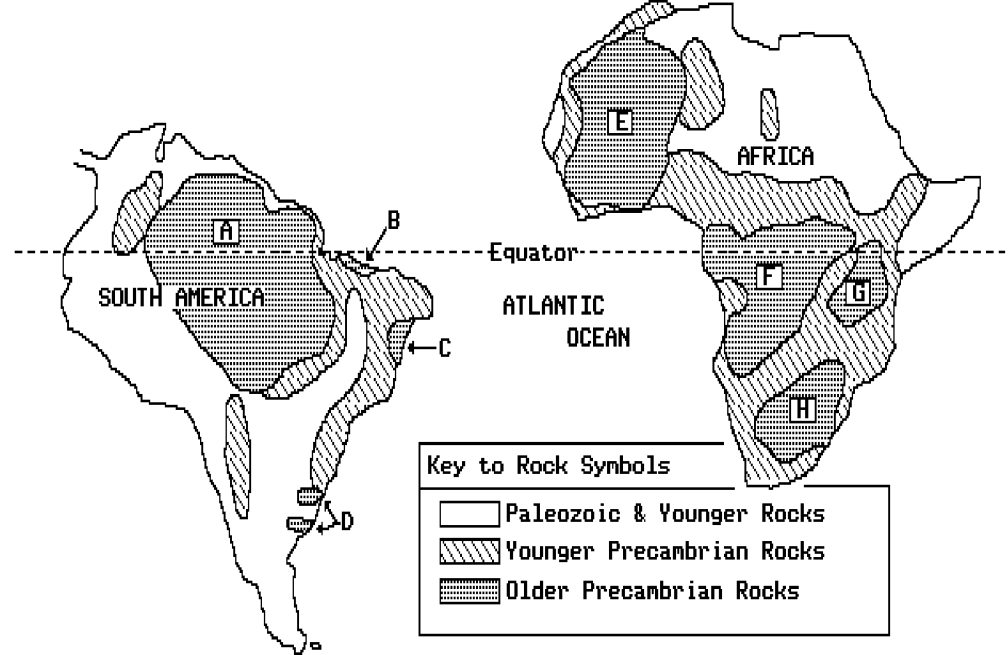
Radioactive Decay of Uranium-238

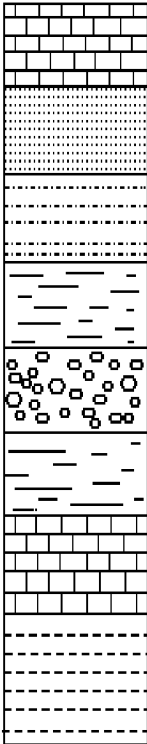
 Uranium-238

 Lead-206









Fossiliferous
limestone

Red
Sandstone

Siltstone

Shale

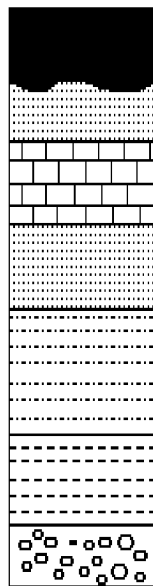
Conglomerate

Black Shale

Limestone

Shale
(contains
trilobite
fossils)

COLUMN A



Glacial
deposits

Sandstone

Fossiliferous
limestone

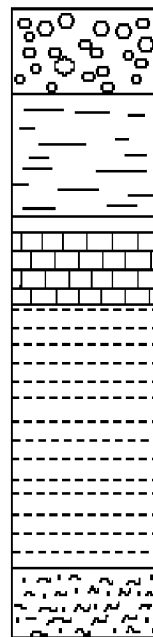
Red
sandstone

Siltstone

Shale

Conglomerate

COLUMN B



Conglomerate

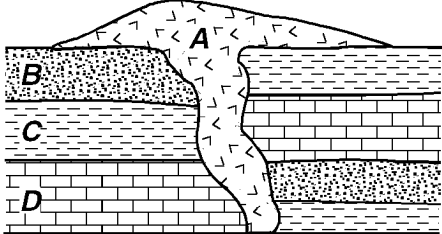
Black Shale

Limestone

Shale
(contains
trilobite
fossils)

Grey
sandstone

COLUMN C



KEY:



Igneous Rock



Shale

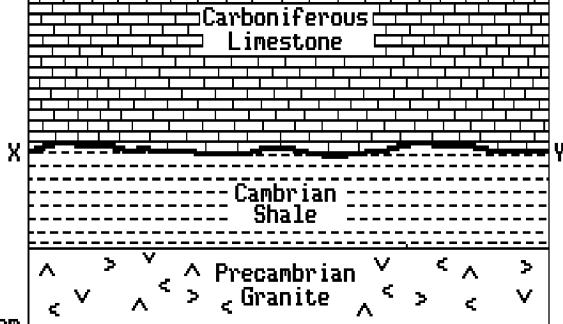


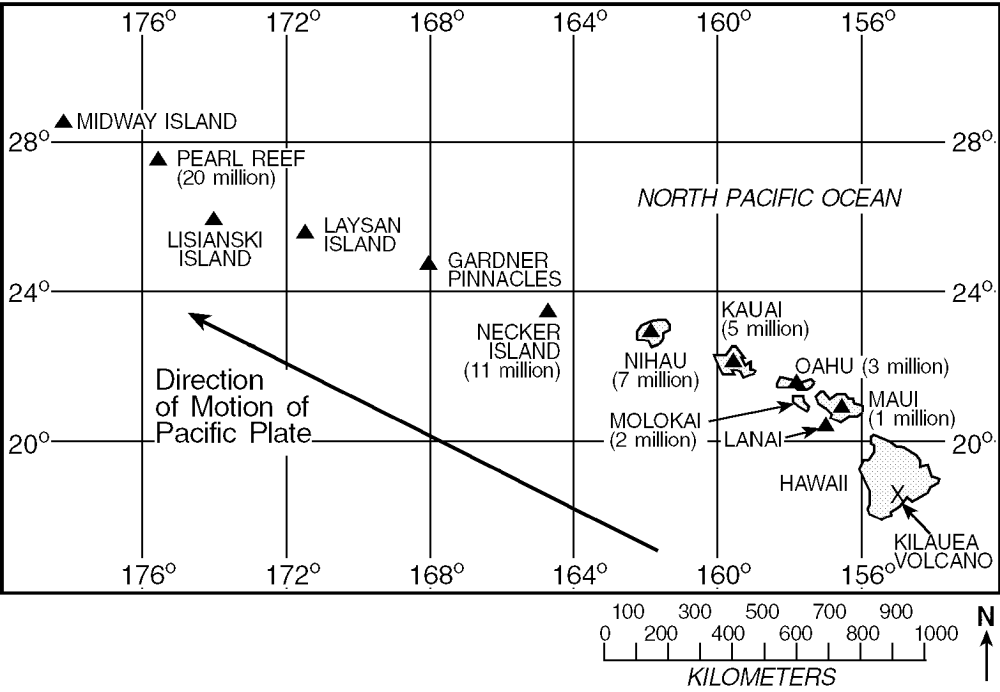
Limestone



Sandstone

Top





OLDER

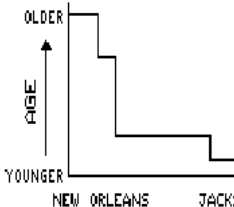
AGE



YOUNGER

NEW ORLEANS

JACKSON



OLDER

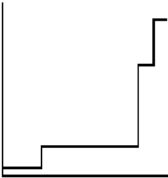
AGE

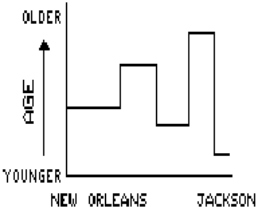


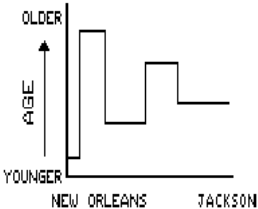
YOUNGER

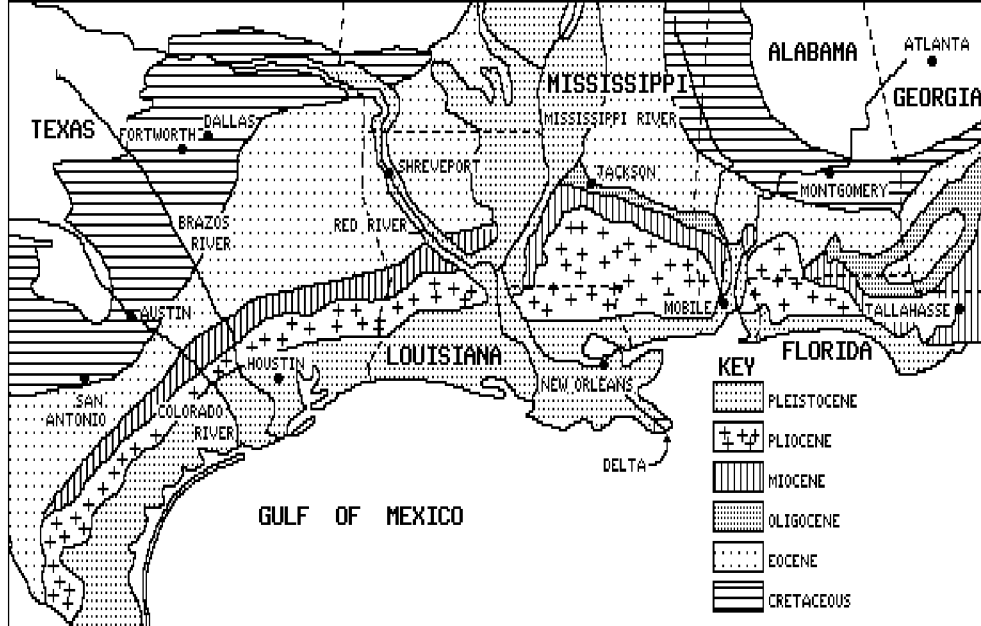
NEW ORLEANS

JACKSON





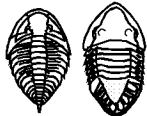




----- STATE BOUNDARY LINES

TOP--

DALMANITES
AND ISOTELUS



ISOTELUS



CALYMENE



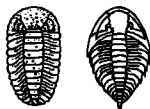
PHACOPS



CALYMENE



PHACOPS AND
DALMANITES



PHACOPS



ISOTELUS



ISOTELUS



DALMANITES
AND CALYMENE



PHACOPS



DALMANITES



PHACOPS



CALYMENE



DALMANITES
AND CALYMENE



ISOTELUS



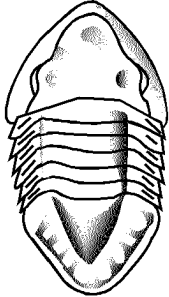
BOTTOM--

A

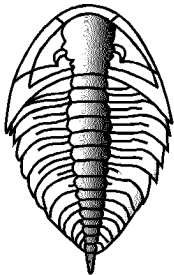
B

C

D



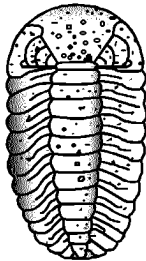
Isotelus
(Ordovician Period)



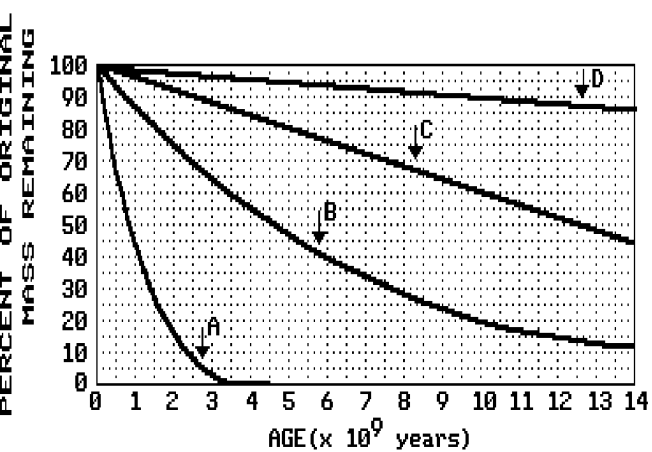
Dalmanites
(Silurian Period)

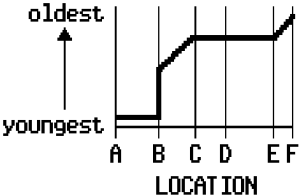


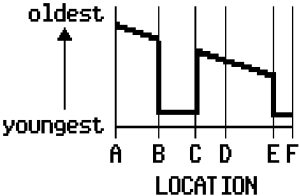
Calymene
(Silurian Period)

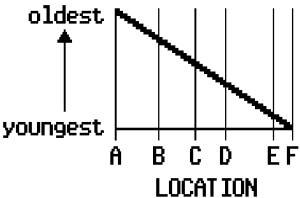


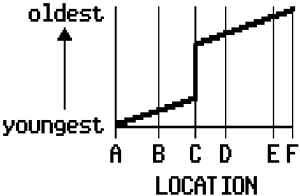
Phacops
(Devonian Period)

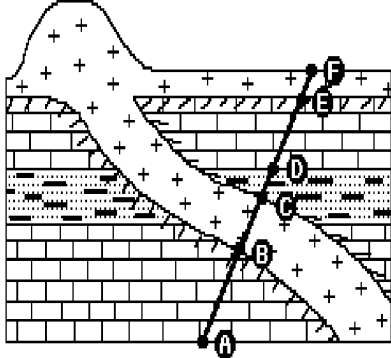












KEY:



Igneous Rock



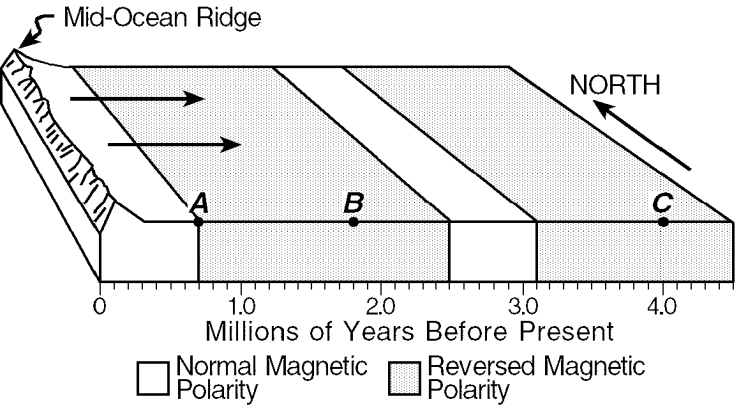
Limestone



Siltstone

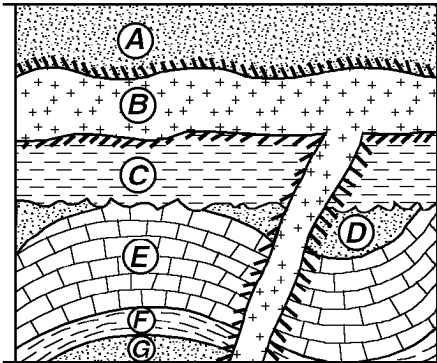


Contact
Metamorphism



TOP

BOTTOM



KEY:



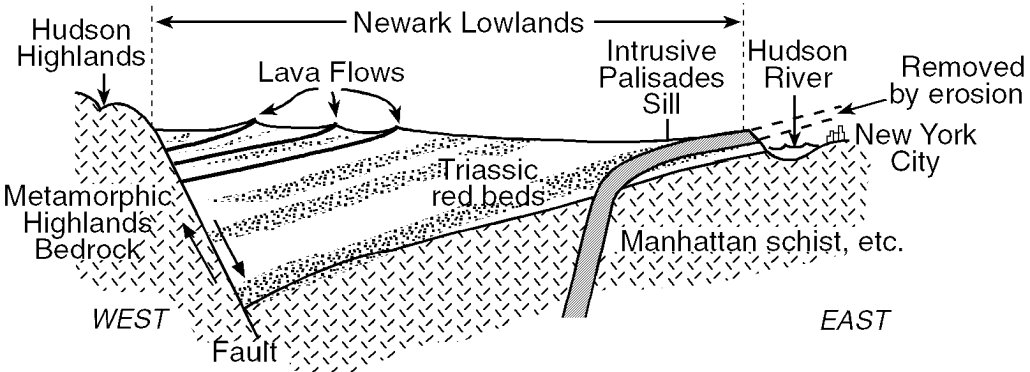
Igneous Rock



Sedimentary Rock



Contact
Metamorphism



[illegible]

Prevailing Wind from West to East

KEY:



Conglomerate



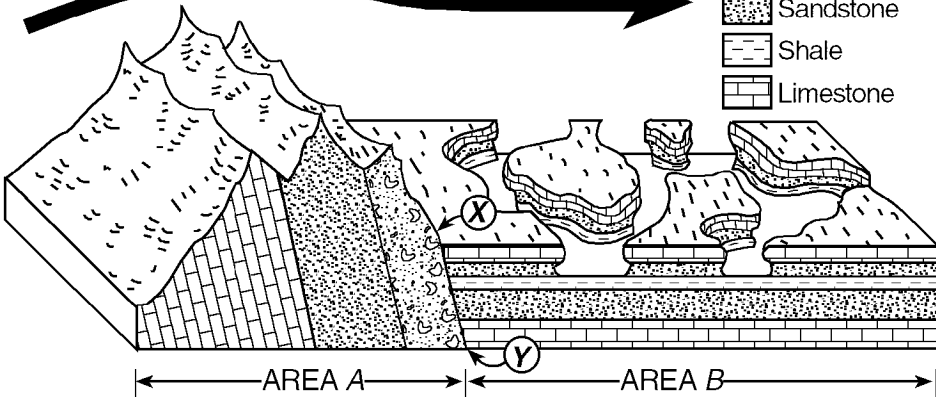
Sandstone



Shale



Limestone



(not drawn to scale)

Top—

D

C

B

A

Bottom—

Top—

A

D

B

A

Bottom—

Top -

E

B

F

C

Bottom -

Top—

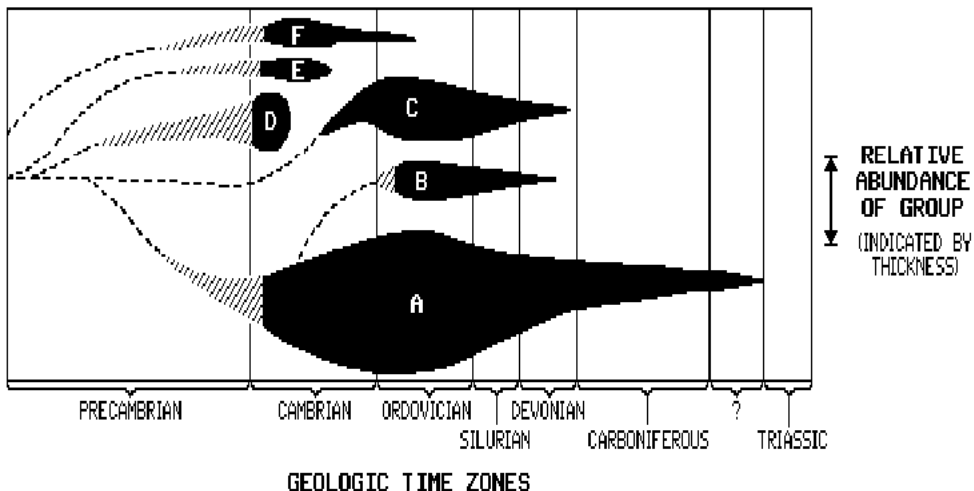
A

C

F

D

Bottom—

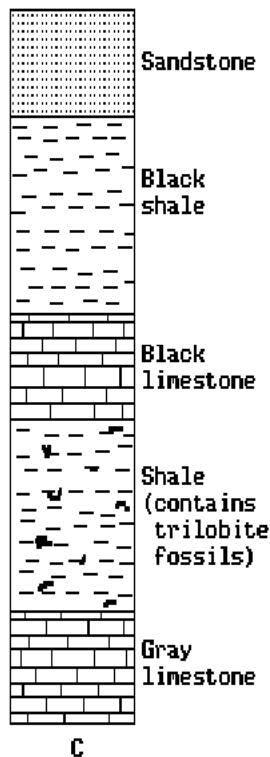
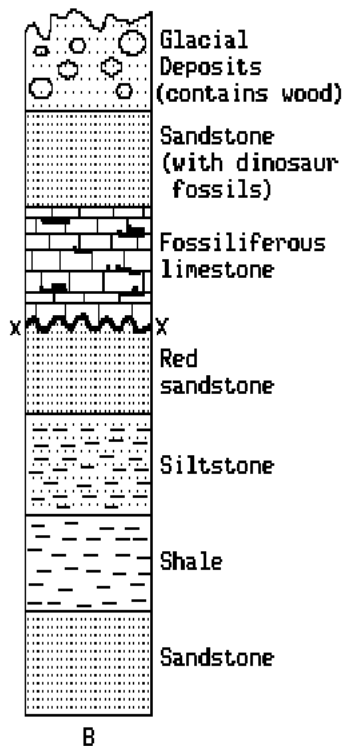
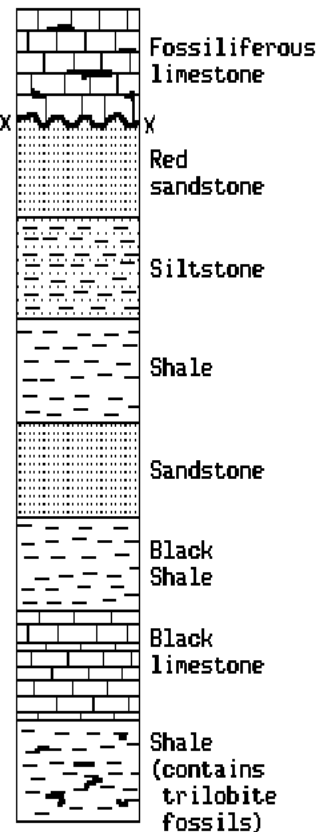


Key to Symbols:

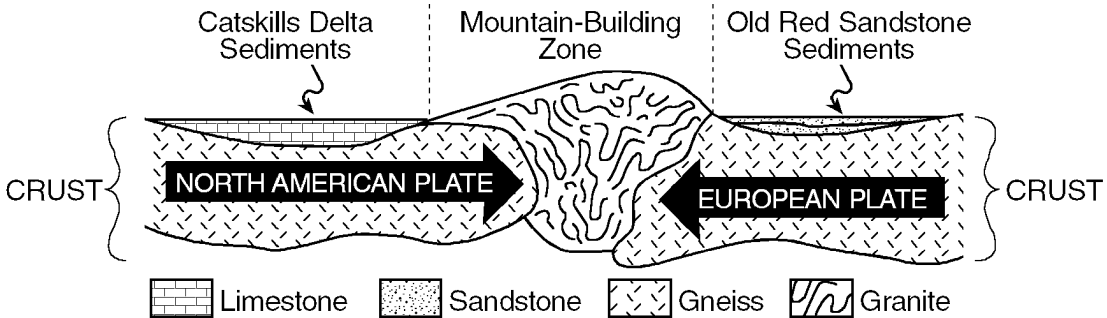
Population based on fossil record

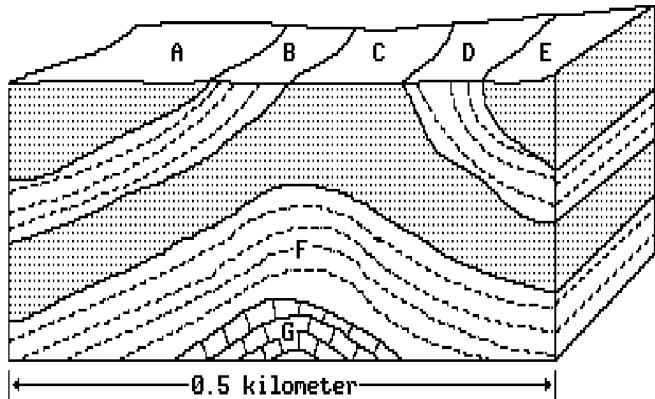
Population presumed: fossil evidence rare

Assumed evolutionary relationship



ACADIAN MOUNTAIN-BUILDING





III

V

M	D	S	O	C
---	---	---	---	---

III

V

C	S	D	M	O
---	---	---	---	---

III

V

C	O	S	D	M
---	---	---	---	---

III

V

