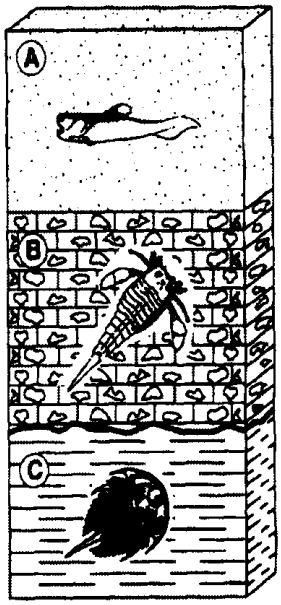
Name: _____ Date _____ Period _____

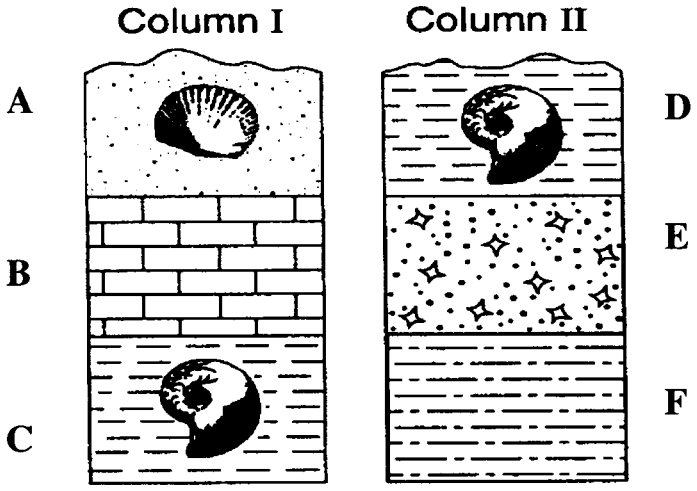
Fossils and Relative Dating Worksheet

_____ 1. Using the diagram below, which of the following fossils (A, B or C) is the oldest? How do you know?



_____ 2. What is the order of the layers? Which relative dating technique(s) did you use to figure out the order of the layers?

Examine the following diagrams. Columns I and II contain rock layers A, B, C and D, E, F. Both columns were taken from the same dig site.

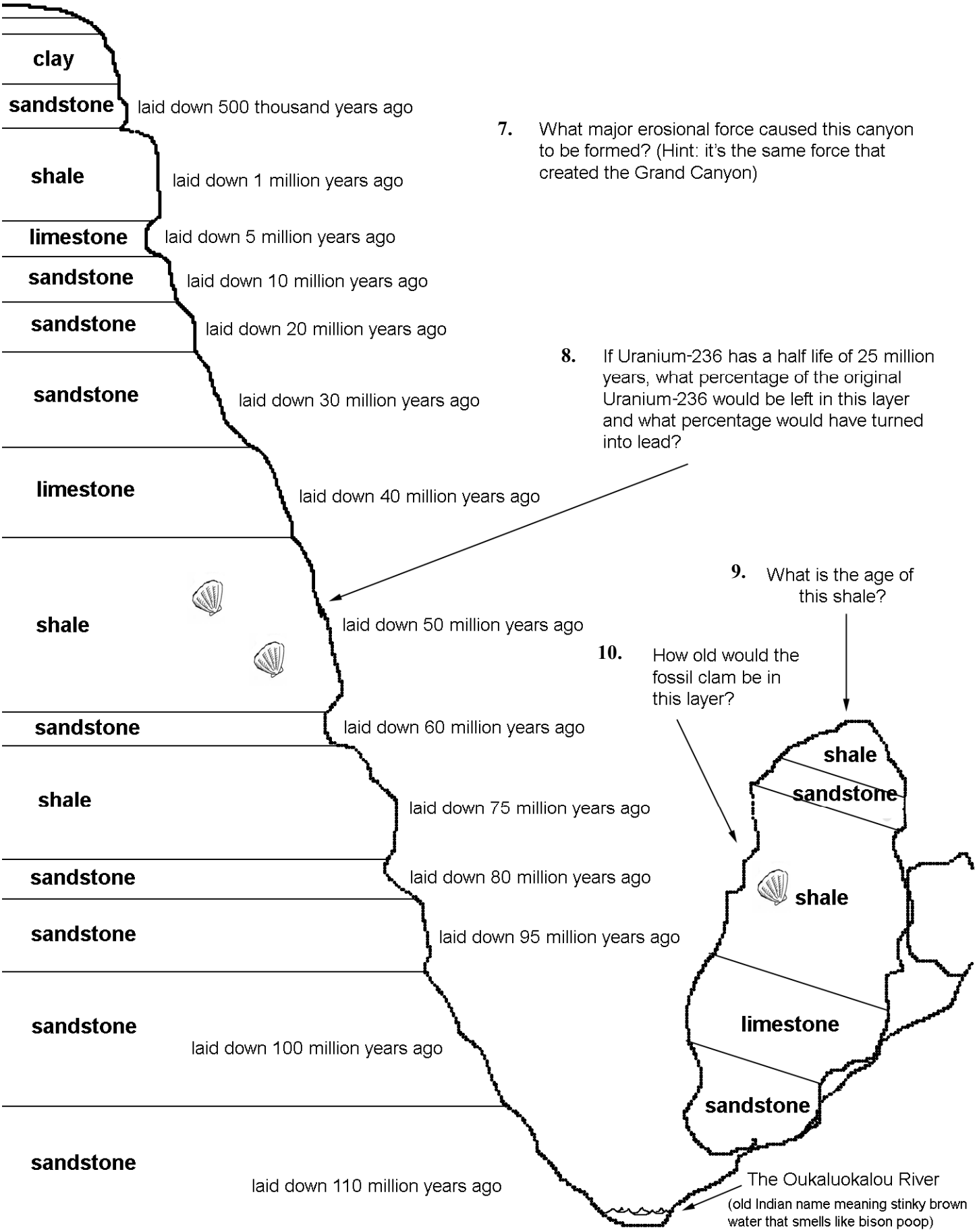


3. Which two layers are of approximately the same age? How do you know?

4. Which layer is the oldest? How do you know?

5. Which layer is the youngest? How do you know?

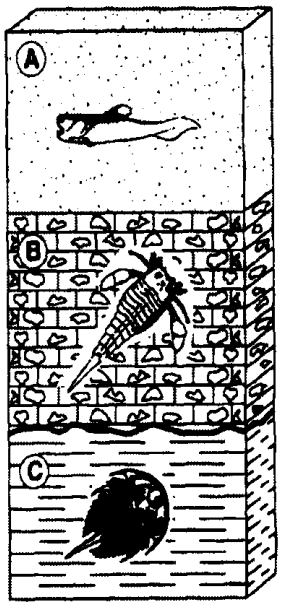
6. Has any of the rock layers undergone metamorphism? How do you know?


clay
sandstone
laid down 500 thousand years ago
shale
laid down 1 million years ago
limestone
laid down 5 million years ago
sandstone
laid down 10 million years ago
sandstone
laid down 20 million years ago
sandstone
laid down 30 million years ago
limestone
laid down 40 million years ago
shale
laid down 50 million years ago
sandstone
laid down 60 million years ago
shale
laid down 75 million years ago
sandstone
laid down 80 million years ago
sandstone
laid down 95 million years ago
sandstone
laid down 100 million years ago
sandstone
laid down 110 million years ago
7. What major erosional force caused this canyon to be formed? (Hint: it's the same force that created the Grand Canyon)
8. If Uranium-236 has a half life of 25 million years, what percentage of the original Uranium-236 would be left in this layer and what percentage would have turned into lead?
9. What is the age of this shale?
10. How old would the fossil clam be in this layer?
shale
sandstone
shale
limestone
sandstone
The Oukaluokalou River
(old Indian name meaning stinky brown water that smells like bison poop)

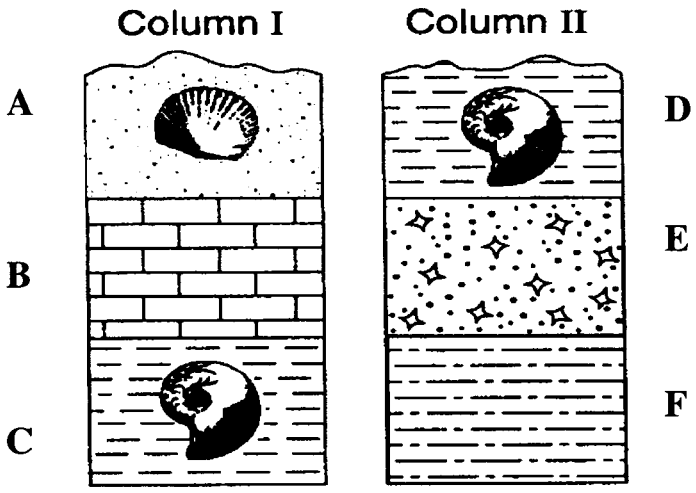
Fossils Worksheet – Earth Science

Name: _____

__C__ 7. Using the diagram below, which of the following fossils (A, B or C) is the oldest?



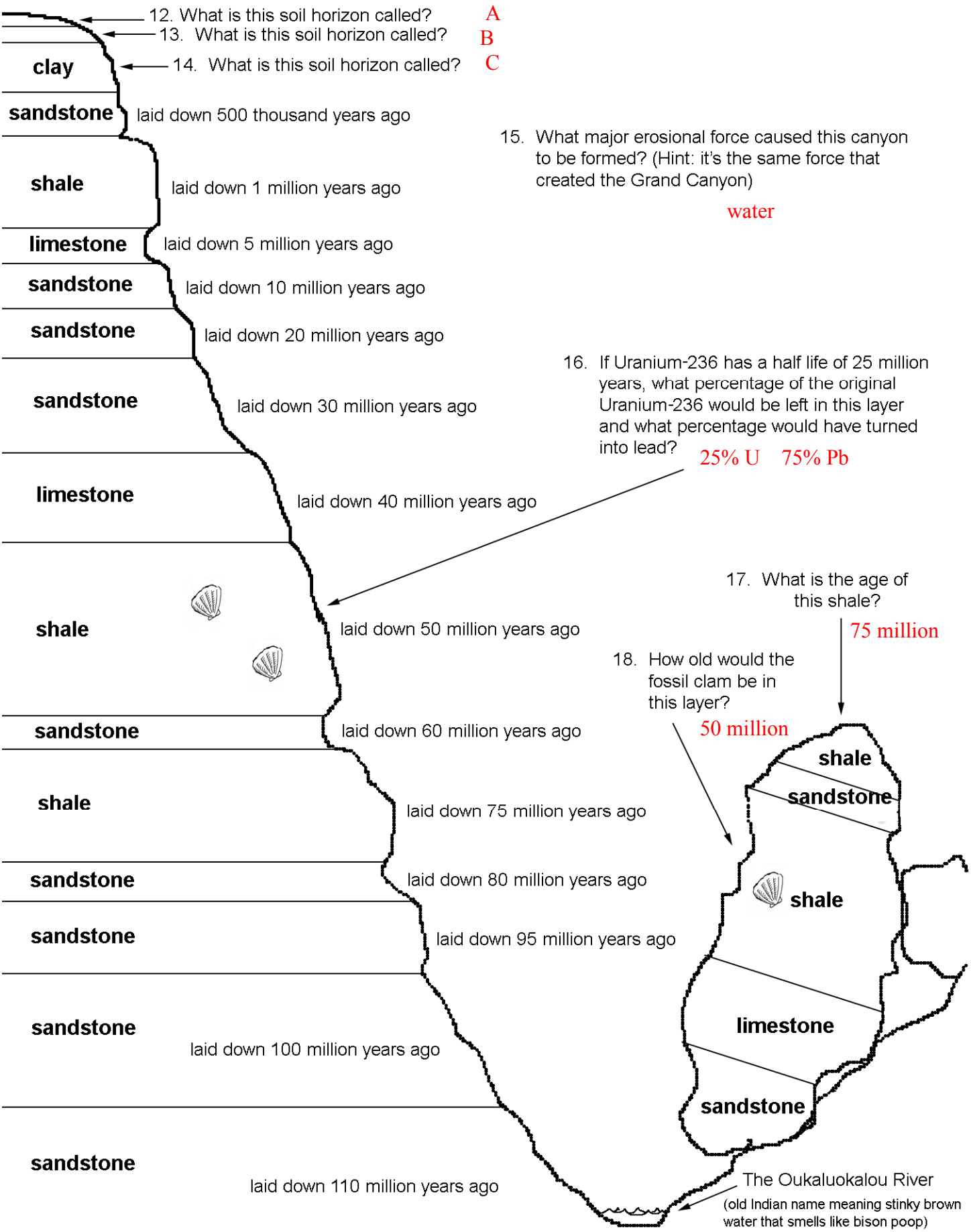
Examine the following diagrams. Columns I and II contain rock layers A, B, C and D, E, F. Both columns were taken from the same dig site.



9. Which two layers are of approximately the same age? C & D

10. Which layer is the oldest? F

11. Which layer is the youngest? A


12. What is this soil horizon called?
A
13. What is this soil horizon called?
B
14. What is this soil horizon called?
C
clay
sandstone
laid down 500 thousand years ago
shale
laid down 1 million years ago
limestone
laid down 5 million years ago
sandstone
laid down 10 million years ago
sandstone
laid down 20 million years ago
sandstone
laid down 30 million years ago
limestone
laid down 40 million years ago
shale
laid down 50 million years ago
sandstone
laid down 60 million years ago
shale
laid down 75 million years ago
sandstone
laid down 80 million years ago
sandstone
laid down 95 million years ago
sandstone
laid down 100 million years ago
sandstone
laid down 110 million years ago
15. What major erosional force caused this canyon to be formed? (Hint: it's the same force that created the Grand Canyon)
water
16. If Uranium-236 has a half life of 25 million years, what percentage of the original Uranium-236 would be left in this layer and what percentage would have turned into lead?
25% U 75% Pb
17. What is the age of this shale?
75 million
18. How old would the fossil clam be in this layer?
50 million
shale
sandstone
shale
limestone
sandstone
The Oukaluokalou River
(old Indian name meaning stinky brown water that smells like bison poop)