

Bio 112 Handout for Evolution 8

This handout contains:

- Today's iClicker Questions
- Handouts for today's lecture

iClicker Question #5A - before lecture

Consider the hypothetical creatures on the last page of this handout. Which of the following is the most likely order of evolution for the creatures listed?

- A. (first) 6 8 3 2 (last)
- B. (first) 2 8 3 6 (last)
- C. (first) 2 3 6 8 (last)
- D. (first) 2 3 8 6 (last)
- E. none of the above

iClicker Question #5B - after lecture

Put the following events in order from the first (happened longest ago) to the last (happened most recently).

- (A) First plants on land.
- (B) First plants.
- (C) First animals on land.

- A. A then B then C.
- B. A then C then B.
- C. B then C then A.
- D. B then A then C.
- E. C then A then B.

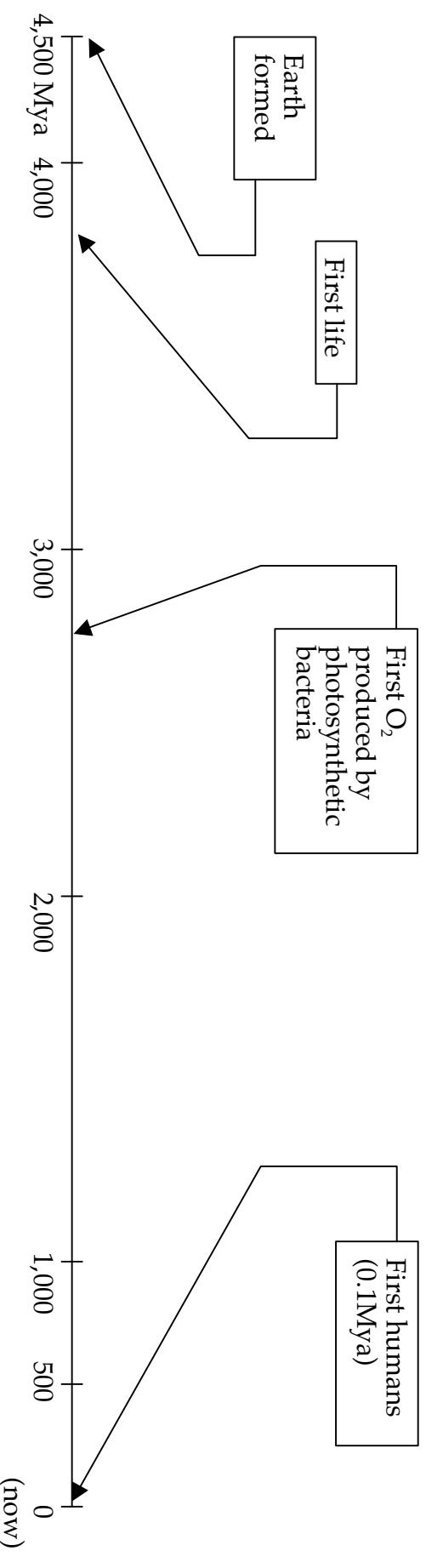
Beaming in your answers

1. Figure out your answer and select the appropriate letter (A-E).
2. Turn on your iClicker by pressing the "ON/OFF" button; the blue "POWER" light should come on. If the red "LOW BATTERY" light comes on, you should replace your batteries soon.
3. Transmit your answer as follows:
 - a. Press the button corresponding to the answer you've selected (A thru E).
 - b. The "STATUS" light will flash green to indicate that your answer has been received. If the "STATUS" light flashed red, your answer was not received; you should re-send it until you get a green "STATUS" light.

Bio 112 Earth History I (the *very* big picture)

- 1 Mya = 1 Million years ago

The Environment:



too hot
for life

atmosphere

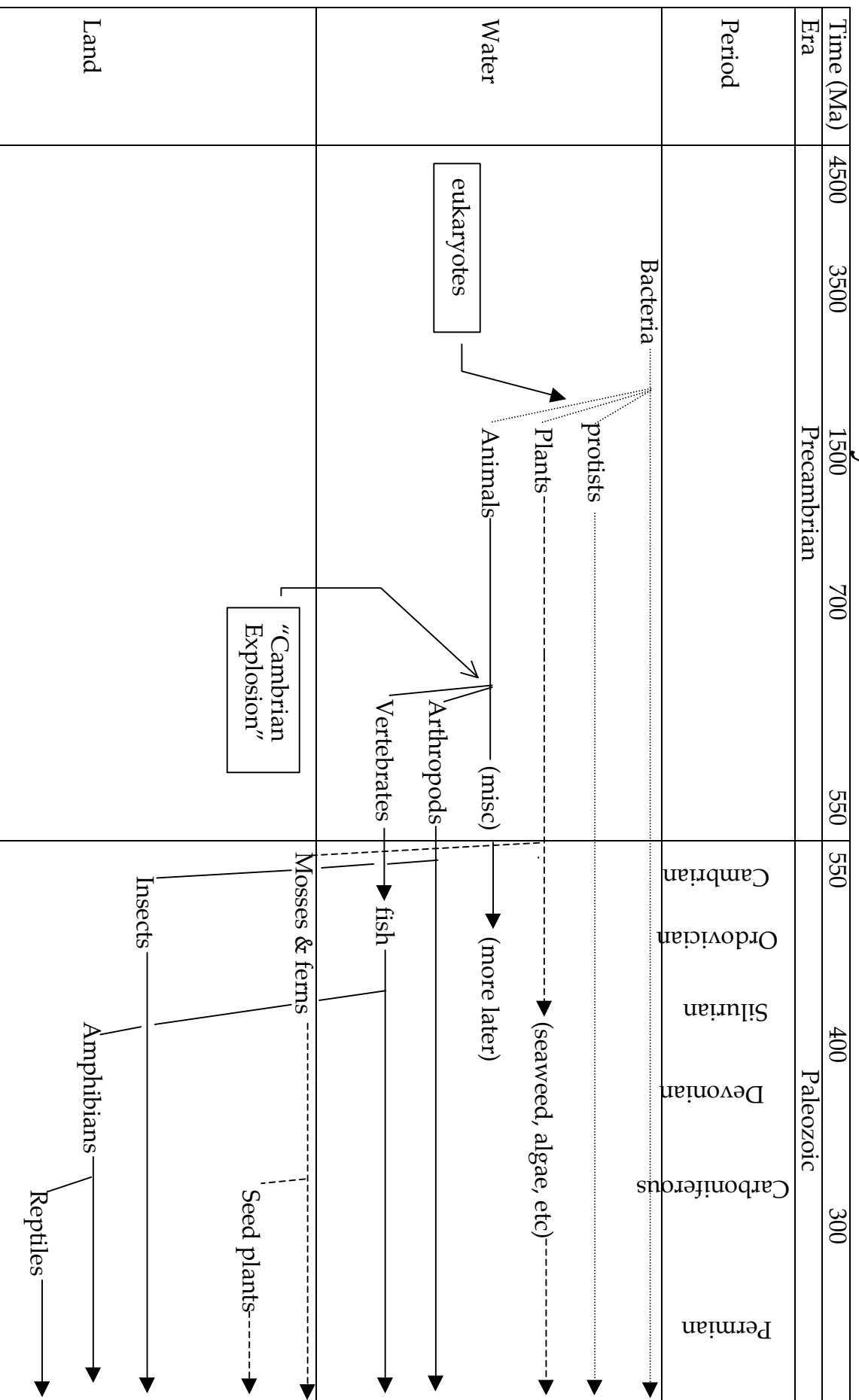
- N₂
- H₂
- H₂O
- CO₂
- NH₃ (toxic!)
- no O₂!

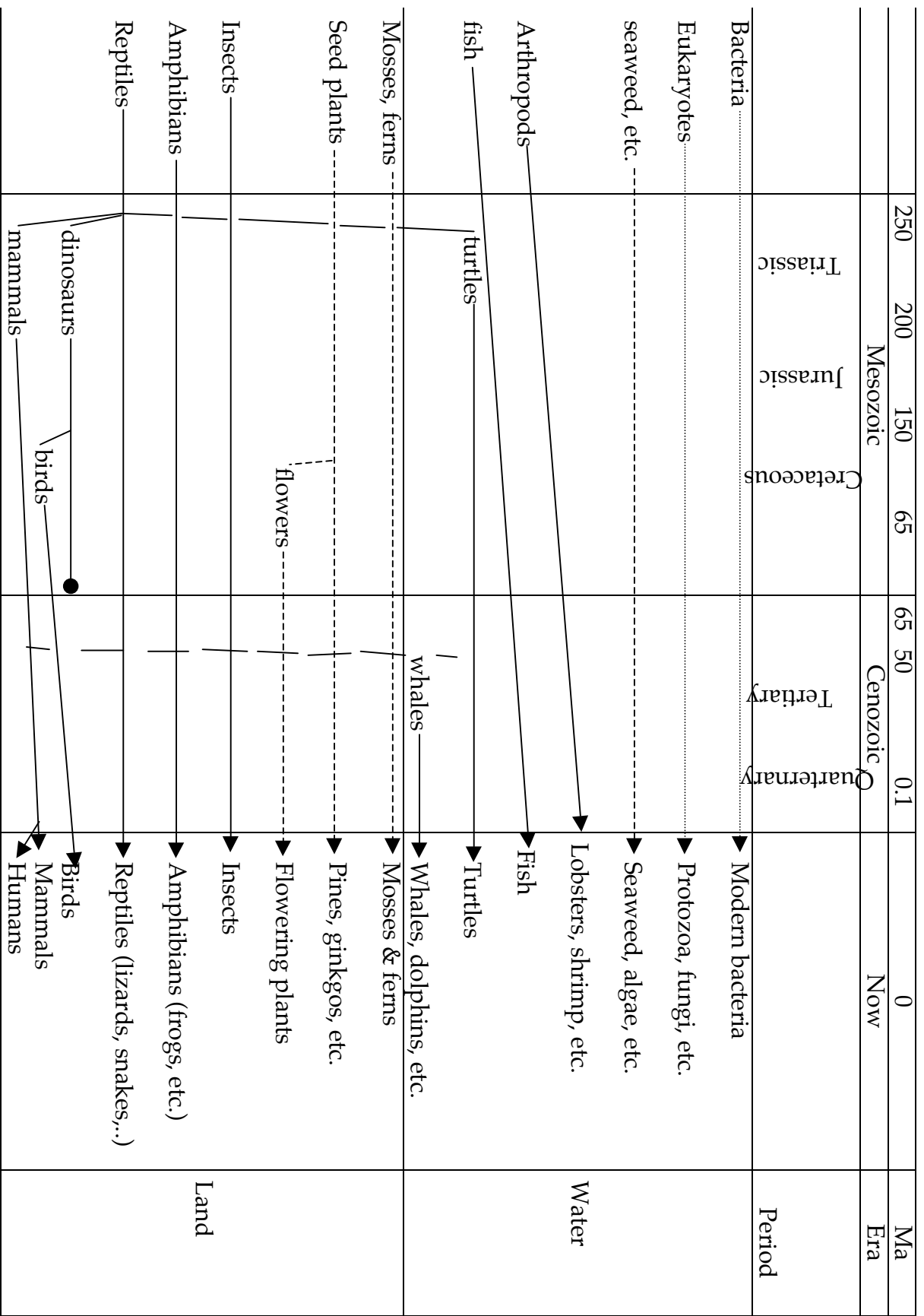
O₂ in air increases

atmosphere

- low CO₂
- 20% O₂
- 80% N₂
- no NH₃

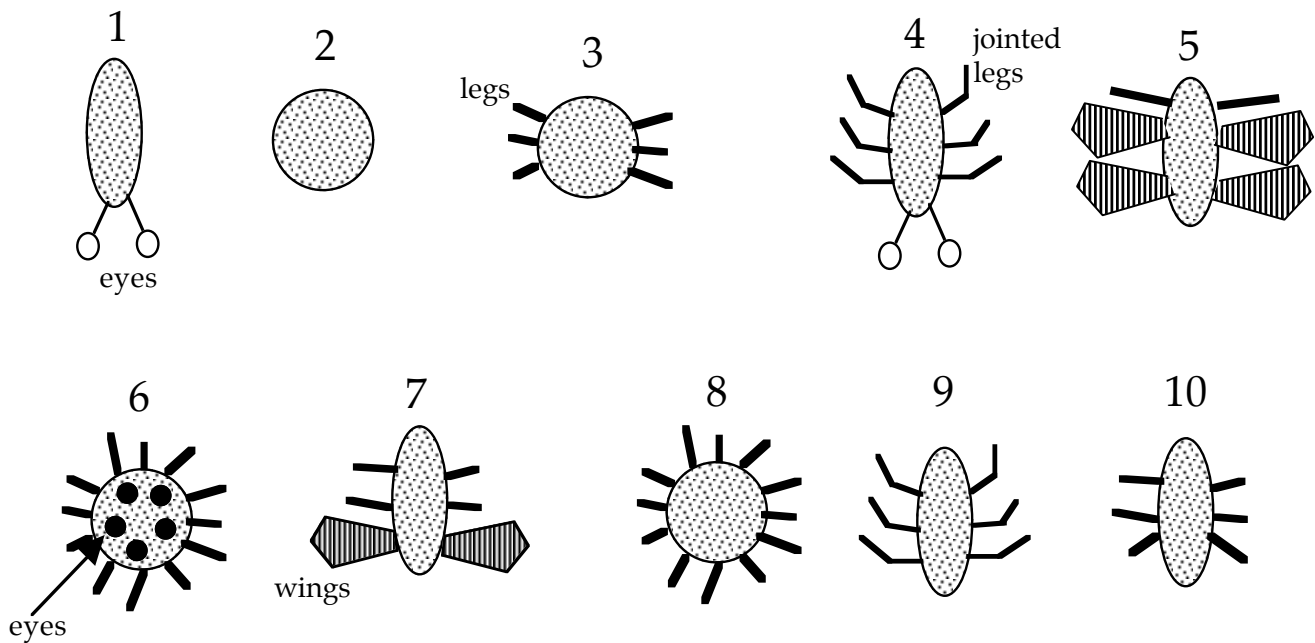
Bio 112 Earth History II





Evolution 8 - 4

Bio 112 Phylogeny Demonstration Problem



Other info:

- in a layer of rock that is 600 million years old, you only find type 2.
- in a layer of rock 200 million years old, you find 4, 5, and 6 but not 1.

Suppose you found these fossil creatures on Mars. What might you conjecture about their evolutionary history?

