

Paleo-Reconstruction Activity

You have just been provided with a “new” fossil specimen. All that you know is the age, time period, location, and rough size of this specimen. It is your job to reconstruction as much of the behavior (diet & locomotion for example) and environment as you can.

1. What are some interesting features about this creature’s anatomy (head, body, limbs, tail, body plan, teeth, odd appendages)?
2. What does this anatomy tell you about diet, behavior (how it got that food for example), and locomotion?
3. Do you think there are parts missing? Why or why not? What taphonomic process may have occurred?
4. Research what the environment was like at the fossil site during the time this creature was alive. How does this new information change your assessment of the creature’s diet, locomotion, behavior, & taphonomic processes that may have occurred?
5. What new information has this new “discovery” given you?
6. How does all of the information you have now acquired inform your thinking about this creature’s diet, locomotion, behavior, and environment?
7. How does your thinking (diet, locomotion, & behavior) change when provided with comparative specimens?
8. Does looking at the comparative specimens change your mind about what pieces may be missing from the fossil? Why or why not? What taphonomic process may have occurred?
9. Draw a rough sketch of what this creature may have looked like in life.
10. Be prepared to set the scene for the class, telling us the story about what this fossil was like, where it lived, and how it behaved when it was alive.