Trace Fossils Lab
No Bones About It

Important information about dinosaurs has been learned by studying their footprint trace fossils. Sets A and B are tracings of actual dinosaur footprints found in Colorado. Examine the footprints and the information provided and then answer the following questions.

1) Study the footprints of Set A.
   
a) Why might the two footprints be different sizes? ________________________________
   ________________________________
   ________________________________
   ________________________________

b) Did this animal have a perfectly flat foot or a padded foot (like a dog)? __________
   Explain how you know. ________________________________________________________
   ________________________________
   ________________________________

   c) Did this animal have long claws or dull toenails? ________________________________

   d) This creature lived during the Jurassic time period. Which dinosaur do you think left this trace fossil? ________________

   e) These footprints were found with three other parallel sets of tracks next to it going in the same direction. What can you hypothesize about the lives of the dinosaurs that made the tracks? ________________________________
   ________________________________
   ________________________________

2) Study the footprint of set B.
   
a) Did this animal have long claws or dull toenails? ________________________________

   b) How could sharp footclaws be useful to a dinosaur? ________________________________

   c) These footprints were found in a layer of limestone rock that also had fossils of freshwater clams imbedded in it. Explain how this could have happened. ________________________________
   ________________________________
   ________________________________
d) This animal also lived during the Jurassic time period. Which dinosaur do you think left this trace fossil? ________________________________________________________________

3) **Now compare the two sets of footprints to each other.**
   
a) Which of the two sets was probably made by a four legged, heavier, and slower dinosaur? ________________________________________________________________

b) Which of the two sets was probably the faster dinosaur? __________________________
   
   Explain why you think so. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

c) Which of the two sets was probably a predator? __________________________
   
   Explain why you think so. ________________________________________________________________
   ________________________________________________________________
   ________________________________________________________________

d) For each set of footprints, name a few modern day animals that would leave similar looking footprints.

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<th>Set A</th>
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Dinosaurs of the Jurassic Period

Diplodocus

Allosaurus

Camarasaurus