

The Big Dig Narrative

Life Science (Lower Middle)
Unit 5

The Big Dig Narrative

Instructions: Read the following italicized sections to your scholars and give clear directions for each activity section.

In this activity, you and your partner will play the roles of paleontologists working in the field in Montana, near the town of Ekalaka. One clear crisp afternoon in October, you find four well-preserved and complete fossils.

Have scholars excavate and remove four fossils from their bucket of sand.

Day 1: *That night in camp, after dinner, around a Coleman lantern, you and your colleagues begin to assemble the 4 bones you found earlier. Since the bones were all found together in an undisturbed layer, you assume that they are all from the same animal. You spend the rest of the evening trying different arrangements of the bones in hopes of identifying the animal before you get tired.*

Give scholars 5 minutes to assemble the 4 bones and make notes in their Lab Notebook on what kind of animal they excavated.

Day 2: *You wake up to a beautiful Montana morning and you hurry back out to the dig site. The rock layers that hold your fossils are very hard and only give up three more specimens. As the day ends you make your way back to camp for another try at assembling the mystery animal.*

Have scholars excavate and remove 3 more fossils from their bucket of sand. Give scholars 5 minutes to assemble the now 7 bones and make notes in their Lab Notebook on what kind of animal they excavated.

Day 3: *The next morning is cold. You can tell that winter is just around the corner and you know that this will be the last day of the digging season, and your last chance to find more fossils of the mystery animal. Just as the day is about to end, one of the members of your team finds 3 final bones.*

Have scholars excavate and remove 3 more fossils from their bucket of sand. Give scholars 5 minutes to assemble the now 10 bones and make notes in their Lab Notebook on what kind of animal they excavated.

Day 4: *Back in the lab, you meet up with some Paleontologist friends. They tell you they have spent the summer working in a different location but with the same geological period. You show them the skeleton you found, and they tell you they have a similar one, but it looks like they have some different bones that you don't have.*

Have two groups of scholars compare their fossils with each other and to look for clues that will help them assemble their animal skeleton. Give scholars 5 minutes to assemble their animal skeleton with these new clues and make notes in their Lab Notebook on what kind of animal they excavated.

Day 5: *In the library at school you find a Skeletal Resource Manual with drawings of the skeletons of some existing animals. You notice some interesting similarities between some of the drawings and your unknown fossil.*

Have scholars use the Skeletal Resource Manual to assist in their final assembly and drawing of their animal skeleton. Give scholars 5 minutes to make notes in their Lab Notebook on their final interpretation of the skeleton.