

1. How to Obtain Bulk Rock Fossils from Penn Dixie

The fossils used for these activities were collected at Penn Dixie Fossil Park in Hamburg, New York. We encourage teachers to visit the site and experience breaking bulk rock and discovering fossils firsthand. For teachers who are unable to visit Penn Dixie, bulk rock can be ordered for classroom use. To ensure availability for the school year, place your order by August 1. Contact Penn Dixie Fossil Park for pricing, which is determined in part by shipping costs. Teachers may also order a fossil kit that includes six different fossil specimens, identification cards, and information about the fossils and Penn Dixie.

2. Suggested Materials for Conducting the Activity

The quantities in parentheses are suggested for a group of 4–5 students.

- Safety glasses for all participants
- *Rock hammers* (1). Do not use regular hammers! You and your students should use hammers designed specifically for breaking rock. For example:
<https://www.forestry-suppliers.com/p/33349/31461/estwing-chisel-edge-rock-picks>.
- Chisels (1)
- *Hand lenses* (2-3). For classroom use, inexpensive 10x loupes are sufficient.
- Brushes (1-2)
- Small plastic sample bags (10-15)
- Specimen labels (10-15).
- Fossil Identification cards and/or fossil guides. Some examples:
<https://penndixie.org/wp-content/uploads/2018/02/penndixieofficialfieldguide.pdf>
<https://bap.priweb2.org/index.php/pubs-special/pubs-spec-5782-detail>

3. Suggestions for Implementing the Activity at Your School

- Check with your administration, colleagues, and custodial staff before conducting this activity, as it involves the use of rock hammers, generates noise, and produces rock debris.
- Consider sending a permission slip home that outlines potential risks and the safety procedures students will follow..
- Remind students to wear clothing that can get dusty or dirty.
- Collect large pieces of cardboard or use old yoga mats to help absorb noise and make cleanup easier.

- Review safety procedures with students both the day before and on the day of the activity. Safety glasses should be worn at all times, and only the person using the rock hammer should hold the rock being broken.
- Keep a dustpan and broom nearby for cleanup.
- If possible, conduct the activity outdoors, as breaking bulk rock with hammers can be quite noisy.
- Demonstrate how to safely break open a bulk rock sample before students begin.
- Model how to identify fossils. Students often expect to find complete, intact fossils, whereas many specimens are preserved only as fragments.