



PTO GIFTS PROGRAM

Requests for PTO Funding 2018-2019

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Any teacher, parent, or student who has a request for funds from the PTO must fill out this form. Please answer these questions as thoroughly as possible, providing supporting detail and information. When completed, please return to the administration at either school by **Friday, October 26, 2018**.

1. Define your request:

I would like to purchase materials for teaching about the evolution of humans and apes. The materials will be used in the units on Protohumans and Prehistory in 6th grade Social Studies, and the Evolution unit in 8th grade Science. The materials consist of (1) replicas of the skulls of several apes and ancestral human species (hominids), some based on fossils and others on reconstructions, (2) replicas of the femurs of several apes and hominids, and (3) replicas of some of the stone tools used by hominids.

2. Amount requested: \$5554.00

Materials:

[Set of 9 Fossil Hominid Skulls BH-KRO-1 \\$2,098.00](#)

Stands for 9 Fossil Hominid Skulls S-BH-KRO \$342.00

[Set of 7 Primate Skulls with Lesson Plan BH-KRO-7 \\$1,695.00](#)

Stands for 7 Primate Skulls S-BH-KRO-7 \$266.00

[Set of 10 Primate Femora KF-001 \\$698.00](#)

[Set of 6 Fossil Hominid Tools from East Africa MS-201-SET \\$358.00](#)

Shipping estimated at \$50

3. Can this project be funded in stages? If yes, what timetable is involved? If no, please explain your due date for funds.

Absolutely. The materials can easily be purchased over several years if needed or desirable. If that is the case, I would suggest purchasing them in the order listed above.

4. Has this request been reviewed by the school administration? What was their response as to its merit and priority?

Yes, Dr. Sukenik, several teachers, and I discussed the proposal and its potential for use in a variety of classes. Dr. Sukenik supports the project.

5. Number of Students that will be impacted or benefit from your request:

Approximately 100-120 students will use the materials each year:

- 50-60 students in 6th grade Social Studies (for the units on Hominid and Prehistory);
- 50-60 students in 8th grade Science (for the unit on Evolution).

6. Is this a one-time request or do you envision needing additional PTO funds in the future or long range? If you will require additional PTO funds, please explain why this cannot be added into your annual budget.

This is a one-time request.

7. What is the intended goal of your request? Would it have any other uses or applications? Is this a start up program or is it enhancing an existing program? Use additional paper if needed.

My goal is to provide students with an authentic experience of the lab-based work done by archaeologists, primatologists, and paleontologists. Our current programming in human evolution is minimal; these materials will enhance it a great deal. Moreover, it will increase the students' exposure to and understanding of investigations in the historical sciences, which are conducted quite differently from those in the physical sciences.

Physical scientists set up experiments and test their outcomes repeatedly in order to understand the regularities of the world. In contrast, historical sciences require students to combine hard data with inferences and logic to arrive at results—we simply cannot recreate the conditions that caused once hominid species to evolve into another (at least, not yet!). While students are exposed to this kind of thinking in our Earth Sciences curriculum, they would benefit from the opportunity to use it in additional settings.

8. What are the long range benefits of your request?

These materials will benefit students by providing them with hands-on experiences. Being able to touch, rotate, measure, and compare the changes we see in the hominid family tree (and their tools) over the past 4 million years creates significantly more student engagement than reading about them, viewing pictures, and even viewing 3-D renderings of them online. The materials allow students to use exactly the same casts used by archaeologists, primatologists, and paleontologists in the lab.

Potential lessons include

- finding and graphing differences in skull features (brain case, teeth, palates, visual orbits, and muscle attachment points) and speculating on the conditions that favored those changes (such as enlarging the brain to allow for complex communication, cooking food to make it softer, using tools rather than teeth in defense, and the like);
- doing the same with fossils skulls, which are pieced together from crushed and deformed rock, with “clean” reconstructions highlights to analyze how much scientists have to speculate about the overall shape and features of hominids and what tools they use to do so;
- doing the same for hips and knees to mark the transition from walking on four feet, to knuckle walking, to walking upright (what was more likely, a transition from forest to grassland or the need

to carry infants unable to cling to mothers' fur—or a combination of these, or something else entirely?);

- grouping stone tools used by different hominids with their cranial fossils and reconstructions and femurs creates a data set students can use to hypothesize about ways the brain and society changed in concert with increasingly sophisticated technology.

9. If you are requesting a capital asset/investment, please provide a minimum of two options/pricing quotes on the item and attach to this form. Please identify your first choice and why.

This does not apply.

10. Have you exhausted all other funding options before coming to the PTO Gifts Program?

Yes. The Social Studies, Science, and ALP budgets are generally allocated for renewing consumable supplies and maintaining equipment. They do not have the capacity for a purchase of this type.