



# SOCIETY OF PHYSICS STUDENTS

An organization of the American Institute of Physics

## Marsh White Award Report Template

Project Proposal Title	Physics is Phantastic Phunshop
Name of School	University of Wisconsin Platteville
SPS Chapter Number	8316
Project Lead (name then email address)	Taylor Keesler
Additional Project Leads (two lists: names then emails)	Jake Ziereis Zen Abbey ziereisj@uwplatt.edu abbyz@uwplatt.edu
SPS Chapter Advisor	Duane Foust
Total Amount Received from SPS	300
Total Amount Expended from SPS	300

## Summary of Award Activities

In October the Society of Physics Students at the University of Wisconsin Platteville host a free 'Physics is Phantastic Phunshop'. The Phunshop invited 5<sup>th</sup> and 6<sup>th</sup> grade students from 25 local schools; there were no requirements for a student to attend the event. This year 25 students attend the event, which included series of fun physics demonstrations designed to grab the students attention, while teaching them about cool physics principals. Highlights from this year's Phunshop included rocket launches and ping pong ball cannons!

## Statement of Activity

### Overview of Award Activity

At the end of October the Society of Physics Students at the University of Wisconsin Platteville host a 'Physics is Phantastic Phunshop'. Phunshop is a chance to do outreach to the community while stimulating

interest in physics to younger students. Phunshop targets 5<sup>th</sup> and 6<sup>th</sup> grade students from 25 local schools; there are no requirements for a student to attend the event, and parents are welcome to join. The Phunshop is a free event to everyone wishing to attend; also, T-shirts are given out to all participants. The turnout for this event varies year to year anywhere between 25 and 50 people. The event includes a series of fun physics demonstrations designed to grab the students attention, while teaching them key physics concepts, along with a construction period where the students are able to design a craft using the concepts we have taught them in the demonstration portion. Phunshop was created by our chapter many years ago, because our chapter decided we wanted to do at least one large community outreach every year. Our goals in hosting this event are to give the students an opportunity to learn about physics in a fun atmosphere, while promoting the entire STEM program.

### Impact Assessment: How the Project/Activity/Event Promoted Interest in Physics

Goals:

- Get at least 20 students to show up for the event.
- Organize a list of demonstrations that will be both interesting and educational.
- Have a construction period where the students are able to apply what they learned.
- End the day where the students are truly amazed at what is all possible with science.

The goals we had set up were fairly simple and straight forward, but if accomplished could leave students with a true interest in the field of physics. From our assessment all of these goals were met in some capacity. We were able to assess the project by asking the students and parents directly. At the end of the day when the event is over our volunteers ask provoking questions to both the students and parents about what they may or may not have enjoyed about the day. We also ask if there is something else they would have liked to see or a topic we could have expanded on. We specifically ask the parents to see if there are any topics that seem too advanced for students of that age group.

Within the weeks following the Phunshop the SPS members who took part in Phunshop gather together and discuss the feedback that was given, and their own personal thoughts on what went well or not so well.

This year we received some great feedback, and have determined that keeping the day of events to about 6 hours is better than 7 or 8 like we have done in the past. The students start to lose focus and become distracted if the day is too long. We agreed that the students enjoyed themselves, and that some of them have started to see the “boring” science of physics in a much more exciting light.

### Key Metrics and Reflection

Who was the target audience of your project?	<b>Local 5<sup>th</sup> and 6<sup>th</sup> grade students</b>
How many attendees/participants were directly impacted by your project? Please describe them (for example “50 third grade students” or “25 families”).	<b>This year 20 5<sup>th</sup> and 6<sup>th</sup> graders (some with parents)</b>
How many students from your SPS chapter were involved in the activity, and in what capacity?	<b>Five SPS memembers were involved with the planning and organizing, while a total of nine members helped the day of the event.</b>
Was the amount of money you received from SPS sufficient to carry out the activities outlined in your proposal? Could you have used additional funding? If yes, how much would you have liked and how would the additional funding have augmented your activity?	<b>Our chapter spent close to 360 dollars at this years Phunshop. Any additional funding would not have changed this event. We fundrais for outreach events like this to make up the cost.</b>
Do you anticipate repeating this project/activity/event in the future, or having a follow-up project/activity/event? If yes, please describe.	<b>Yes, this event has happened for over 6 years, and we plan on continueing it.</b>
What new relationships did you build through this project?	<b>We built relationships with indeividual members of the community.</b>
If you were to do your project again, what would you do differently?	<b>We would have thought of more ways to get a larger attendance.</b>

### Press Coverage (if applicable)

## Expenditures

**Sheet of Polycarbonate:** This material was used to have the students design and construct small boats. Polycarbonate was used because of its material properties. It is easily cut, yet extraordinarily strong and light for the size. Students were able to form their boats to their desires. Building these boats gave them an object they took home.

**Plungers:** These were used in pressurize water, to demonstrate hydraulics.

**Pizza, Milk, Juice, Cups, and Napkins:** These were purchased to feed the children throughout the day while they learned about physics.

All of the Marsh White award was used to buy supplies. Any additional costs were made up by our chapter's fundraising.

### Expenditure Table

Item	Cost
Sheet of PolyCarb for the boats	70.00
Plungers Used to Pressurize Water	50.00
Pizza	98.00
Gallon of Milk	12.50
9 oz Cups	4.00
Gallons of Juice	23.00
Napkins 100 count	2.00
Printing flyers and forms	65.00
Mailing	35.50
<b>Total of Expenses</b>	<b>360.00</b>

## Activity Photos



*Students working on boat construction applying what was taught earlier this morning. (Photo by Taylor Keesler)*



If you have any questions, please contact the SPS National Office Staff  
Tel: (301) 209-3007; Fax: (301) 209-0839; E-mail: [sps-programs@aip.org](mailto:sps-programs@aip.org)