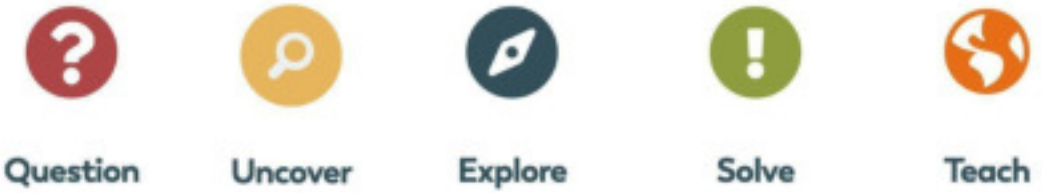
Project Hero
Pollinator Quest - FAQs

www.heroforttheplanet.org/pollinators

What is the Pollinator Quest?
A Project Hero Quest follows a QUEST framework that offers a hybrid project- and problem-based learning journey for students to explore the science concepts behind and the issues facing species and ecosystems in trouble, culminating in students' design and implementation of a project that makes a meaningful difference in their own community.

What does Q-U-E-S-T mean?
All Quests follow Project Hero's QUEST learning approach. This is a project-based approach that integrates the engineering design process.



What's this Quest about?
The Pollinator Quest is focused on the plight of pollinator species in your community. After exploring the world of pollinators, learners can choose a project to do at their school, home, or in their community that helps a particular pollinator living in their area. By helping one pollinator, they will also be helping others.

What pollinator animals will we be able to help?
Butterflies and skippers, moths, hummingbirds, bees, and some bats (in the Southwestern US).

Who can do this Quest?
Any school classes, informal education programs, home schoolers, families, and individuals who are interested in pollinators, gardens and flowering plants, human impact on the environment, the engineering design process, and implementing environmental solution-oriented projects.

Is this Quest for a particular age or grade?
It is aligned with 3-5 grade Next Generation Science Standards, but has content that is also relevant to standards in both middle and high school. If you are interested in, or teach curriculum related to pollinators and the issues affecting them, this Quest has something for you!

Do we have to do the whole Quest from beginning to end?
No. Quests are designed to be flexible. You as the educator and guide are encouraged to explore the content covered in the Quest and design the best path through it for your students. You can spend as little or as long on a step as you choose, but our testing has suggested that the longer students spend exploring the issues and the more you leave the path open to their inquiry, the richer the experience for them. The EXPLORE section of the Pollinator Quest is rich with information and activities about all types of pollinators. Learners can focus on just their pollinator group or they can expand to explore other groups as well.

What do we have to do to apply for a grant to fund our project?

In SOLVE, students in classes and informal education programs can write and submit a Project Plan to Captain Planet Foundation that describes what they need to implement a project that solves a problem for local pollinators. Captain Planet Foundation will review the proposal and consider funding of up to $150 per class.

Note: If you are having your students complete a Quest from home, the grant will still be available at the CLASS level, so please consider how you'd want to facilitate your project design with that in mind.

What happens in each part of the Quest?

Q - Question. All science investigations and problem-solving start with questions. Students can generate questions by:

- observing local pollinators outside their door,
- determining what they already know about pollinators, and
- brainstorming questions they want answered so they can help pollinators around them.

U - Uncover. The investigation begins! Students learn about pollinators broadly by reading, writing, watching and doing. Suggested activities are described in a "Try This!" box. The questions they are finding answers to include:

- What makes pollinators so special?
- What is pollination?
- Why are pollinators so important?
- Why are pollinators in trouble?

E - Explore. Now learners shift their focus to a specific pollinator species that lives around them.

- After searching by their zip code, learners choose a pollinator they want to help (*Species Research* page).
- To help their species, learners now need to find out how it survives and thrives in its natural habitat. They can go to the sections of each page to read about their pollinator group. The *Survive and Thrive* page is a hub with links to these webpages that describe each group of pollinators.
    - Structure & Function
    - Adaptations
    - Life Cycles
    - Food Webs
    - Ecosystems and Habitats
    - Migration & Hibernation
    - Human Impacts

S - Solve. Time to help! With a new understanding of their species' pollinator group, learners work with the engineering design process to define a problem in their community that is harmful to their pollinator. Then they will survey a site where they could do a project to solve the problem. Finally, they design and carry out the project.

T - Teach Others. The final step of the Quest is to inspire others to help pollinators by sharing what they've learned from their project and the Quest. These might be people in their family, school or community. Learners are able to reflect on how this Quest has changed them and let Captain Planet know what they did.