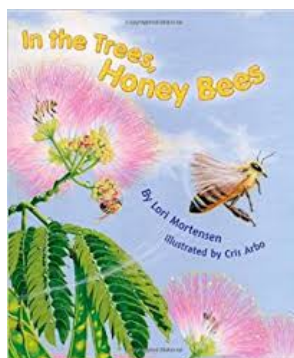


In the Trees, Honey Bees



Honey bees are amazing! Explore inside-the-hive views of a wild colony of honey bees and then build a DUPLO garden to provide them with pollen!

Materials: In the Trees, Honey Bees by Lori Mortensen DUPLO bricks

Hula hoops 4 DUPLO Base Plates Build A DUPLO Garden Posters

Pollen Puffs 4 stuffed bees per group

Intro: Review rules and procedures for LEGO Engineering. Introduce the book “In the Trees, Honey Bees”. **Read aloud and** discuss the story. Tell the students about yourself! Is there a fun story you have about gardening/beekeeping?. Explain that this book is about wild honeybees and the specific jobs of the different honeybees in a colony. (Here is a great link to a Honey Bee Unit:

https://utah.agclassroom.org/estore_files/honey_files.pdf

Discuss how the honey bees leave the hive in search of pollen and how they bring the pollen back to the hive. Show students the yellow puff ball “pollen”. Tell them that they will be building a flower garden filled with some pollen for their bees to find. Have students pay particular interest to the pictures in the book of the bee hive – they will be building one of those, as well.

Challenge: Each group will be responsible for *a garden filled with DUPLO flowers for their bees. Show students the two DUPLO flower-building posters for ideas. Students must make as many flowers as they can and add two or three balls of “pollen”. They also must build a type of hive for the bees to live in. All the bees must fit in to the hive. Also, during the demonstration portion of the lesson, they must describe how the bees gather the pollen and what they use it for.*

How will they do this?

Build: Divide students into three work groups. Have groups work together to build a garden with flowers and a hive. Monitor each group by observation and asking pertinent questions: *“How can you make the DUPLO blocks into a hive? What shapes did we see inside the hives in the story? Where should the pollen go?* Allow students time to build.

Debrief: Gather the students back together and discuss problems they had and how they solved them. Ask *“What worked best?” “What didn’t work?” “What did you wish you had more of?”*

Presentation: Visit each group’s construction. The group presenting are the called the “Sitters” because they sit and describe what they’ve done. The teacher and the rest of the class are called the “Standers” because they stand around the presenters in a circle to observe and ask questions. The standers and the sitters change depending on the group presenting. Which groups were able to build a garden and a hive as well as explain what is happening?