

## Dear Parents, Guardians, and Students,

The school year is almost complete! This week, in honor of spring/summer, I want to focus on honey bees! You will also be testing materials in order to make a paintbrush.

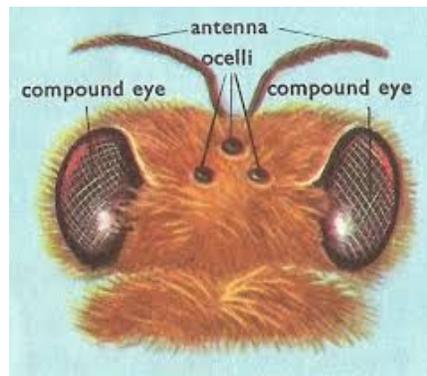
Next week, our last week, you can catch up on any missing assignments. Remember the goal for science class is to complete one activity from each newsletter. Overall, I need at least two assignments from you for the fourth quarter (or an email with other science experiments you have been doing at home) to give you a “P” for “pass” on your report card. If you are not able to turn in the assignments, you will not be penalized, but you will get an “NM” for “not marked” showing that you weren’t able to participate. I’ll send out another reminder next week, too.

Stay well and best wishes,  
Ms. Conant

### **Monday May 18 - Friday May 22: Honey Bees, Hand Pollinators, and Paintbrushes**

#### **STEAM Challenges**

**Science** - Each year our third graders study honey bees. I want to give you a preview of that study now. They learn that honey bees come in different sizes. The queen bee is the largest, the worker bee comes next, and the drone bee is the smallest. Like their name implies the worker bees do all of the work in the hive! They collect nectar and make honey. The drone bees are in charge of helping the queen. Students also learn that honey bees make their hives inside of tree trucks, not in the ground or attached to tree branches (like wasps and hornets do). Finally, honey bees are insects. They have three body segments: a head, a thorax, and an abdomen. They also have a pair of antennae, four wings, and five eyes. This week draw a honey bee and label whether it is a queen, worker, or drone bee.



**Technology** - Watch this Magic School Bus video about how bees make honey:

<https://www.dailymotion.com/video/x6skqj6>. (You will be able to watch the video straight through without any ads.) Write a sentence or two about what you have learned.

**Engineering** - All grade levels are supposed to test materials. As a result, this week I am asking you to create your own paint brush. Experiment with materials for making the best handle and the best brush. The best brush may depend on what you are trying to do. Are you trying to make big circles? Then perhaps cotton balls would make the best brush. Are you trying to draw cirrus clouds? Then perhaps ribbon would make the best brush. Write a brief description (a sentence or two) of what made the best paint brush for you.

## CREATE YOUR OWN PAINT BRUSHES



**Art** - Use your newly engineered paint brush to draw a picture of a honey bee nest inside a tree. Don't confuse the honey bee's nest with a wasp's nest, which can be underground, or a hornet's nest, which can be found hanging from a tree branch.

**Math** - What shape do bees use to make their honeycombs? Watch this video to find out why bees don't build in squares, triangles, or circles:

<https://www.youtube.com/watch?v=kxDEcODUEP0>

Then make a model of different kinds of shapes using straws, popsicle sticks, or other materials you have at home. Afterwards, explain why bees use a certain shape (in a sentence or two).



**Extension:** Try some honey on toast this week. Each type of honey has a different color and taste depending on the variety of flowers the bees visited when they produced it. Enjoy!