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# The H.O.T. Spot

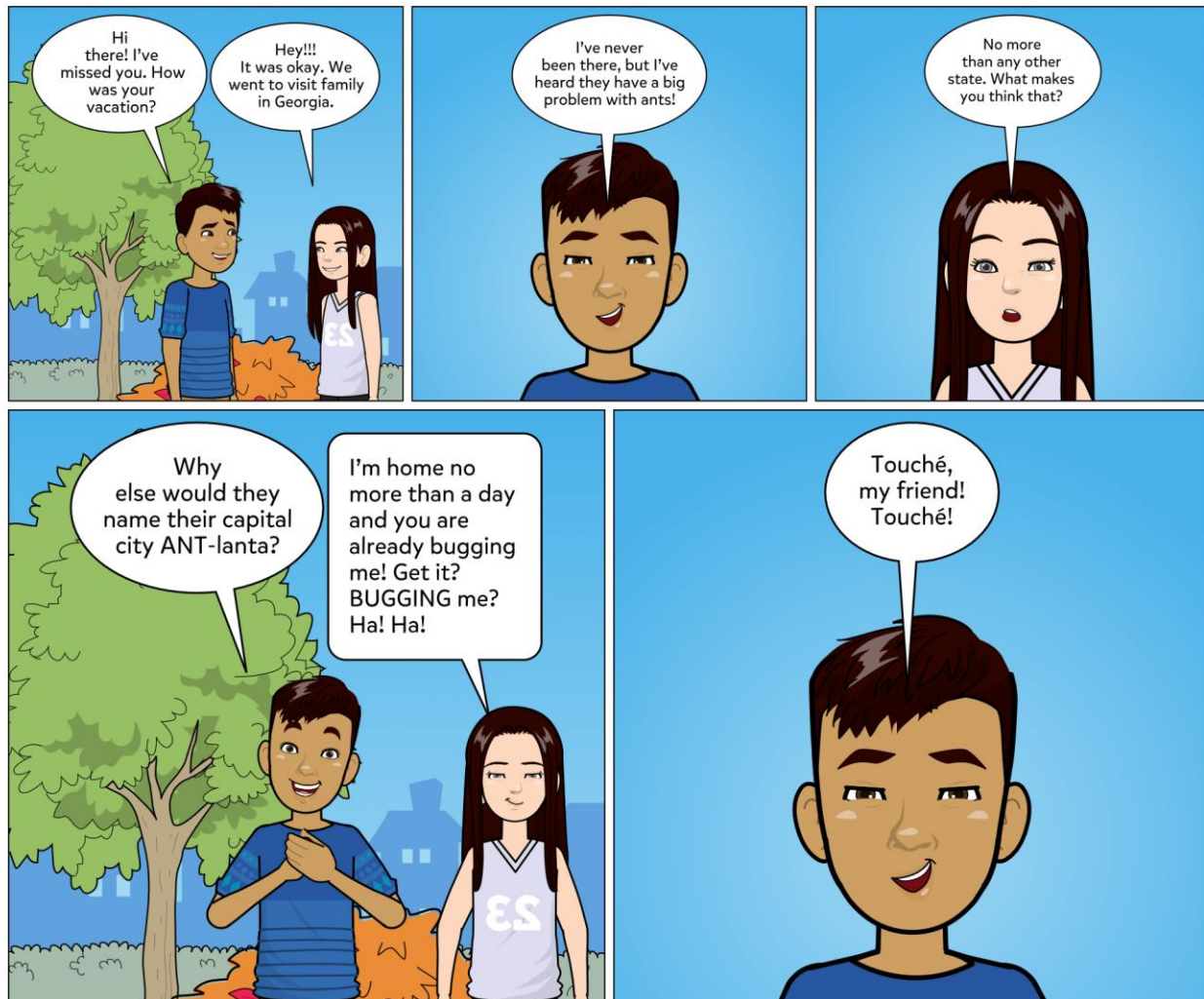
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A WEEKLY PUBLICATION FOR CURIOUS KIDS

Issue #7 (August 10, 2020)

**CAUTION:** Participation may lead to a lack of boredom and a tired brain!

FEATURED TOPIC THIS WEEK:  
Insects of the World





# Insects of the World

## Did You Know?

Insects are a part of the arthropod family, which means they have an exoskeleton instead of backbone. They also have six legs, three well-defined body parts (head, thorax, and abdomen), plus anywhere from zero to two pairs of wings. The insect family is so successful that 90% of all Earth's creatures belong to this group. The oldest insect fossil found is 400 million years old. That means they were around before dinosaurs!

## Help Wanted

Do you love insects? If so, you might want to become an entomologist (i.e., a scientist who studies insects). Aspiring entomologists must meet the requirements and possess the skills listed here:

### *Requirements*

- At least a bachelor's degree in entomology
- Become certified by the Entomological Society of America

### *Necessary Skills*

- Comfort with insects
- Observation and critical thinking
- Ability to communicate well

### *Daily Tasks*

- Collect and analyze data or insect specimens
- Write research papers or reports

## Bio-Profile

Eight-year-old Sophia Spencer was once teased for loving bugs. Now, she is the youngest person ever to write a scientific paper published about bugs. Listen to her story at this link:

[www.npr.org/2017/09/19/552181920/a-girl-s-love-for-bugs-goes-viral](http://www.npr.org/2017/09/19/552181920/a-girl-s-love-for-bugs-goes-viral)

## Mystery Picture of the Week

Can you guess what you are looking at? After doing your research, turn your paper upside down to check your answer.



ANSWER: This is called the "Mad Hatterpillar". It is called this because it goes through nine or more larva stages and keeps all of the old heads. It does this to protect itself from hungry predators.

## Virtual Field Trip

Visit a live Leaf-Cutter Ant cam:

[www.houstonzoo.org/explore/webcams/leafcutter-ant-cam/](http://www.houstonzoo.org/explore/webcams/leafcutter-ant-cam/)

## Would You Rather

Eat a chocolate covered cricket OR  
a barbecued beetle?

Check out bug recipes here:

<https://time.com/3830167/eating-bugs-insects-recipes/>



What do you think the featured topic should be next week? Email your teacher with your thoughts.

## Project-Based Bonanza

Choose one or more of the projects below to complete this week.

### **CHOICE A**

When talking about your Tia or Aunt (in English), do you say ANT like the bug or with a long ahhhh-nt. People in different parts of the country say it different ways. Research other words people say differently around the country or world.

### **CHOICE B**

If it takes an ant 5.5 hours to walk a mile, how long would it take it to walk from your school to your home? What about from Disney Land to your home?



### **CHOICE C**

There are over 9,000 different types of ants. Research a few, choose your favorite, and create a 3D model or draw a diagram of it. Next, find out where it lives and design an ant farm that this species of ant would enjoy!

## It's Story Time

OPTION #1: Imagine that insects were the size of puppies. Your parents say you can keep one as a pet. Which one would you choose and why?

OPTION #2: My grandmother used to tell me the story of the ants and the grasshopper. In short, the grasshopper was lazy and didn't gather food for the winter, but the ants were busy and worked hard to prepare. Without the help of the ants, he wouldn't have survived. The moral was "Do not put off to tomorrow what you can do today". Write your own story with a moral that uses insects as the main characters.

## Digging Into Depth and Complexity

In past issues, we have learned about the Kaplan Depth and Complexity Model icons *unanswered questions*, *ethics*, *change over time*, and *rules*. A fifth important icon is **trends**.



This icon stands for the direction something is likely to go in the future based on past events. Using this icon means you will have to make a prediction after analyzing patterns of change over time. Think about the trends icon while reading the scenario below.

For years, scientists have noted a decline in the bee population around the country. There are many reasons why this is happening (e.g., disease, habitat loss, pollution, invasive species, climate change, pesticides). Read the article linked below and predict the trend for the next five years. Will bee populations continue to decline or can we slow it down?

[www.sciencenewsforstudents.org/article/why-are-bees-vanishing-pesticides-disease-other-threats](http://www.sciencenewsforstudents.org/article/why-are-bees-vanishing-pesticides-disease-other-threats)

## Brain Teaser of the Week

Can you answer this riddle?

*Ancient hunter, under water, striving for the top.*

*Sip the air, crawl on up, exoskeleton drop.*

*Feel of wings, swishing by, over shimmering ripple skim.*

*Iridescent buzz and diamond eyes, circling a brim.*

**HINT-** It has 9 letters!