

# Insect Tea Party

This activity was adapted from the H.J Andrews Experimental Forest Tea Party by Molly Charnes

## Activity

1. Assign each student one of the organism role cards. Have students read their card to themselves until they have identified the unique traits, behaviors and possible habitats of their organism and are prepared to talk about them with other students.
2. Provide each student with a tea party worksheet to record key information about the organisms they meet during the tea party.
3. Explain to students how the tea party works: during the given time (15-20 minutes), they will interact with others in the room in the persona of their organisms. Students should move around the room and introduce themselves to the other organisms they meet, engaging in one-on-one conversations to learn more about the role each other plays in their habitat. They should not be gathering in large groups or reading off their role card during these conversations.
4. Review the directions for the student worksheet. As students meet other organisms, they should record their names, any important characteristics about them, and details about their habitat on their data sheet.
5. Have students stand up and mingle, recording on their worksheet as they go. Provide 15- 20 minutes for this part of the activity. You can provide snacks to make it more like a tea party.
6. After the tea party, have students get into small groups. In each group, give students a few minutes to find a “common thread” among themselves. Encourage them to find as many similarities and relationships between their organisms as possible. If the students cannot find any find any similarities, use this as a chance to illustrate the diversity of organisms.
7. Continue to have students break into small groups and find similarities between their organisms as time allows. Students should record the similarities and differences they find on their worksheet.



## Discuss:

- What similarities and differences did you find between the insects?
- Did the organisms have overlapping habitats?

# Insect Tea Party Student Worksheet

## Directions:

- 1.. Read your role to yourself. Read it again. You will be pretending to be the insects on the card you received and telling the other insects about yourself, so be prepared to tell them about yourself. Tell them about your key features and what types of habitats you like to spend time in. As you meet with other insects you should be talking about yourself, not reading off your role card.
2. When directed to, walk around the room have one-on-one conversations with your fellow insects to learn about their key features. Find out who the other organisms are and what habitats and areas they are likely to be found.
3. As you meet other insects, fill in the grid on the back of this page using what you learned about them noting the similarities and differences you find between yourself and the other insects you met. Were there particular types of features (e.g. body parts, size, mobility, color) that were more or less useful in telling different insects apart from each other, or that helped emphasize their similarities? Were there any insects that had one set of features that made them look more similar to one group of insects but that also had another set of feature that made them look more similar to a completely different group of insects?
4. Just because organisms have similar features and look alike doesn't necessarily mean that they are related!

Fill this grid with facts about the organisms you meet and the tea party:

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| <b>Name:</b> | <b>Name:</b> | <b>Name:</b> | <b>Name:</b> |
| <b>Name:</b> | <b>Name:</b> | <b>Name:</b> | <b>Name:</b> |
| <b>Name:</b> | <b>Name:</b> | <b>Name:</b> | <b>Name:</b> |
| <b>Name:</b> | <b>Name:</b> | <b>Name:</b> | <b>Name:</b> |
| <b>Name:</b> | <b>Name:</b> | <b>Name:</b> | <b>Name:</b> |



## Banded Alder Borer

*(Rosalia funebris)*

I am one of many kinds of bark beetles in the forest. As a larva I feed on dead, dying, or decaying wood. These activities are important for wood decomposition.

I spend most of my 1-3 years as a larva. After pupating, I emerge as an adult (my photo shown here) and feed on flowers or other plant parts for a few days to months.

Image by Susan. Banded Alder Borer. Digital image. What's That Bug? N.p., 8 Sept. 2012. Web. 26 July 2016.



## Snowberry Clearwing Moth

*(Hemaris diffinis)*

I am one of the large moths of the Sphinx family. Members of this family are known for their strong flying skills. These skills, along with my clear wings, long hair, and large size, cause many individuals to mistake me for a bee or even a small bird!

As a caterpillar, I am bright green and have a large horn that only looks dangerous. I feed on plants while I'm young, and once I mature I drink nectar using my proboscis.

Image by Naturally Curious with Mary Holland (<https://naturallycuriouswithmaryholland.wordpress.com>)



## Ipsilon Dart Moth

*(Agrotis ipsilon)*

As a larvae, I am known as a black cutworm. I get this name due to my feeding habits. Because I tend to feed on young plants and ground level, I often cause them to topple over by consuming the base of the stem.

My life span can reach up to 67 days, depending on environmental conditions. Nearly all of that time, about 34 days, is spent in larval and pupal development.

Image by Dave's Garden (<http://davesgarden.com/guides/bf/showimage/13647/#b>)



Image by Rodale's Organic Life (<http://www.rodaleorganiclife.com/garden/woollybear-caterpillars>)

## Banded Woollybear Caterpillar Moth

*(Pyrrharcita isabella)*

My cuddly name comes from my appearance as a caterpillar. Once I emerge as an adult, I appear as a mustard-yellow moth with black spotted wings.

I am often seen in the fall and winter, as this is when I hatch. In my caterpillar form, I can survive being frozen in the winter because of the cryoprotectant that my tissue produces. Once spring arrives, I thaw and begin to pupate.



## Bald-faced Hornet

*(Dolichovespula maculata)*

While I am known for being extremely aggressive if disturbed, I am actually a very beneficial species. My species prey on flies and other yellowjackets, keeping these populations in check. I also like to feed on nectar and tree sap.

My home is a football-shaped hive that is grey and papery. I share this hive with anywhere from 100-400 other hornets. You can find hives like mine on low branches of trees or shrubs.

Image by Advance Pest Control (<http://www.advancepestcontrolnwa.com/insect-gallery/>)



## Bold Jumper

*(Phidippus audax)*

I am the largest and most common species of jumping spider in North America. If you get the chance to look at me closely, you will notice my chelicerae (jaws) have a beautiful iridescent sheen.

They call me the bold jumper due to my ability to spring 10 to 50 times my own body length at a moment's notice.

Image by Kaldari. Adult female *Phidippus audax* jumping spider in Nashville, Tennessee. 15 May 2012. [https://commons.wikimedia.org/wiki/File:Kaldari\\_Phidippus\\_audax\\_01.jpg](https://commons.wikimedia.org/wiki/File:Kaldari_Phidippus_audax_01.jpg)



Image by Jungle Dragon  
(<https://s3.amazonaws.com/media.jungledragon.com/>)

## Cross Orbweaver

(*Araneus diadematus*)

I get my name from my ability to create intricate orb webs. These webs are created by females of my species, and are used to collect prey. I usually hang head down in the center of my web, using my legs to detect the slightest disturbance in the silk strands.

Building webs from silk is a metabolically costly process, so I will often reuse the silk I have produced by eating my web in the mornings or evenings, depending on when I hunt.



Image by Hahn, Jeff. Squash bugs in home gardens. 2007.  
(<http://www.extension.umn.edu/garden/insects/find/squash-bugs/>)

## Helmeted Squash Bug

(*Euthochtha galeator*)

I am one of many bugs to emit quite a stink if you bother me. I share this trait with a group of bugs known as “Leaf-Footed Bugs.”

My name comes from my affinity for the juices of squash. Plants like pumpkins, gourds, and zucchini are my favorite to feed on. Because I can feed on these vegetables to the point of destruction, many farmers consider me a pest.



## Millipede

(*Narceus americana*)

I have 2 pairs of legs on each of my many, many segments except for the first (which is my head.) To protect myself, I can curl into a tight spiral or even emit a foul odor. However, I am not poisonous and I do not bite! I’m on of the bigger invertebrates on the forest floor – some millipedes are almost 1 foot long.

I live in moist environments, and I especially like soft wood in rotting logs or nurse trees. Most of my kind are either scavengers or herbivores.

Image by BugGuide (<http://bugguide.net/node/view/271909/bgimage>)



Image by Folini, Franco. *Armadillidium vulgare*. 6 May 2006. ([https://commons.wikimedia.org/wiki/File:Armadillidium\\_vulgare\\_001.jpg](https://commons.wikimedia.org/wiki/File:Armadillidium_vulgare_001.jpg))

## Isopod

(*Armadillidium vulgare*)

I am also known as a sow bug, potato bug, a pill bug, or a roly poly. I am a crustacean, meaning that lobsters, crabs, and shrimp are some of the kinds of organisms that I am most similar to. I live in moist places such as under logs and fallen leaves. This is because I breathe using gills.

When dead trees and leaves fall to the forest floor, I move in to shred them into smaller pieces so that I can eat them. By doing this I return nutrients to the soil – you could call me a master recycler in the forest!

## Rindge's Moth Caterpillar

(*Pero mizon*)



Image by Simbana, Wilmer & Salgaje, Luis. *Parasitoid-Caterpillar-Plant Interactions in the Americas*. Miller, James. (<http://caterpillars.myspecies.info/taxonomy/term/53746/media>)

I am a young caterpillar that some call an inchworm. I'm often not even noticed as I sit on the branch of my favorite foods, but sometimes you can see me inching along to a new leaf. I like the leaves and flowers of plants like alder, Douglas fir, and oak.

I spend months eating and growing until I'm ready to change into a moth. Some moths stay caterpillars for years, if they can avoid being eaten!



Image by U.S. Fish and Wildlife Service (<https://www.fws.gov/southdakotafieldoffice/beetle.htm>)

## Burying Beetle

(*Nicrophorus spp.*)

I am an efficient recycler of the forest. I consume small, dead vertebrates in a very unique way. Bury the vertebrate, remove any feathers or hair, and lay my eggs on the carcass. When the eggs hatch, they use the carcass as a food source.

As an adult, I also feed on decaying food sources. Because I feed on dead or rotting material as an larvae and adult, I help to efficiently return nutrients back to the food web making me an essential part of ecosystem.



Image by Pest Specialist LLC  
(<http://www.pestspecialistllc.com/library/pavement.php>)

## Red Pavement Ant

(*Tetramorium caespitum*)

I am an extremely common insect of North America, although I am native to Europe. I am known for setting up my large colonies in the cracks of pavement, which is where my common name originated from.

My presence is most notable when my colony gets into battles with nearby colonies. At these times, you may see thousands of ants swarming the pavement! Our aggressive colonization tendencies are what have led us from forest areas to the more urban habitats of pavements.



Image by PestMall Blog  
(<http://www.pestmall.com/blog/know-how/how-to-get-rid-of-earwigs>)

## European Earwig

(*Forficula auricularia*)

Despite my name a popular stories about me, I do not crawl into human ears! In fact, I do not even bite or pinch humans. I am completely harmless to humans, spending most of my time hiding under rocks and logs.

The seemingly dangerous pincers on my posterior are actually for use against males of my own kind when fighting for females.

My kind is infamous in Portland, when in 1924 there were so many of us that the city declared a state of emergency.



Image by USDA Forest Service (<http://www.fs.fed.us/wildflowers/pollinators/animals/flies.shtml>)

## Tachinid Fly

(*Adejeania vexatrix*)

While I may look hairy and scary, I only pose a threat to caterpillars. Females of my species will lay eggs on caterpillars. Larvae will then feed on the caterpillar once they have hatched.

While the feeding habits of larvae are somewhat distasteful, as an adult I feed only on nectar. My mouth consists of a proboscis that is very similar to what you would find on a moth or butterfly.



Image by Rottler  
(<https://www.rottlar.com/pests/profile/yellow-jacket>)

## Yellow Jacket

(*Vespula spp.*)

I am a highly feared member of the wasp family, easily distinguishable from my bright yellow coloring. People avoid me due to my ability to sting repeatedly without losing my stinger (as honey bees do.) My venom is also more potent than that of most bees, making my sting particularly painful.

I tend to make nests closer to than ground than other wasps, and I feed mostly on nectar. My larvae, however, enjoy insects that have been previously chewed by adult Yellow Jackets.



Image by Rutgers  
(<https://njaes.rutgers.edu/stinkbug/identify.asp>)

## Brown Marmorated Stink Bug

(*Halyomorpha halys*)

I am known as a pest due to my appetite for fruit-bearing plants. While I don't actually ruin the flavor of fruit that I feed on, my proboscis creates many small dimples in the fruit. These deformities make the fruit harder to sell.

I also have the ability, like all stink bugs, to emit a foul smelling chemical from specialized stink glands. Finally, my coloring makes me incredibly hard to find among the leaves of orchard trees, demonstrating my camouflaging abilities.



Image by Proactive Pest Control  
(<http://www.beproactivepestcontrol.com/common-pest-problems/house-centipedes-in-the-greater-sacramento-area/>)

## House Centipede

(*Scutigera coleoptrata*)

At first glance, I may look creepy crawly. Despite my appearance, I'm actually quite helpful to have around the house! I have a big appetite for cockroaches and moths, keeping these populations in check and out of your home.

My hidden skill is my speed. I actually move around with my body off the ground, using my long legs like stilts. Only when I stop moving does my body rest back on the ground.



Image by Mark J. Moran of Encyclopedia of Alabama  
(<http://www.encyclopediaofalabama.org/article/m-7003>)

## Brown-Hooded Cockroach

(*Cryptocercus punctulatus*)

While many of my kind prefer to live in human dwellings, I actually spend my time living among decaying tree trunks.

I'm a pretty social creature, and I often live in large groups of my fellow kind. Several generations of us can be found congregating around decaying trees. We stay in such large colonies because young cockroaches, known as nymphs, rely on adults to digest the wood for them.



© Alex Wild  
alexanderwild.com

Image by Alexander Wild  
(<http://www.alexanderwild.com/Ants/Taxonomic-List-of-Ant-Genera/Formica/i-pzB5PWm>)

## Formica Ant

(*Formica spp.*)

Unlike most ants, I have the ability to spray formic acid from the tip of my abdomen. This has earned me the name of Formica Ant, although I may be more commonly called a black ant or silky ant.

I love to feed on the honeydew that aphids produce. I'm a pretty clever little ant when it comes to getting food. I will often herd aphids to specific locations of plants so that I can feast on the plant juices that they extract for me.

## Silverfish

(*Ctenolepisma longicaudata*)



Image by University of Minnesota Extension  
(<http://www.extension.umn.edu/garden/insects/find/silverfish-and-firebrats/>)

I'm a super speedy insect that loves to hide away in dark, warm places such as houses. I've earned my name by my ability to slip out of the grasp of larger insects that like to eat me, such as spiders and centipedes. My slipper nature is due to the slick scales that cover my body.

My favorite foods are starches, so it is not uncommon to find me lurking around the potatoes and flour bags stored in pantries. For this reason, many humans consider me a pest even though I am harmless.



Image by Mississauga Pest Control  
([http://www.mississaugapestcontrol.ca/Pests/House\\_Fly.html](http://www.mississaugapestcontrol.ca/Pests/House_Fly.html))

## Small House Fly

(*Fannia spp.*)

I am much like your typical house fly, but much thinner and smaller. An important feature about me is my predictable life cycle. As a larvae, or maggot, I develop on decaying tissue and animal waste. The rate of my growth corresponds with the amount of time the waste or decaying matter has been present. Scientists can then use this knowledge to determine how long something has been decaying.

While I may be an annoyance when I land on your food, my life cycle is essential to understanding the process of decomposition.