



Made by Mia and
Makenzie

Issue #5

11/21



' Pandora Pine Moth '



By: Mia, Addison, Makenzie, Cillian, Connor, Madilyn



A pandora pine moth on a tree.

picture from butterflies and moths of North America

Pandora Pine moths eat pine needles off of trees and have about a two-three year lifecycle. Although they're native to Oregon, they also live in many other western states like California and Arizona. The Paiute people in California often prepare the Pandora Pine moth larvae at their most mature stage and eat them as a preferred dish. to, Contributors.

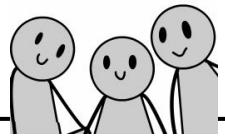
“Species of Insect.” Wikipedia.org, Wikimedia Foundation, Inc., 6 Nov. 2006, en.wikipedia.org/wiki/Pandora_moth. Accessed 15 Dec. 2025.

Interview with Ms. Stacey!

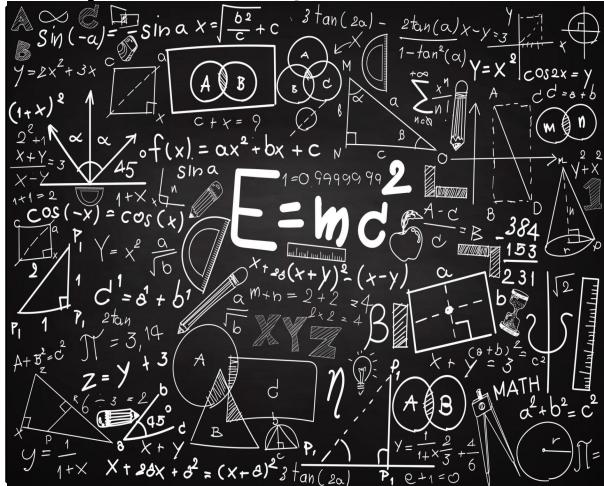
Question: What do you know about moths: "I know that moth's can be pollinators I also know that like they're little antenna like things are like, like fuzzy combs uhm, I know that uhm they're always in my leaf piles...we also have a moth that sometimes goes into our kitchen and into our like flour and rice thing, there attracted to light during the night. Next question What do moths usually eat: "I think they eat just pollen and sugar.."



WOW work!



Byline Arya, Emmeline, Monroe



We interviewed Oliver and Veronica because they are in tenth grade math which means there are two years ahead. We are interested in them since they are really smart. We interviewed them on the 11/17/2025

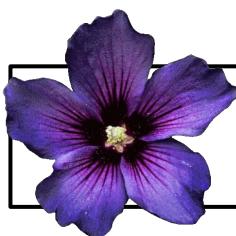
Oliver and Veronica



How does it feel being in tenth grade math?

Veronica: "it feels alright but it's a tiny bit harder" Oliver: "I sit at a table, in a chair and go on my chromebook and feel like I'm on my chromebook [pretty boring]" What is advice can you give to your peers going in this level of math?

Veronica: "Take good notes, use your time wisely, and try not to get overwhelmed or stressed" Oliver: "Don't fail" How hard is it in this level of math? Veronica: "It's decently hard" Oliver: "It's not really hard considering that I've been through the previous lessons"



PBL Progress Report

Byline Arya, Emmeline, Monroe



Stefanie Eddleman

We interviewed Stefanie because her class is making blueprint drawings for the maze in the pollinator garden. We interviewed her in Sycamore on 11/17/2024, so we can inform you all of where we are on the pollinator project.

During our interview with Ms. Stefanie, we asked, "What have you been doing in Health and Wellness PBL?" She said that we have been researching pollinators and painting rocks while working on the layout of the labyrinth for the pollinator garden. The next question that was asked was, "What is the end goal for your project?" She said, "To make a beautiful and tranquil walking path for our pollinator garden that everyone can enjoy."

The Pollinator Drawing Contest

By: Beau, Julia, Fin, Garrick



This was our first place entry, Addison Cochran. The theme was butterfly on a flower.

Hey TVS students! Vote for the new drawing contest theme!!! You have 1 week to do this. This is just for fun and for a money prize!!!

Vote at this link:

<https://forms.gle/BuEBsfQzGWX6tAKp9>

1st place gets 500 VB.

2nd place gets 300 VB.

3rd place gets 150 VB.

Try your best to win!!

Ways to Improve Mental health

By: Ben



This is an image representing mental health and its challenges.

Mental health is incredibly important for everyone but mainly teenagers because it is an important part of growth and they are more pressured by other people. Depression and mental health issues have risen over the last couple years, especially for teens. These are ways to hopefully improve it.

The first part is how your environment and the place you live can affect your mental health. One way is that a cluttered and messy space can make feelings of overwhelm and anxiety. A tidy and colorful space can make a sense of calm and boost moods. Another part is sound, like how harsh and loud noises can lead to anxiety or agitation. Shared music experiences at concerts, festivals and at home can enhance social connections and mood, and finally, playing a musical instrument is associated with improved cognitive health and well-being.

A study in 2024 showed that talking to your parents can help with stress. Multiple participants did a therapeutic approach called Internal Family Systems. It works on the idea that we have multiple perspectives in us and that talking to them can help you deal with hardships and problems in your life.

Those are some ways to hopefully improve mental health and some things to avoid. Mental health is a massive part of everyone's lives so it is important to keep it healthy.

Singl's bee = 1/12 teaspoon **honey bees never sleep**

50-80% **beat their wings 11400 times per second** **Queen lays up to 2000 eggs per day**

Queens may fight other queens to the death

5 eyes

Static buildup from flying attracts pollen

Only honey bees make honey

1 foraging trip = 50-100 flowers

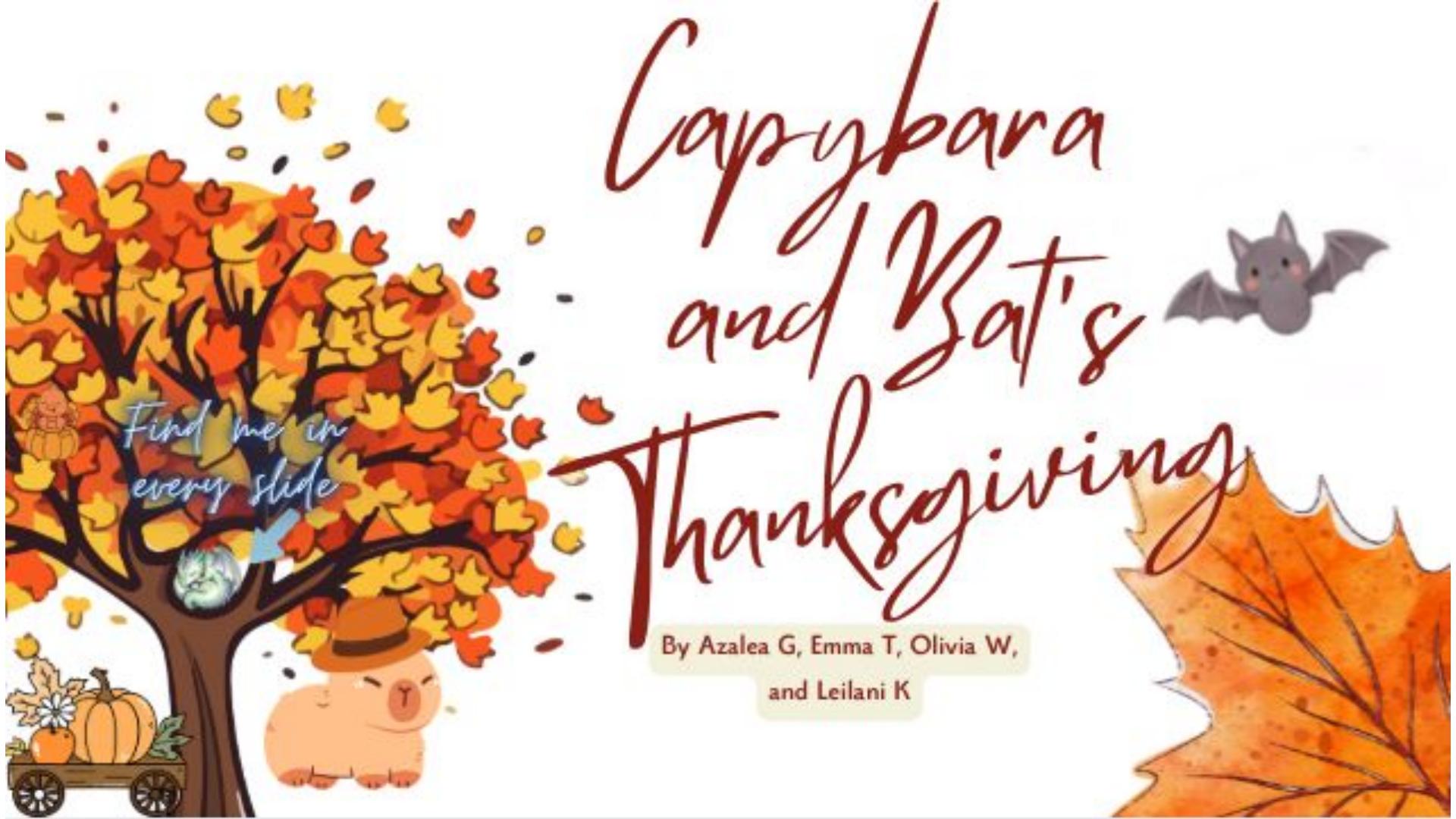
2 stomachs

Apiology is the study of bees



American bee journal, Sci news, Information sheet 18, NC state

university, ID tools, Ask nature, Pollinator partners, The holy habibee.



Capybara and Bat's Thanksgiving

By Azalea G, Emma T, Olivia W,
and Leilani K



Fall is when bats are actively preparing for the winter. While you may see their activity decrease later in the season as the temperatures drop, you should also prepare for their early-season behavior.



OMG it's
Thanksgiving!!

Time to cook
some yummy
food!!!

welcome

25
Thanksgiving

Bats are crucial nocturnal pollinators for over 500 plant species, including important food crops, due to their ability to fly long distances, carry large amounts of pollen in their fur, and use echolocation to find flowers.



Eating insects is by far the most common diet found among the 1,450+ species of bats worldwide, which benefits our ecosystems by keeping many insect species in balance.



HAPPY
*Thanks
Giving*



Classifieds

Sports News	Upcoming News	Spirit Week news
Girls basketball is now starting games will be every Monday and practice will be held every weekday at tbd.	Lego club officially in motion Gingerbread club has started Upcoming Art club (waiting for information)	Mr Gabe is Planning with some students currently but more information coming soon
Boys basketball games are still every Monday and practice is every week day from 3:30 to 5:00 		

Tenebrionidae - Darkling beetles

By Charlie Smith

Tenebrionidae is a family of beetles in the suborder Polyphaga. This family includes many different beetles and it is one of the most diverse families of beetles. A few species of these beetles are available as commercial pet food which include mealworms (*tenebrio molitor*), superworms (*zophobas morio*) and rice beetles (*tribolium confusum*) Tenebrionidae is divided into 8 subfamilies lagriinae, phrenapitinae, pimeline, tenebrionidae, blaptinae, alleculinae, diaperinae, and stenohaline. Each one of these subfamilies is then divided into 106 tribes but we will be focusing on cryptoglossa, amphidorini, and cnodalonini

Cryptoglossa

The beetles in this tribe are mostly desert beetles that live in the Sonoran and Mojave deserts especially in washes where creeks or streams used to run. They are crepuscular, meaning they are active in the mornings and evenings because that is when the temperature is the most mild.

Examples

Asbolus verrucosus + *A. leavis*

These beetles are desert beetles and are commonly kept as pets in the pet bug niche. They have the ability to feign death to ward off predators by rolling on their back and sticking their legs in the air.

Cryptoglossa sp.

These beetles lack the blue coloration of asbolus and have a less round shape although they are very similar and can also feign death.

Cnodalonini

The beetles in this tribe are mostly found in the western United States and Canada. Some of these you can even find in Medford. Most of these beetles have the ability to leak defensive chemicals from a gland near their anus. Their diet mostly consists of decaying logs of *quercus* (oak) and *pinus* (pine) ; they may also feed on fungi that grows in the dead log.

Iphthimus serratus

These beetles live in the pacific northwest and are common in Washington and northern Oregon. They have a habit of climbing foliage and tree trunks.

Coelocnemis Ditacolis + Magna

These beetles are common all over the western United states although they are plentiful here. They live in oak savannas and alpine forests and feed on rotted cellulose and fungi. These beetles are easily distinguished from eloedess because of the yellow hairs lining the tibia.

Alobates pennsylvanica

These beetles are found all over the united states but they are common in California. They eat decaying logs. They have a tendency to hibernate and group up in large numbers under logs with sometimes hundreds of individuals.

Amphidorini

This tribe has many genera and species but the most researched and most interesting genus is eleodes, also known as desert stink beetles or pinacate beetles. They are known for their long back legs and head standing behavior similar to coelocnemis' head standing behavior. The headstand is a defense mechanism where they point the tip of their abdomen at the attacker to threaten them with a foul odor as one of their common names suggests. Eleodes are widespread in the southwestern United States.

From top down, *Coelocnemis ditacolis*, *Eleodes Armata*, *Asbolus Verrucosus* Photos from Inaturalist

Examples

Eleodes Armata

A shiny black beetle with long thin legs. Common in Sonoran and Mojave deserts. Feed on decaying material and are commonly active at night. A common choice in the bug pet niche.
Common name Armored Darkling beetle.



Glossary

Explanation of names and terms used in this article

Word Definition

Subfamily - The taxon lower than family

Tribe - The taxon lower than subfamily

Tibia - a part on the upper leg of a beetle

Cellulose - A polysaccharide with the formula

$(C_6H_{10}O_5)_n$ and the main component of plant cell walls it is also the most abundant organic polymer

Next Week - holometabolous vs. hemimetabolous

Rank	Ending	Example
Kingdom	-	Plantae
Phylum = Division	-phyta	Magnoliophyta
Subphylum = Sub division	-phytina	Magnoliophytina
Class	-opsida	Asteropsida
Sub class	-idea	Asteridea
Order	-ales	Asterales
Suborder	-ineae	Asterineae
Family	-aceae	Asteraceae
Sub family	-oideae	Astroideae
Tribe	-eae	Heliantheae
Genus	-	Helianthus
Sub genus	-	<i>Helianthus</i> subg. <i>Helianthus</i>
Series	-	<i>Helianthus</i> ser. <i>Helianthus</i>
Species	-	<i>Helianthus annuus</i>

learninsta.com

In Taxonomy the highest taxon is kingdom and every kingdom contains multiple phyla and every phylum contains multiple classes and so on.

Fun Facts With Ryland And Charlie! Darkling beetle



Really quick at digging!

I HIGHLY recommend you zoom in!

Can not bite but releases a stinky odor in self defense!

A female Darkling lay up to 2000 eggs in a year!

The larva are VERY high in protein and are really good for pets that eat insects, or... you could just eat them yourself but i don't recommend it.

Very good for basic biology.

That's it for f-f-fun facts with ryland and charlie!

Joke Time!!!!!!

You haven't lived until you've ruined a date with an aggressively timed bug pun.

- Why did the darkling beetle refuse to tell a joke?
Because it was too dark!
- How did the darkling beetle describe its new comedy routine?
"It's a little niche, but worth it – real dirt comedy!"
- What's a darkling beetle's favorite song?
"Beet It" by Michael Jackson!

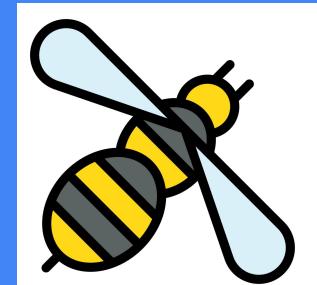
Interactive Blue day

Made by:
Henry R.
And Noah A.

[Pollinator Wordle](#)

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link