



Transformation

A Study of Metamorphosis and Personal Growth

Dear Parents, Teachers, and PEAKers,

Students took a deep dive into biology last week with the **5 Areas of Investigating Living Things!** They participated in a simulation where we catalogued some new species we had “discovered” (the students themselves!) and observed their physical characteristics (**Natural History**), heard about their homes (**Habitat**), how they were cared for in infancy and childhood (**Reproduction/Care of Young**), what they like to eat and drink (**Diet**), the many different ways they can move, and places they frequently travel to (**Movement/Migration**). It was a lively and fun introduction, and served as a springboard into the 5 Areas research the teams then completed on their chosen metamorphic species.

Students also used teamwork and leadership skills as they designed challenging outdoor obstacle courses to represent the many challenges these metamorphic species face as they hatch, grow, develop, and metamorphose into adults. Many of them completed their metamorphoses and survived to adulthood, while some less lucky specimens were eaten by fish, failed to emerge from their chrysalises, or fell prey to other hazards. It’s a dangerous world out there! (See example pics on pg. 2).

We’ll learn even more about tiger salamanders and other amphibians of Montana from real wildlife biologists this week as students take a trip to Montana WILD! We’ll be learning from the experts, asking questions to help with the students’ final projects, and seeing some real live amphibians and macroinvertebrates! (Pics above).

Student teams will then begin designing their final projects for this unit. I don’t want to give away the surprise just yet, but these projects will be artistic and scientific depictions of their chosen species’ cycles of metamorphosis. Students will present them to you late in October- please watch for details!

This Week’s Activities: October 9 - 13

<p>Research: Expert-Led Research I can listen attentively, take effective notes, ask pertinent questions, and utilize expert information to add depth to my own work.</p>	<p>WILD Amphibians - Students will learn about amphibians of Montana from experts at Montana WILD. They will also ask their own questions to help them with their final project research.</p>
<p>Interpersonal: Teamwork/Collaboration I can assume an assigned role within a group and effectively contribute to a team.</p>	<p>Population Integration - Students will participate in some interpersonal activities to get acquainted with PEAK students from the other schools since Monday and Tuesday students will be together for the day.</p>
<p>Creativity: Product Development I can create projects that contain my own design choices such as color, style, pattern, etc. and describe why I chose them.</p>	<p>Final Project Build - Student teams have chosen organisms, researched them, and will begin building physical displays of their creatures’ life cycle stages.</p>

Building our Bugs and Beasts,

J. Slead

PEAK GT4-5: Fall 2023

October 9	10 → Jefferson Rossiter Warren Jim Darcy Kessler Central	11 Four Georgians Hawthorne	12 Smith Broadwater Bryant	13
16 Jefferson Rossiter Warren	17 Jim Darcy Kessler Central	18 Four Georgians Hawthorne Smith, Bryant Broadwater ←	19 20 Teacher Conventions No School	
23 Jefferson Rossiter Warren	24 Jim Darcy Kessler Central	25 Four Georgians Hawthorne	26 Smith Broadwater Bryant	27
30 Jefferson Rossiter Warren	31 Jim Darcy Kessler Central	November 1 Four Georgians Hawthorne	2 Smith Broadwater Bryant	3
6 Jefferson Rossiter Warren	7 Jim Darcy Kessler Central	8 Four Georgians Hawthorne	9 Smith Broadwater Bryant	10



A baby salamander emerges from its egg.



Hatchling tadpoles practice swimming to grow. They swing more times on each swing moving down the line, representing metamorphosis.



An adult salamander navigates the rocks to emerge on the river bank. The salamanders must avoid lurking predators (the black climbing grips) or they'll be eaten!