

Caterpillar Field Reports (S.T.E.M.)
Grade Level: 8

Overview	Students will learn about the Costa Rican caterpillar and its role in an endangered ecosystem.
Objectives	After completing the readings from the Costa Rican Caterpillar Field Report pages, students will be able to build their own caterpillar that is suited to its particular environment as well as complete five essay questions over the material covered.
Standards	- 8.4.8: Describe how environmental conditions affect the survival of individual organisms and how entire species may prosper in spite of the poor survivability or bad fortune of individuals.
Materials	- Computers with internet access
Procedure	<ol style="list-style-type: none"> 1. Have the students read about Costa Rican Caterpillars <ul style="list-style-type: none"> -It is only necessary to have them read the Field Sites and Field Report sections. 2. Have them keep in mind that they will build their own caterpillar that is suited to its particular environment later. 3. Post questions to Yammer about the Costa Rican caterpillar that the students must respond to on Yammer. 4. Only one question is assigned to each student. 5. Some of the questions to include: <ul style="list-style-type: none"> - Describe the physical attributes, climate, and animals of the La Selva Biological Reserve, in Costa Rica. - Why do tropical rainforests have such a diverse collection of plants and animals? - Define biodiversity and explain why it is so important. - How do caterpillars affect the tropical rainforest? - What are ways that caterpillars defend themselves from predators? - What are the life cycle stages of the caterpillar? - Describe the parts of the caterpillar. - What are some behavior characteristics of the caterpillar? - Describe what takes place in the caterpillar "zoo." - What is the canopy layer of the rainforest like? - What did scientists learn about caterpillars from the data they collected? - Why is it essential for conservationists to know as much as they can about rainforest ecosystems? 6. After they have completed their readings and posted their answers, they are to build their own caterpillar using the Endangered Ecosystems website. <ul style="list-style-type: none"> -Make sure the students know to review all of the questions and answers that the other students posted because they will be asked about them later. 7. After they finish building their caterpillar, each student is to choose one environment that was covered in the build your own caterpillar activity, and post on Yammer why they chose the characteristics they did for their caterpillar in that environment.

Evaluation	The students will be given a 5 question essay test that will cover material included in the Costa Rican caterpillar sections. The students' explanations for why they chose the characteristics they did for their caterpillar will also be taken into consideration as to how well they understood the unit.
Adapted from:	http://www2.scholastic.com/browse/lessonplan.jsp?id=492&FullBreadCrumb=%3Ca+href%3D%22http%3A%2F%2Fwww2.scholastic.com%2Fbrowse%2Fsearch%2F%3Fnr%3DOR(Resource_Type%3ALesson%2520Plan%2CResource_Type%3AInformal%2520Lesson%2520Article%2CResource_Type%3AUnit%2520Plan)%26N%3D0%26isBrowse%3DY%22+class%3D%22endecaAll%22%3EAll+Results%3C%2Fa%3E+%26gt%3B+Grade+9+-+12http://www2.scholastic.com/browse/lessonplan.jsp?id=492