



The State Fair of
TEXAS
Curriculum

LIVESTOCK & AGRICULTURE
GRADE 8 STEM

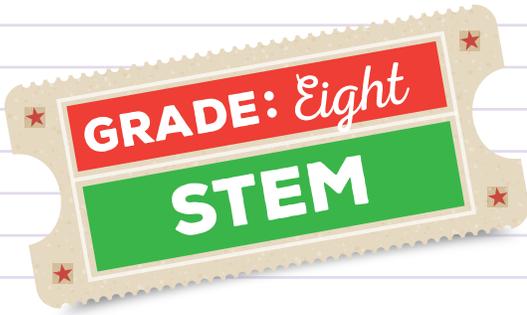
ART SAVES LIVES!

ENVIRONMENTAL AWARENESS ON A TROPHIC LEVEL



STUDENT EDITION

LIVESTOCK & AGRICULTURE

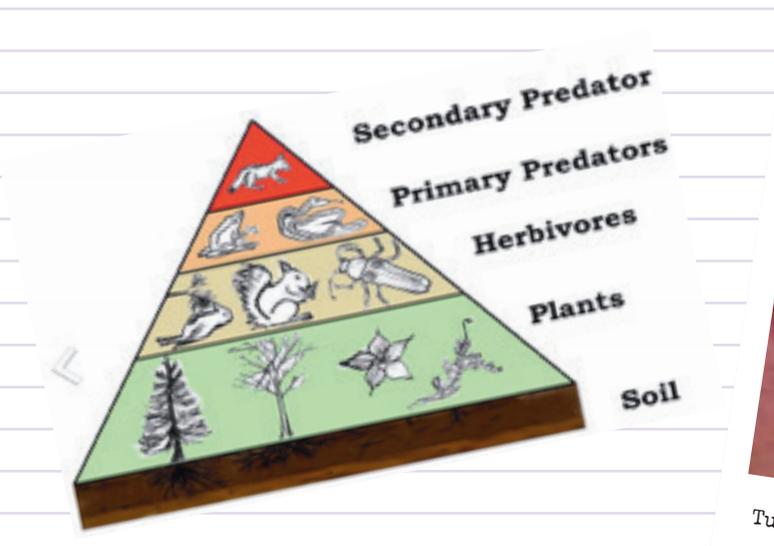


Art Saves Lives! Environmental Awareness on a Trophic Level



Recap

- ★ Recall the in-class discussion you had about what it takes to grow a successful crop in Texas, and how plants, humans, and animals get their energy.
- ★ Review the trophic level diagrams below:



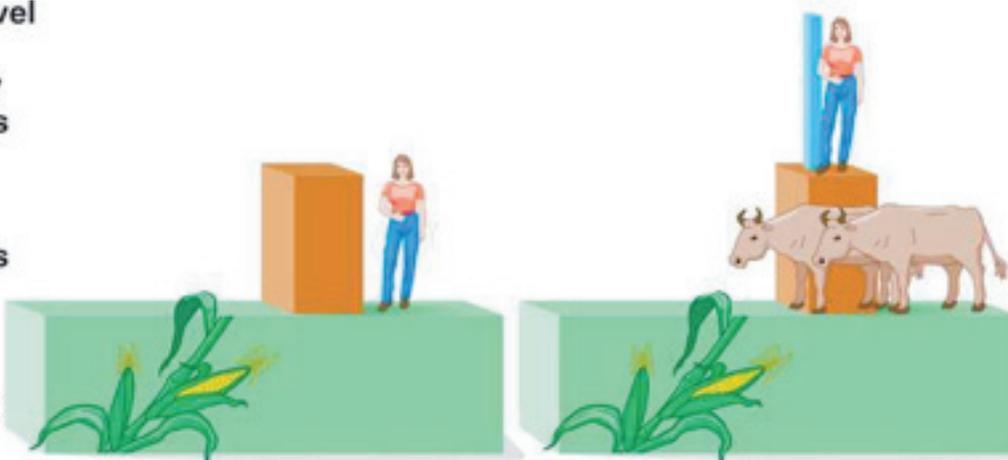
Turtle sculpture made from recycled materials, by Helena Maratheftis. helenamaratheftis.com

Trophic level

Secondary consumers

Primary consumers

Primary producers



STUDENT EDITION

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Art Saves Lives! Environmental Awareness on a Trophic Level



Plan Your Route.

- ★ From the Texas Star, head over to the Greenhouse and take a tour.
- ★ When you're finished, go up MLK Blvd to the Livestock Barns and explore.

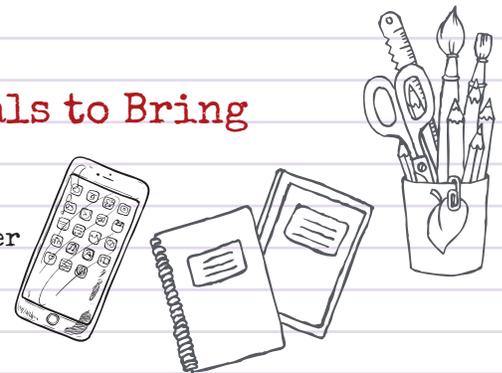
★ Visit the following links again to review class discussions on farmland, pollution, and environmental awareness art:

- ★ <https://www.farmland.org/our-work/areas-of-focus/farmland>
- ★ <http://homeguides.sfgate.com/pollution-affect-living-things-79218.html>
- ★ <http://www.hongkiat.com/blog/public-awareness-artwork/>



Optional Materials to Bring

- ★ Smart Phone, Tablet
- ★ Pencil & Sketchbook
- ★ Science Notebook or Paper

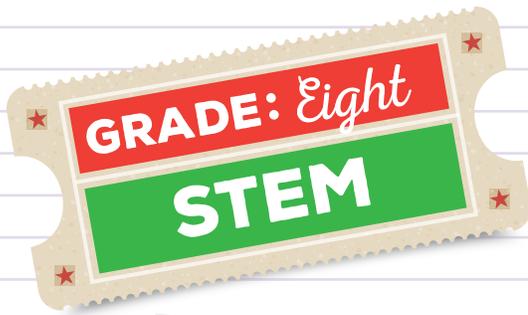


While You're There

You will use information you gather at the State Fair to help you with up to **three projects**:

1. Create a trophic level pyramid of the "fair ecosystem"
2. Craft a graphic organizer to classify the animals you observed (Math Connection)
3. Design your own environmental awareness art

The goal of your visit is to gather information about the plants and animals you see in the Greenhouse and Livestock Barns so that you can complete the three projects back at school. Be sure to ask questions of the people that you see caring for the plants/animals. They are there to help!



Art Saves Lives! Environmental Awareness on a Trophic Level



GREENHOUSE

- ★ Pay attention to all of the things that are needed to grow plants/crops successfully.
- What type of soil is needed?
- What added nutrients are needed, if any?
- Where are they getting the majority of their energy?
- How much sunlight/rain is needed?
- What sorts of things hinder their ability to grow?
- What trophic level would you put them in?

LIVESTOCK PAVILION

- ★ Join a Guided Livestock Tour.
- Think about all of the different things that are needed to raise and breed healthy animals.
- What do the animals in the livestock barn eat?
- What trophic level would you put them in?
- Could they belong in different trophic levels?

MATH CONNECTION

- Use these questions to help you with the Math Connection portion of this lesson.
- How would you describe each of the animals?
- What characteristics do the animals have in common?
- What characteristics make the animals different?
- How would you classify or group the animals you observed?

Back at School

When you return to school following your visit, you will work on the three projects above. See your teachers for more information.

