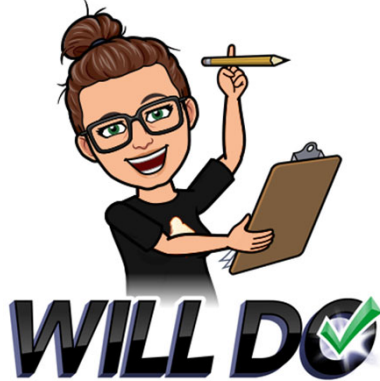


# Mini Lesson



Book: Milk From Cow to Carton



Energy transfer



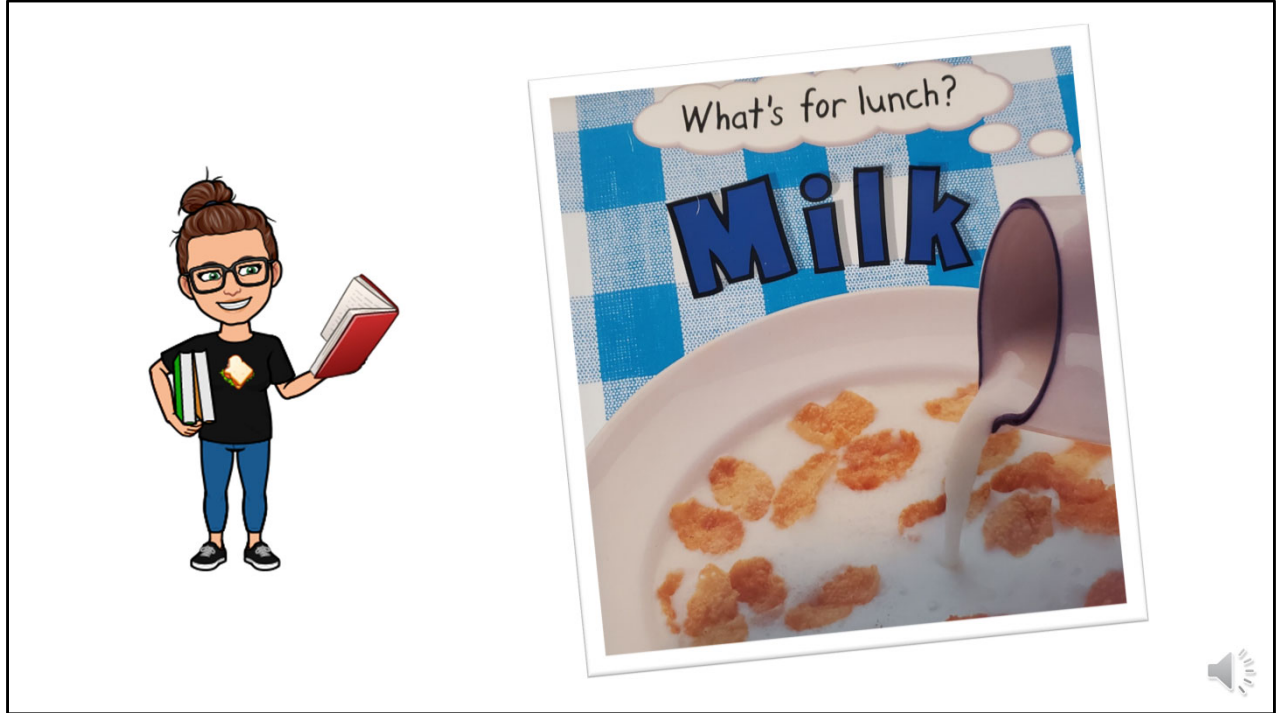
Today's mini lesson is all about energy!

First, we will talk about a book called: Milk From Cow to Carton

Then, we will talk learn about the energy transfer in milk production

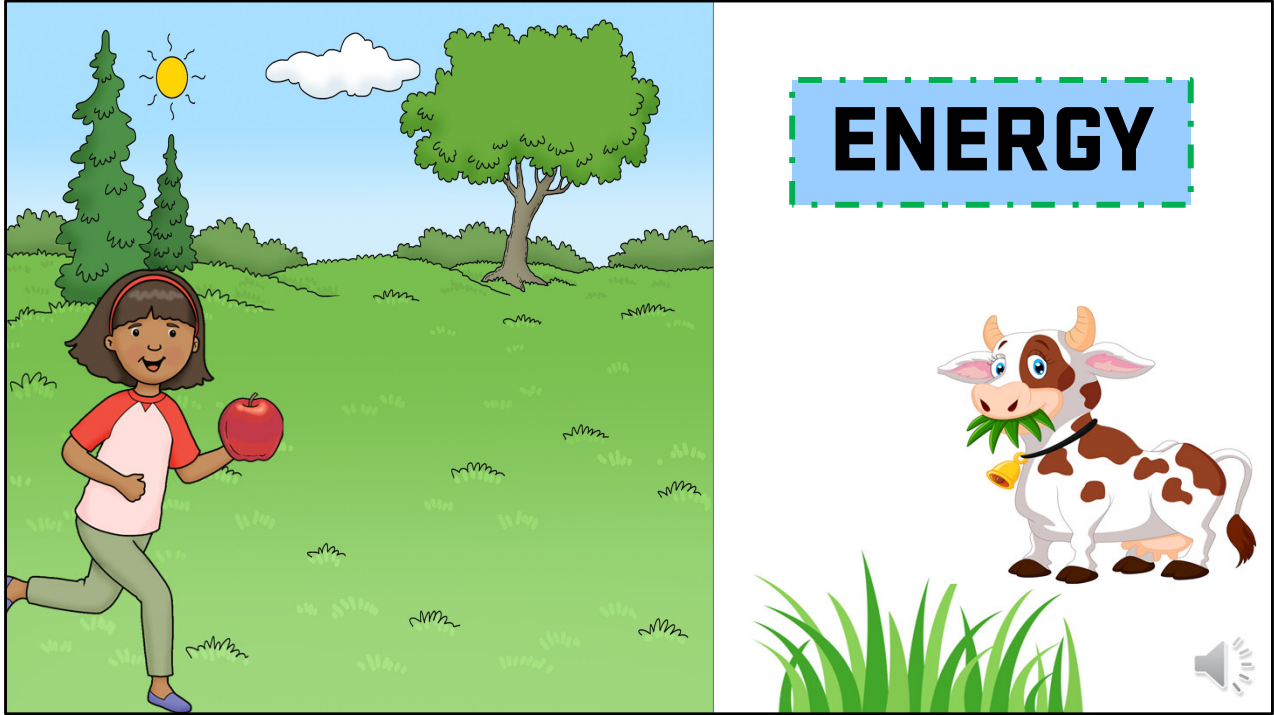
**\*\*\* TEACHER NOTE:** Up next I will mention the book, asking the students if they read it. If you have not read this book already. You can also choose to read the book prior to the lesson if you prefer.

Length: 4 Minutes and 4 seconds



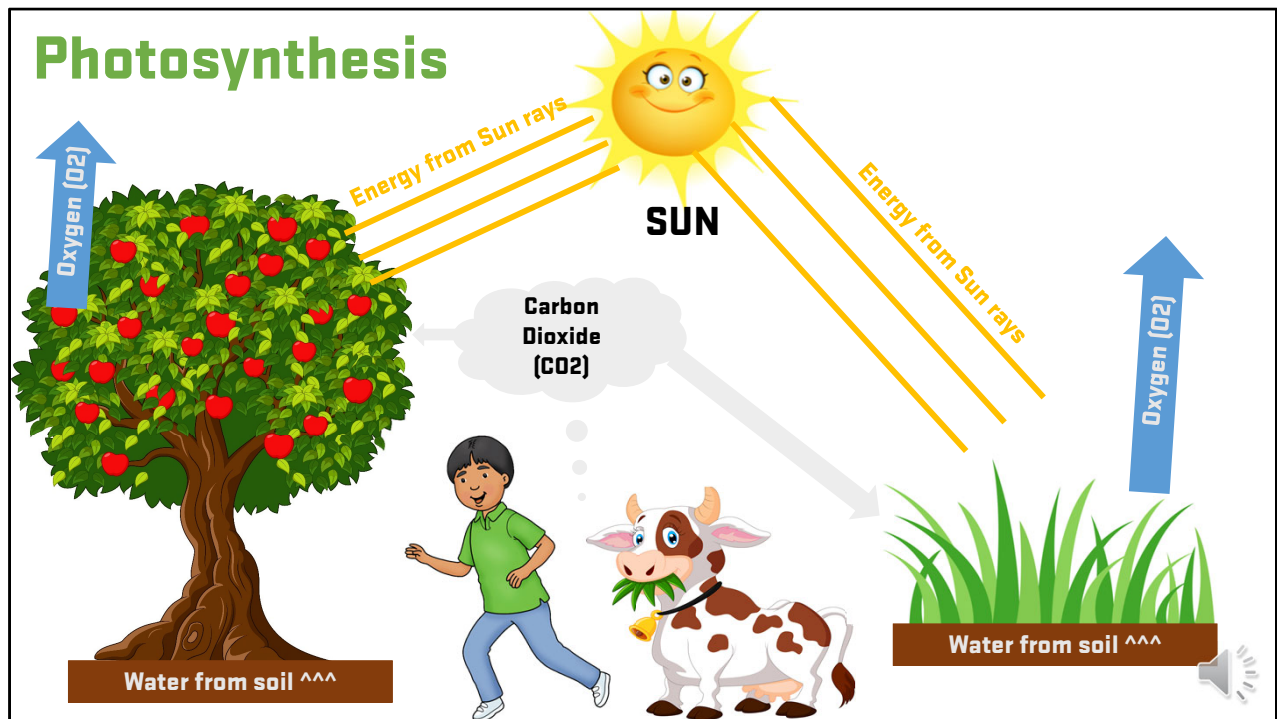
Here it is! What's for Lunch? Milk is an interesting book that teaches about the journey of milk from the cow all the way to the store  
Have you read this book? If not, that's okay. Let's stop here and read it! If you have already read this book, let's keep on learning!

**\*\*\*TEACHERS NOTE:** You can check this book and/or lesson kit out by contacting your Klamath County's extension office's SNAP-Ed program. The books can be delivered with or without your classroom kit prior to the lesson date. An OSU educator will set up a time to pick up the book and/or lesson kit after the lesson date. Please pause here to read the book to students. If you have already read the book, move on to the next slide for discussion.



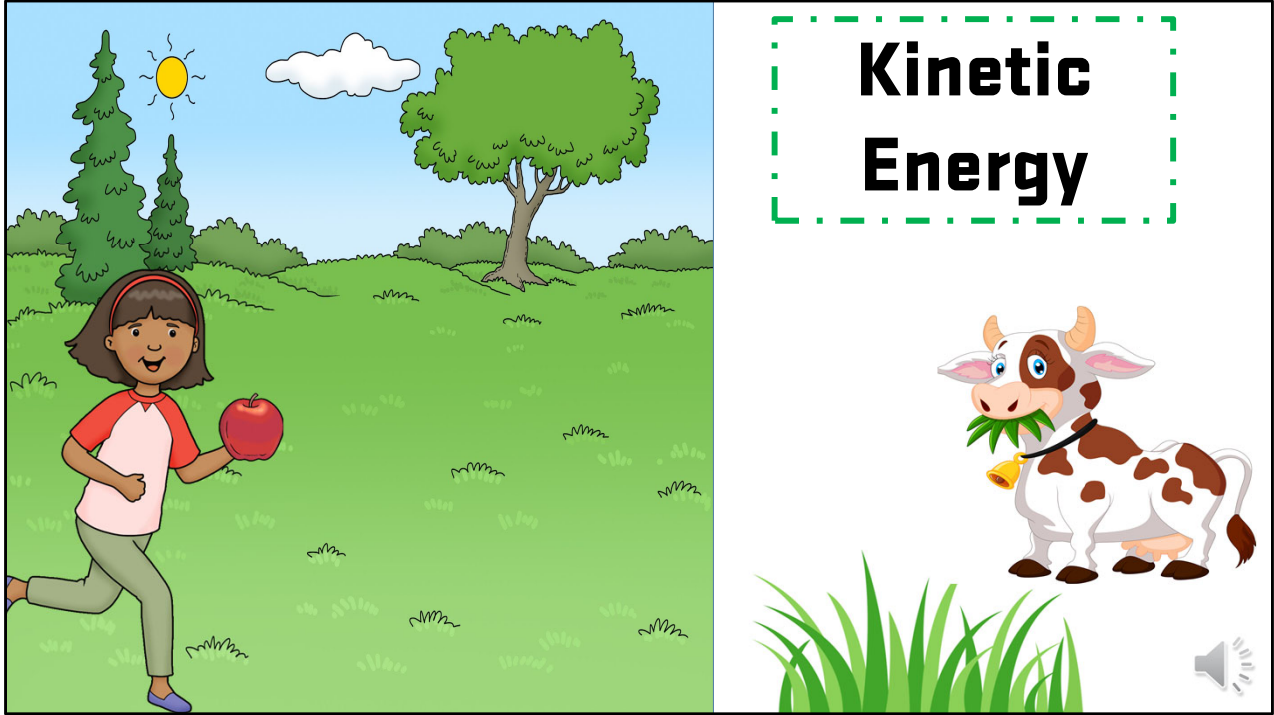
Did you know we all use energy? Humans and animals both get their energy from nutrients made by plants. Nutrients from the plant provide humans and animals with what their bodies need to grow and stay healthy. Humans and or dairy cows both receive energy from plants in the form of fruits, vegetables or grains. Look at our friend in the picture, Emma. Emma just ate an apple. Emma is now using the energy from the nutrients in that apple to help her run! I would also like you to meet Myrtle, the dairy cow. Myrtle is grazing on the grass from the pasture. Myrtle is using the energy from the nutrients in the grass to make milk! Just like you saw in the book! Let's take a look at how plants get those nutrients.

**\*\*\*TEACHER NOTE:** Please feel free to stop here and answer any questions students may have.



For plants like grass or apple trees to create nutrients they must go through a process called Photosynthesis. Say that word with me. Photo-syn-the-sis. NICE! Photosynthesis is the process by which plants use sunlight to synthesize (create) foods from carbon dioxide and water. The plants absorb the sun's radiant energy and create it into chemical energy that is stored in the plant. The carbon dioxide the plants take in is what humans and animals' breath out. The water the plants use comes from the soil. Photosynthesis in plants normally requires the green pigment chlorophyll (the stuff that makes our plants green) and creates oxygen during the process. Oxygen is part of the air we breath, all humans and animals need this to live. Photosynthesis is how grass and plants grow and prepare for animals and humans to eat. Let's see what the humans and animals can do with the energy they get from eating the plants. Remember plants that we eat com in the form of fruits, vegetables or grains

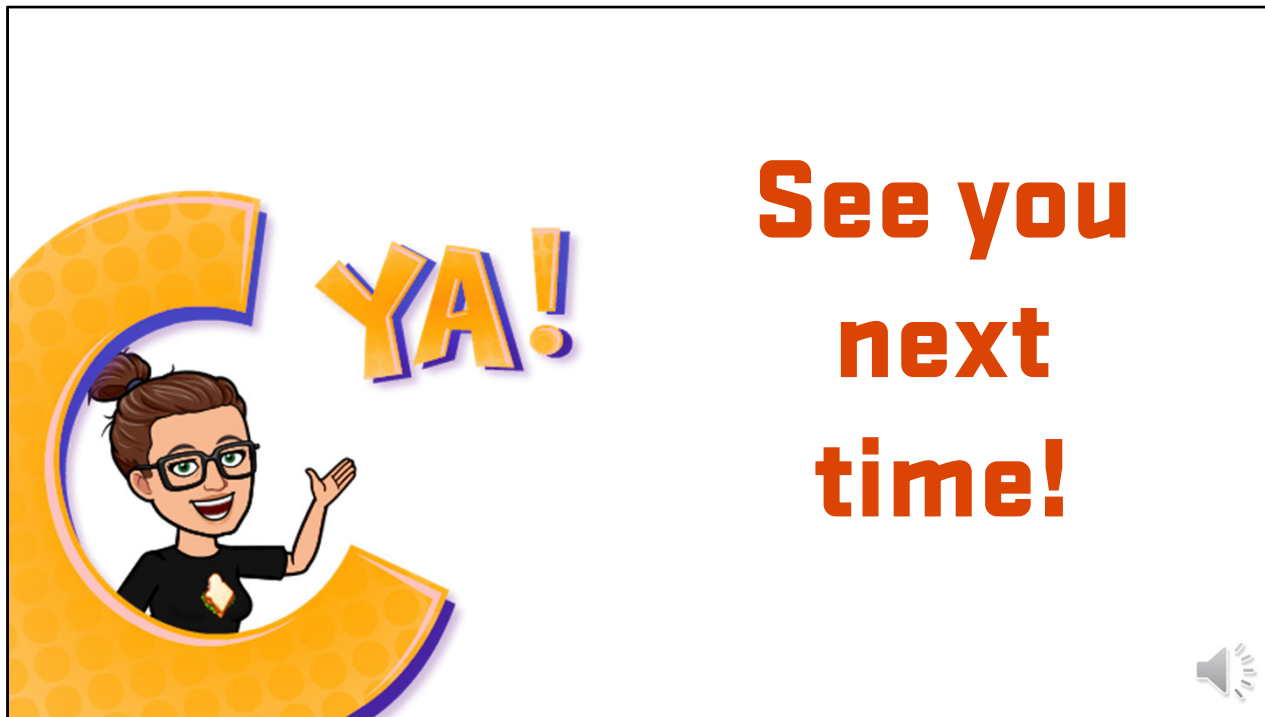
**\*\*\*TEACHER NOTE:** Feel free to pause and review if needed. Up next we will discuss kinetic energy.



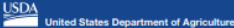

Let's talk about Kinetic energy. Emma uses the chemical energy stored in this apple to move when she runs and plays. Myrtle uses the kinetic energy stored in this grass hay to continue chewing her food and digesting to produce milk. The movement of Emma playing and Myrtle chewing is called Kinetic energy, also known as physical energy. Our bodies rely on Kinetic Energy (energy our body uses to move) to do work, have fun and accomplish tasks.

Let's see how Myrtle the dairy cow uses the energy she gets from the grass in our next activity!

**\*\*\*TEACHER NOTE:** Please feel free to stop here and answer any questions students may have. Or discuss the importance of energy in our everyday lives.



That is the end of our mini lesson today. Thank you for learning with me in our online Oregon Grown classroom! See you next time!

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The letter must contain the complainant's name, address, telephone number and a written description of the alleged discriminatory action in sufficient detail to inform the Assistant Secretary for Civil Rights (ASCR) about the nature and date of an alleged civil rights violation. The completed AD-3027 form or letter must be submitted to USDA by:

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U.S. Department of Agriculture  
Office of the Assistant Secretary for Civil Rights  
1400 Independence Avenue, SW  
Washington, D.C. 20250-9410; or

**fax:**  
(833) 256-1665 or (202) 690-7442;

**email:**  
[program.intake@usda.gov](mailto:program.intake@usda.gov).

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**correo postal:**  
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Office of the Assistant Secretary for Civil Rights  
1400 Independence Avenue, SW  
Washington, D.C. 20250-9410; o'

**fax:**  
(833) 256-1665 o' (202) 690-7442;

**correo electrónico:**  
[program.intake@usda.gov](mailto:program.intake@usda.gov).

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Form AD-475-S SNAP and FOPIR Poster Revised September 2019 Afiche del Formulario AD-475-S SNAP y FOPIR / Revisado Septiembre 2019

**\*\*\*TEACHER NOTE:** If program delivered in a non-school setting, you must read the script below

Oregon State University's Klamath County Extension Service would like to take a moment to share with you the And Justice For All poster, something we display when we are teaching. It provides non-discrimination information stating that our institution is prohibited from discriminating in accordance with civil rights regulations and policies. For more information see this link -> <https://www.fns.usda.gov/cr/and-justice-all-posters-guidance-and-translations>  
This program is partially funded USDA's Supplemental Nutrition Assistance Program.

## Credits Slide (1 of 1)



**Oregon State University**  
Extension Service



Project funded, in part, by Oregon Department of Ed Farm to School & School Garden Grant

This material was funded by USDA's Supplemental Nutrition Assistance Program - SNAP. For information on nutrition assistance through Oregon SNAP, contact Oregon SafeNet at 211. USDA is an equal opportunity provider and employer. Oregon State University, Oregon State University Extension Service is an Equal Opportunity Provider and Employer.

Photos Source: FoodHero.org & Shutterstock (Invoice available upon request).

Farmer fun facts by: Oregon dairy council & <https://www.oregon.gov/ode/students-and-family/childnutrition/F2S/Pages/OregonHarvestforSchools.aspx>

Activity Source: Oregon Agriculture in the Classroom Foundation



Oregon Agriculture in the  
Classroom Foundation

