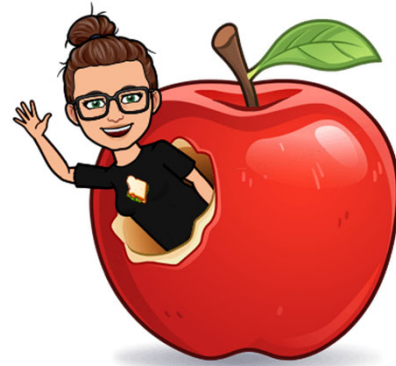




# Oregon Grown



With Mrs. Paolina !



Hello Students! Welcome to the Oregon Grown classroom with Mrs. Paolina. Here we get learn all about Oregon grown foods and healthy ways we can eat them!

**\*\*\*TEACHER NOTE:**

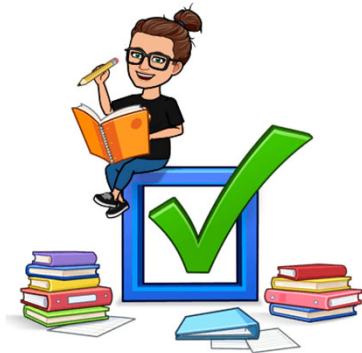
Oregon state Standards: NGSS: 5-LS2-1, MS-ESS2-1, Essential Skills: 5, 8, CCSS: RI.3.7, Math NF.3.1.

Key Message: Students learn about the small fractions of the planet available for growing food and ways this important land can be protected.

Time: This lesson is less than 16 minutes without pauses for the activity. Total 30-45 minutes with activity pauses.



# Earth As An Apple Mini Lesson



**Earth's Soil**



**Why it is important**



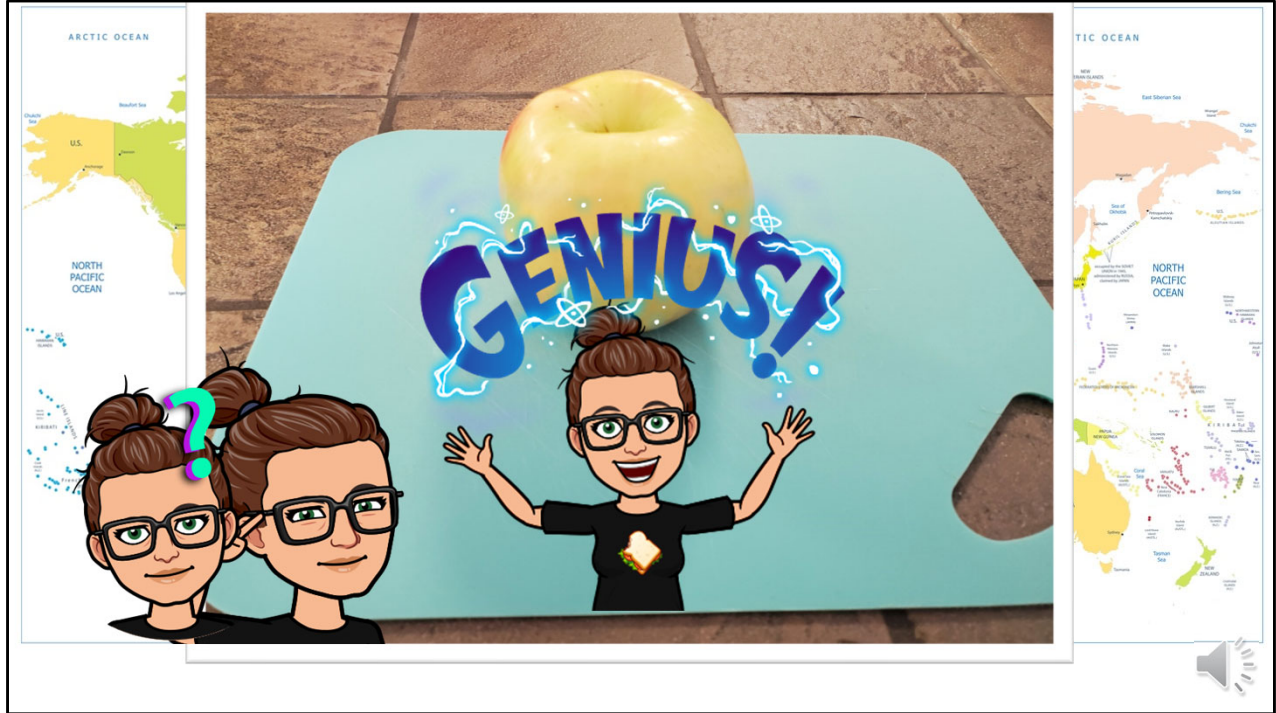
**Soil Facts**

Adapted from Oregon Agriculture in the classroom foundation Part 1: Earth as an Apple & Soil conservation. oregonaitc.org



Today's Mini Lesson is all about the earth's soil. It is called Earth As An Apple. We will look at how much soil is on the earth and what portion is available for farmers to farm on. Then, we will talk about why this is important to us. Finally, we will end our lesson with some soil facts! Are you ready?!

**\*\*\*TEACHER NOTE:** Coming up next is a visual activity where an apple is the earth and is cut up into different portions. Adapted from Oregon Agriculture in the classroom foundation Part 1: Earth as an Apple & Soil conservation. Oregonaitc.org

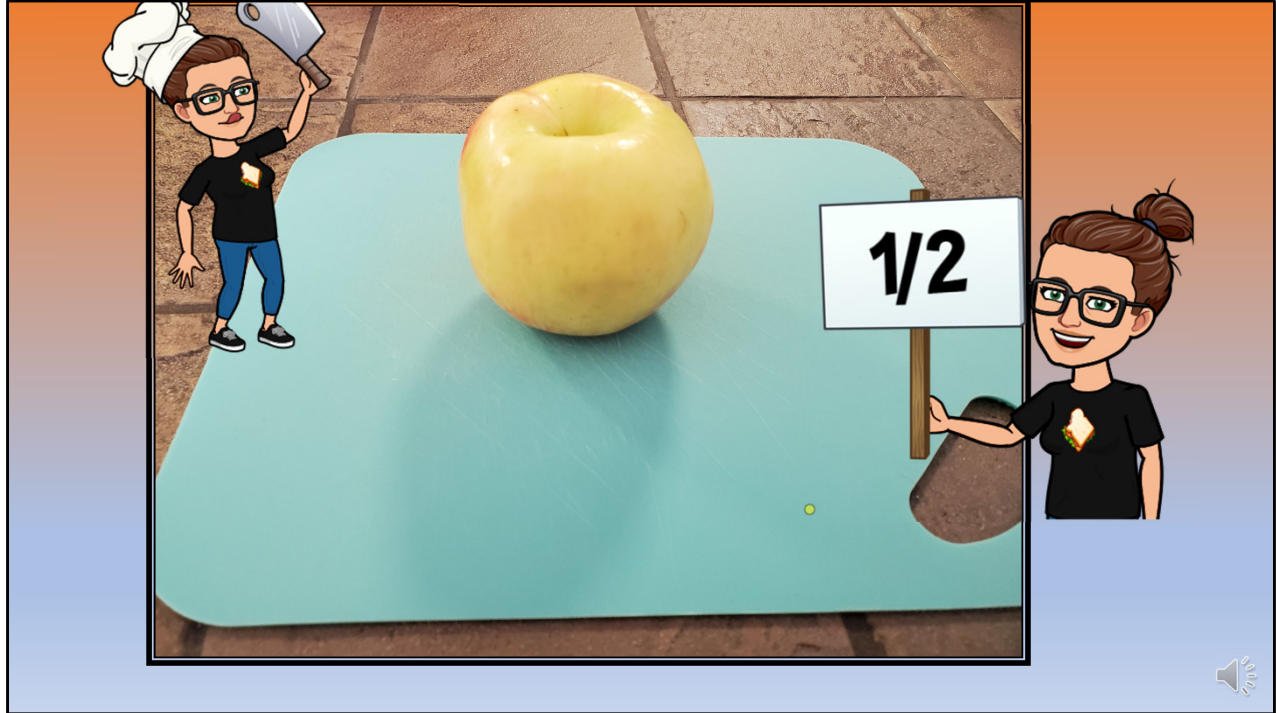


This is a map of the world, our Earth. Do you know what amount of the earth is water? What about Land? How much of the Earth is land? 50%? 75%? I'll let you guess

**\*\*\*TEACHERS NOTE:** Pause here for students guess and discussion.

Great guesses! Now, turn your imaginations on because we are going to picture this apple as our earth, just like the one on the map we just saw. Pretending this apple is our earth, I am going to cut it up into different sections so we can learn how much is land and how much is water.

**\*\*\*TEACHERS NOTE:**



First let's cut our earth apple down the middle. If I started with 1 whole apple, then cut it in half. What fraction of the whole do I have?

**\*\*\*TEACHER NOTE:** Stop and let students guess. Discuss fractions if you would like.

That's right I have two, one half pieces of an apple! Let's keep cutting

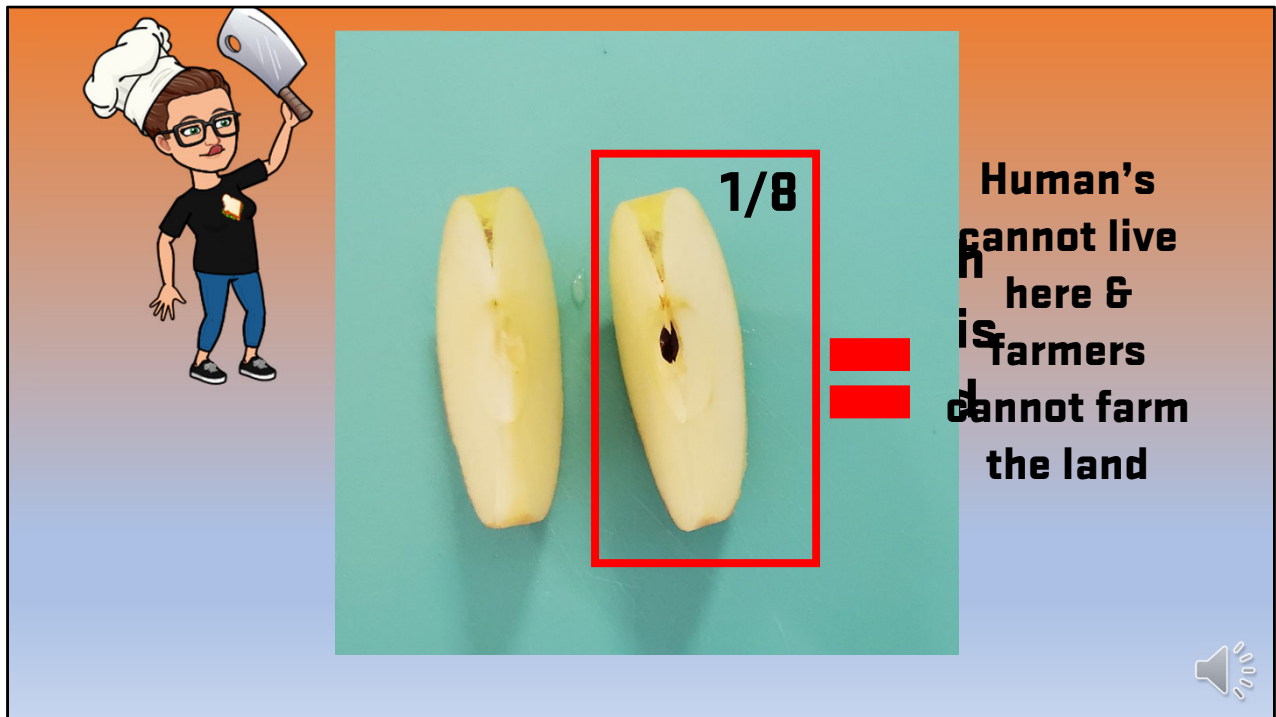


I am going to cut each  $\frac{1}{2}$  of the whole earth apple into  $\frac{1}{4}$  pieces. I now have 4,  $\frac{1}{4}$  pieces of the 1 whole earth apple.

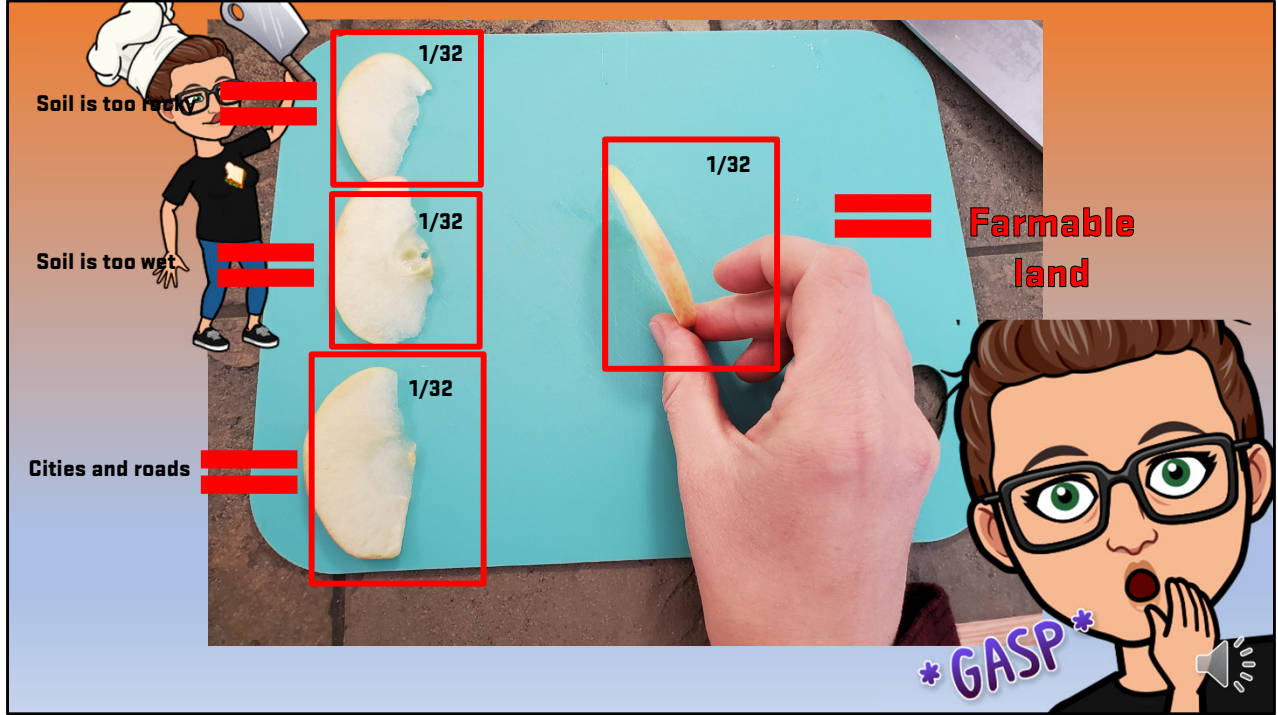
Three of the  $\frac{1}{4}$  pieces represent the amount of earth that is water, that includes oceans, seas, lakes and rivers.

The remaining  $\frac{1}{4}$  of the earth apple represents the amount of earth that is land. That means 75% of my earth ( $\frac{3}{4}$ ) is water and 25% of my earth ( $\frac{1}{4}$ ) is land

**\*\*\*TEACHER NOTE:** Please feel free to pause here for discussion if you would like.



Let's talk about our remaining  $\frac{1}{4}$  piece of our earth apple. I am going to cut my  $\frac{1}{4}$  piece into two more pieces. I now have 2,  $\frac{1}{8}$  pieces. These two small slices represent all the land on earth. However,  $\frac{1}{8}$  of the earth's land is not suitable for humans to live on or farmers to farm on.

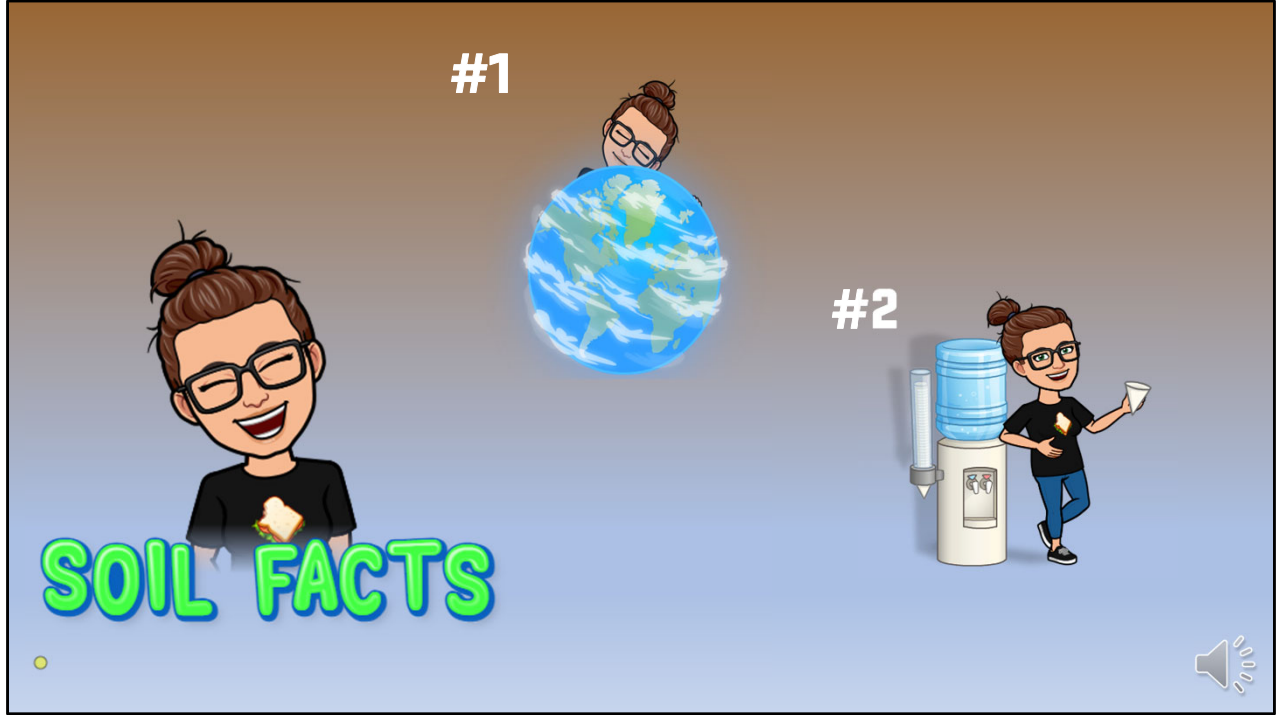


This means we are left with only 1/8 of the earth's land that is suitable for humans to live on and farmers to farm on. However, we are going to have to cut this piece 1/8 into 4 more pieces. That means I now have 4, 1/32 pieces of the earth's land. 1/32 of the land's soil is too rocky to farm, this 1/32 of the land's soil is too wet to farm, and this 1/32 of the land is filled with cities and roads... That leaves us with only 1, 1/32 of the earth's land available for our farmers to farm.



But wait! The farmers can only plant in topsoil. So, if we cut the skin off this piece. We are left with 3% of our earth apple. This thin sliver represents all the topsoil available on our entire earth for farmers. That tiny sliver of land feeds 7+ billion people that live on our planet every day! That is why it is so important to be kind to our earth's soil, because without it, where would we grow all of our food?!





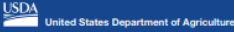

Now that we understand why our soil is so important. Let's talk about SOIL FACTS!

- #1 Life on earth depends on soil: plants get food from soil, and animals get food from plants or animals that eat plants. Without soil, animals would not have food to eat.
- #2 Soil is the largest water filter on earth and can produce clean water through physical, chemical and biological services. Without soil, it would be harder to have clean water to drink.

# See you next time!



Well students, that is the end of our 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:

**mail:**  
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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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 Sources: FoodHero.org Plant parts poster & quiz provided by <https://www.fns.usda.gov/tn/dig-handouts> Farmer fun facts by: <https://oregonfb.org/2018agweek/> & <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

