

Week 6: Food & Climate Change



feed
6.7

Pounds of
grains and forage



water
52.8

Gallons for drinking water
and irrigating feed crops



land
74.5

Square feet for grazing
and growing feed crops



fossil fuel
energy
1,036

Btus for feed production and
transport. That's enough to power a
typical microwave for 18 minutes.



Success Criteria:

Students will become familiar with foods that both promote and reduce greenhouse gasses, and will be able to list some by the end of the week and explain either how they contribute to or reduce the Greenhouse Effect.

Week 6 Lesson 1:

The Greenhouse Effect & Food

Task 1: Class Discussion: Revision – What is the Greenhouse Effect?

Short video clip for review:

<https://www.youtube.com/watch?v=SN5-DnOHQmE> (2:29 sec.)

Task 2: How do animals like cows contribute to climate change?

Watch the clip: <https://www.youtube.com/watch?v=DD3sS743XHw> (4:59 sec.)

1. From what part of the cow does most of the methane gas come from?
2. How many cows are there in the world?
3. Where does most methane from cows come from – dairy cows which are raised for milk or cows that are raised for their beef?
4. Why are cows a threat to forests?
5. What is Silvapasture and how can it help reduce cow methane emissions?

Task 3: Watch the clip on animals and Greenhouse gasses:
<https://www.youtube.com/watch?v=DD3sS743XHw> (4:54 sec.)

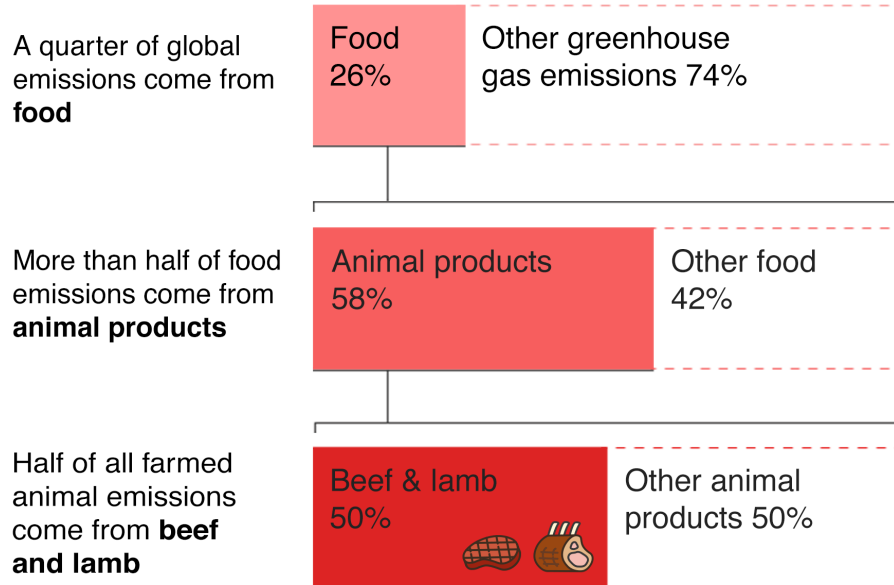
Answer the following questions:

1. What percentage of greenhouse emissions into the atmosphere are caused by farming (agriculture)?
2. What is the leading cause of deforestation?
3. How much water is required to make a pound of beef?
4. How much water is required to make a single roast chicken like you get at the supermarket?
5. What is a major reason for the loss of forests and jungle in Brazil?
6. List some problems of factory farms?

Week 6 Lessons 2 & 3:

How much impact does food have?

Proportion of total greenhouse gas emissions from food



Source: Poore & Nemecek (2018), Science

BBC

Task: Create a 2-page brochure in your Red Books that will inspire and motivate people to start eating more plant-based foods. Explain the health benefits of a plant-based diet and the benefits for the environment.

Resources: Use the 2 videos and the article below from the United Nations to create your brochure.

Read the article:

<https://www.un.org/en/climatechange/science/climate-issues/food>