Problem 1

Look at figure 4.

- Make a top-5 list of food which emits <u>most</u> CO_2.
- Make a top-5 list of food which emits <u>least</u> CO_2.
- Make a bar chart from your data in Excel or some other suitable program.
- What can you conclude from the diagram?

Problem 2

Look at figure 4.

- Go to this webpage where you can calculate your CO_2-emission from flying:
  https://www.flysas.com/en/sustainability/emission-calculator/
- Chose a place where you have flown to recently and find out how much CO_2 you spent. Remember to tag the "Round Trip" if you came back home again.
- How many kg of pork could you have eaten for the same amount of CO_2 that your flight used?
- How many kg of potatoes could you have eaten for the same amount of CO_2 that your flight used?
- Explain from your findings why the climate scientists want us to fly less.

Problem 3

Look at figure 1, 2 and 3.

- How much CO_2 does the production of beef emit?
- How much CO_2 does the production of soy emit?
- How much energy (kJ) do you get from beef?
- How much energy (kJ) do you get from soy?
- How much protein do you get from beef?
- How much protein do you get from soy?
- Compare your results and conclude on beef and soy as sources of food compared to CO_2 emission.

Problem 4

Look at figure 4.

- How could your family reduce their CO_2 emissions by changing food habits? Make sure everyone gets the nutrition they need. Choose food you would like to eat.

- Can you think of other ethical considerations that you need to include in your diet choices?

Problem 5

Look at figure 4.

- Examine what effect import has on the CO_2 emissions. Why is the carbon footprint more severe with imported goods?

- Explain why the local tomatoes and cucumbers have a higher carbon footprint than the imported? You may use the internet. (Keep in mind that these data are from Scandinavia).

Problem 6

Look at figure 4.

A group of scientists in Denmark calculated that sweets, soft drinks, beer and wine emit more CO_2 than beef. A few days later, the media revealed that the meat industry had paid them to release the information. They had summed up the number of all the stimulants to make the number higher than beef. This is unethical science.

Soft drinks are not included in the table. It is approximately 0.5 kg CO_2/kg.

- Find out how many kg of sweets and soft drinks you can have for the same carbon footprint as 1 kg beef. You choose the amount of each goodie you want.

Problem 7

Look at figure 4.

A cow is a kind animal who lives and eats like we do. When we make 1 kg of beef, the cow has eaten around 4 kg grain, 1.5 kg soy and 6.5 kg greens per kg cow at the age of slaughtering.

- How much CO_2 is approximately spend to produce the food a cow needs to make 1 kg beef?

- Find some good reasons why the beef has a higher carbon footprint than the food eaten by the cow combined.

Problem 8

Look at figure 4.

A T-shirt costs about 4 kg CO_2 to produce. A mobile phone costs about 80 kg CO_2 to produce. Someone has estimated that the carbon footprint of one person's use of the internet is 150kg CO_2 per year.

A person eating a medium meat diet spends 6 kg CO_2 per day on food. (This number is halved if you are vegan).

- How many days could you eat for the same carbon footprint you spend on clothes, mobiles and internet per year?

Problem 9

A tree can absorb around 25 kg CO_2 per year. Really old trees can even bind up to a ton CO_2 per year.

- How many trees do we need to plant to remove the 37,000,000,000,000 kg CO_2 we release per year on the entire planet?

- Is planting trees in itself a realistic solution to the climate crisis?