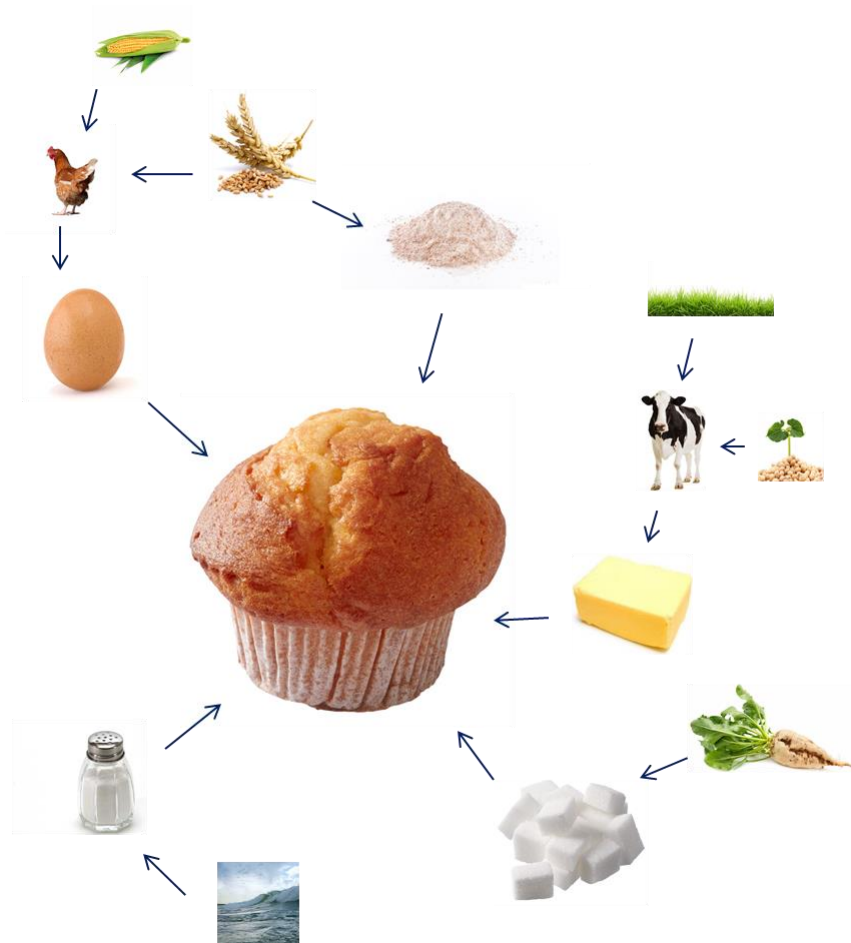


Cupcakes

And what they are made of



Name:

Class:



Utrecht University

During this double hour you will make **cupcakes!** Every group follows the **same recipe**, but each group has **one unique ingredient**. You will research the background of this unique ingredient during the lesson. Ultimately, you will summarize what you've found out in a short **movie of 60 seconds** (maximum!).

For this, your research question is:

*"How **sustainable** is your ingredient?"*

Sustainability is the balanced use of **natural resources** (for instance water, ground, food) and **human resources** (for instance working hours, health, effort).

During this lesson all of you will have a **special role**. First divide who is going to perform which role, for this, use this table.

Role	Name
The researcher: leads the research part of the lesson	
The writer: is responsible for writing down the results	
The movie producer: leads the shooting of the movie and the construction of the storyboard	
The time manager: makes sure that everything happens within the allotted time	

On your table you can find cards with information on your ingredient. Start looking for information, divide questions 1, 2, 3, and 4 among the group.

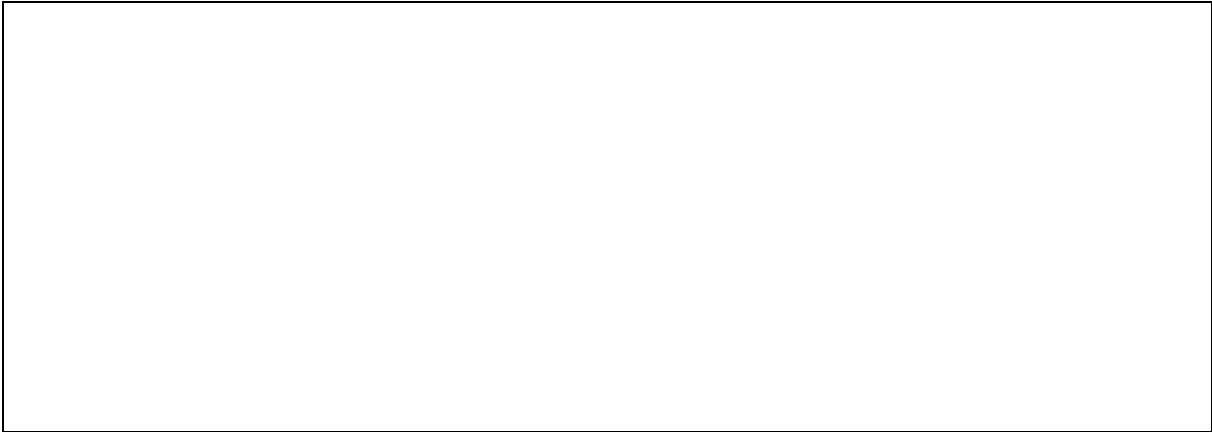
1 Where does your ingredient come from? How is it shipped to your country?

In the figure below, draw a straight line from the place where your ingredient comes from to your country. Write down next to the line how many kilometres it has to travel to reach us here (use www.distance.to to calculate this).

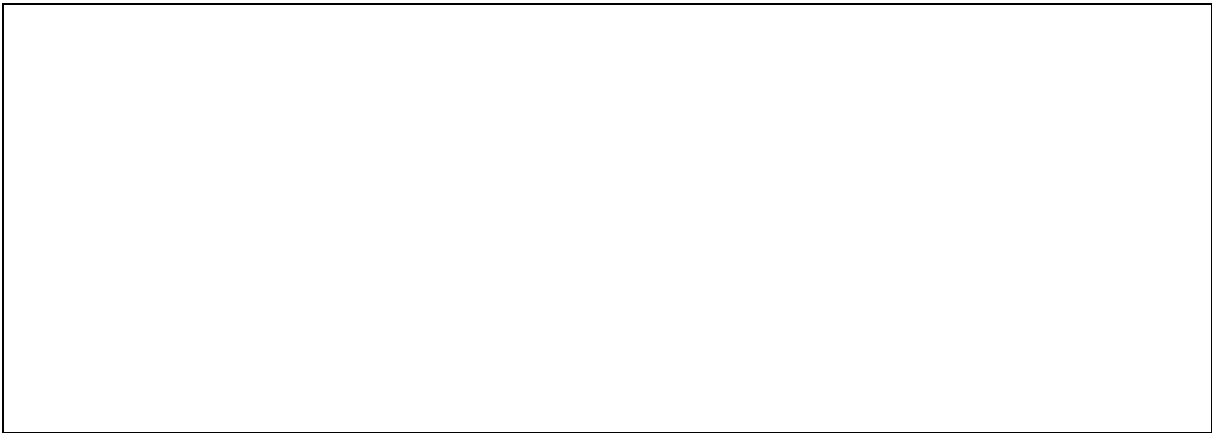


For whom is producing your ingredient a positive thing, and for whom is it a negative thing? Why?

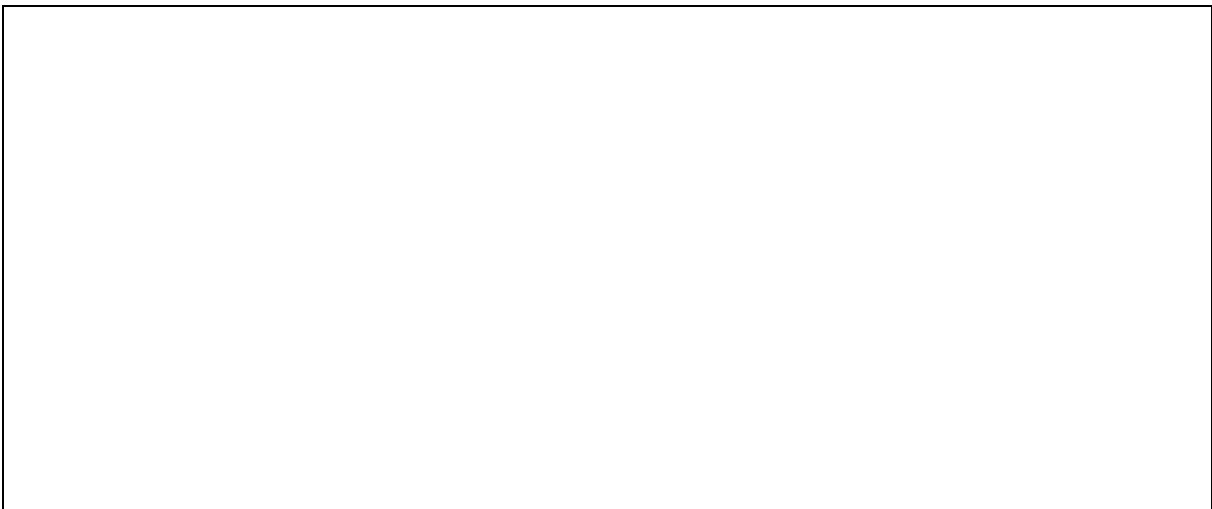
2 What is the influence of producing your ingredient on **nature**?



And what is the influence of its **transportation** on the environment?



3 What are the **working conditions** like in the area where your ingredient is grown?



4 Who earns **the most money** from producing your ingredient?

Are there any other things you've found related to your ingredient that you think are still important?

Issues related to **sustainability** can always be described by **the 3 Ps**: *people, planet, and prosperity*.

5 Summarize the information you've found in the scheme for your ingredient. For the **people** aspect, write down what you've found on people, for **planet** collect the info on the environment, and for **prosperity** write down what you've found concerning money.



Please search for more information to make sure everything that you need is collected there. You will use this scheme for constructing your movie at the end of the lesson.



Now you will **make your cupcakes**. For this, use the recipe that you've received on a separate sheet.

When the cupcakes are in the oven (please pay attention to the alarm clock!), you will start making your **storyboard** for the video. The storyboard will contain the information that you want to display in your video and when you show what.

Your video should answer the following questions:

1. Where is your ingredient produced, and how does it reach The Netherlands from there?
2. What effect does the production of your ingredient have on nature?
3. Who experiences benefits from your ingredient, and who experience negative effects?
4. When the demand for your ingredient increases, what will happen?

At the end of your video, you will answer the question:

Aan het einde van het filmpje geven jullie antwoord op de vraag:

*"How **sustainable** is your ingredient?"*

Your video should be **no longer than 60 seconds!** Use the separate sheets to make your storyboard.



Before you start shooting your video, ask your teacher whether they agree with your plan. Your teacher will tell you when to start filming.

As soon as everyone has finished their video, your teacher will explain what happens next.

Write down **how sustainable** you think the other ingredients are.

Ingredient:

How sustainable is it? Why?

Ingredient:

How sustainable is it? Why?

Ingredient:

How sustainable is it? Why?

6 After seeing all the videos, which cupcake would you say is the **most sustainable** one?

Why?

7 Do you now have enough information to be able to tell whether a cupcake with the following ingredients is sustainable or not? Or would you have to know more before you can tell this? Also tell why you think this is the case.

Ingredients: sugar, free-range egg, rapeseed oil, wheat flour, cocoa mass[°], wheat starch, lactose, water, vegetarian whey powder, raising agent (diphosphate [E450], sodium carbonate [E500]), emulsifier (mono- and diglycerides of fatty acids [E471], soya lecithin [E322]), salt, milk protein, thickener (xanthan gum [E415]), natural vanilla flavouring.
[°]Rainforest Alliance certified. For more information, see ra.org

Evaluation

8 Grade this lesson. I would grade this lesson a/10, because:

9 Do you think the problems surrounding your ingredient are complex?

Not at all
complex

Not complex

Neutral

Complex

Very complex

Why?

10 What was new to you today? Did you learn anything you didn't know before?

The end.

Student booklet 'Cupcakes'

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