



Food and Agriculture
Organization of the
United Nations



INTERNATIONAL
FOOD
WASTE
COALITION

EDUCATION MATERIAL PACKAGE ON FOOD WASTE REDUCTION
IN PRIMARY AND SECONDARY SCHOOLS

DO GOOD: SAVE FOOD!

For age group 1

5 TO 7 YEARS OLD





5-7
years



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Foreword

*Making children aware of world food challenges “is about involving them in building the future we want.”
(José Graziano da Silva, FAO Director-General)*

Today, an estimated 1.3 billion tons of all food produced for human consumption is lost or wasted on an annual basis, at a cost of more than USD 940 billion to the global economy, while approximately 815 million people across the globe suffer from chronic malnutrition and more than 2000 million people suffer from micronutrient deficiencies.

Educating young people to value food, in an effort to reduce food waste, will go a long way to bringing about the behavior change required to stem the problem now and in the future.

“Do Good: Save Food!” is an education package designed for that purpose. This education package is the output of a comprehensive, scientific and inclusive development process that involved the input of both public and private sector stakeholders. It responds to the growing public demand for information on the causes of and solutions to addressing food waste and seeks to engage children in the global endeavour to reduce food waste and alleviate its associated economic, environmental and social impacts.

The package lays out a holistic food systems perspective in tandem with a communication style and tools that are appropriate for the sensitisation of children to the issues. It is designed to enable teachers and educators to select and implement components they consider to be most pertinent. Examples and tips on how children can become active ‘food-savers’ as well as agents of change through transmitting the messages to their families and friends are also provided.

The content of the package has been designed in a format that can be easily adapted for different target audiences, whether from developed or developing countries.

The package will contribute to meeting the global target for food loss and waste reduction: Sustainable Development Goal (SDG) target 12.3 - *halve per capita global food waste at the retail and consumer levels and reducing food losses along production and supply chains (including post-harvest losses) by 2030* as well as addressing other related targets such as malnutrition, climate change and natural resource preservation.

We hope that this training package will stimulate thought and action among children and their families, to reduce food waste.

Anna Lartey

Director
Nutrition and Food Systems Division

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■ INTRODUCTION



Background

Food loss and waste are a massive global problem: One-third of all the food produced in the world is either lost or wasted, which means that every year, a staggering 1.3 billion tonnes of perfectly good and edible food does not reach the end-consumer – 100 kg for each of us. Not only does this wastage create immense economic costs of around USD1 trillion; food loss and waste also come at a high environmental and social price.

Reducing food loss and waste is an important global endeavour that we can, and should, all take part in – particularly in industrialised countries, changes in consumer behaviour can significantly reduce the amount of food wasted. Getting children and teenagers involved is a central aspect of fighting waste: they are the future of our planet, and their knowledge and actions will shape future life on Earth.

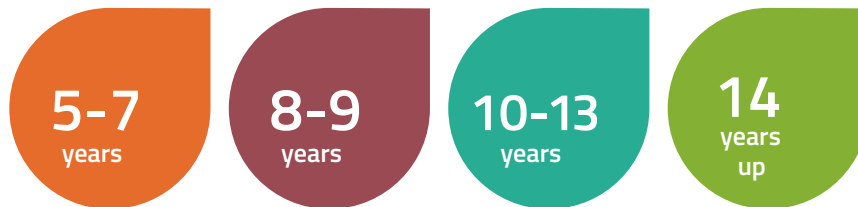
From a pedagogical point of view, discussing the reasons for, and consequences of, food loss and waste with students touches upon and reinforces central educational aspects: It encourages children and teenagers to think about their relationship with the environment and their own important place in the social, political and ecological world. Students have the opportunity to appreciate their role as global citizens and agents of change. The role students can play as disseminators of food waste reduction knowledge and as experts within their families and local and school communities has the potential to raise their level of self-assurance and self-esteem.

This development of an education material package on food waste reduction for primary and secondary schools, under the slogan “DO GOOD: SAVE FOOD!” by the Food and Agriculture Organization (FAO), in close collaboration with the International Food Waste Coalition (IFWC), took place against this backdrop.

This resource, conceptualised as a teaching material package, aims to raise awareness among school children, teachers and staff and their related families/networks on food loss and waste issues, and to introduce good practices that are conducive to food waste prevention and reduction, with an expected long-term impact. It also contributes to the achievement of multiple Sustainable Development Goals (SDGs), particularly target 12.3, which aims to halve food waste and to reduce food loss globally by 2030.

How to use this teaching material

This teaching material on food waste reduction in primary and secondary schools has been tailored for four age groups: five to seven (age group 1), eight to nine (age group 2), ten to thirteen (age group 3) and fourteen years and above (age group 4), reflecting the different abilities and interests that exist throughout the wide age range covered.



For each age group, the package consists of **two core lessons** and **various follow-on activities**. Our rationale in designing this material has been to make it as flexible as possible: You will find enough material here to fill a whole series of lessons, but if you have limited lesson time available, one or a few activities can stand on their own.

The core lessons consist of a series of **illustration slides** (these can be found in the appendix), plus accompanying voice-over scripts (these can be found within the main body of the material). The core lessons provide students with the fundamental knowledge required before moving on to the follow-on activities. The starting-point is the information-centred **core lesson 1, "DO GOOD: SAVE FOOD!"**, which outlines the causes and consequences of food waste while offering some initial practical solutions. Practice-based **core lesson 2, "Feed yourself, don't feed the bin: nine easy tips to reduce food waste"**, on the other hand, features a more hands-on approach and introduces concrete actions to reduce food waste. Depending on time and resource availability, technical appliances in the classrooms, as well as the age and abilities of the students, teachers can decide to project or print the illustration slides and then read the voice-over in the form of a story (probably most suitable for younger students), have it read out by the students themselves, adapt it to form a small drama/role-play exercise, or assign the thorough reading of it as a homework task (more suitable for the older students of age group 4).

2 CORE LESSONS

Starting point: the information-centered core lesson 1
"DO GOOD: SAVE FOOD!"



2nd step: the practice-based core lesson 2
"Feed yourself, don't feed the bin:
Nine easy tips to reduce food waste"







Each presentation is accompanied by a set of follow-on activities that aim to reinforce the message conveyed. The activities come in a variety of forms. These range from worksheets to discussions, games, drama/writing exercises and projects suitable for students and groups with diverse interests, talents and creative, analytical and content-related experience. Each activity includes learning objectives and useful instructions that detail the time and resources required for successful implementation.

FOLLOW-ON ACTIVITIES	
Worksheets	Foster a deeper understanding of the topic's main issues, enable textualisation and consolidate content.
Discussions	Content-driven group activities that allow for further intellectual and/or creative involvement with the topic.
Games	Revisit the topic's main issues to give students the opportunity to deepen their understanding of these in a playful manner.
Writing exercises	Foster creative and cognitive involvement with the topic.
Projects	Hands-on, practice-based activities that take place over the course of several days and encourage behavioural changes.

Flexibility was at the forefront of the planning process. The materials have been structured in a way that enables teachers to select those activities that best match the needs, abilities and interests of their students while also conforming to time and resource constraints. Both core lessons and most follow-on activities exist for all age groups and only differ in terms of the depth in which they discuss the topic, so if you feel that a particular exercise is too challenging or not challenging enough for your students, the material will give you the opportunity to choose the same activity from a different age group. The majority of the activities can be completed within 45 minutes; those that cannot have been split up into different parts. These particular lessons can be conducted over the course of a few days. Further materials, such as posters, leaflets and brochures, can be found on the FAO website.

We would love to hear about your experience of using these materials! Your feedback will help us to improve and update the product. Please get in touch by email: Save-Food@fao.org.

Overview of the core lessons and follow-on activities

Activity	Students are asked to ...	Learning objective	Time requirement
CORE LESSON 1: DO GOOD: SAVE FOOD!			
DO GOOD: SAVE FOOD! 	... read or listen to a presentation about the causes and consequences of food waste, and about solutions for avoiding food waste at home and school.	Students can recall key facts and techniques for saving food.	45 min
FOLLOW-ON ACTIVITIES FOR CORE LESSON 1: DO GOOD: SAVE FOOD!			
WORKSHEETS			
We are the food savers! 	... discuss the “personalities” of the Food Savers and create their own superhero persona.	Students can describe their role in fighting food waste and imagine themselves as key agents of change.	80-90 min
Colour me in	... colour in the illustration of Anna, Theo, and the Food Savers.	Students identify with the Food Savers.	20 min
Sum it up, waste it down!	... solve mathematical exercises based on the theme of food waste.	Students can apply their understanding of food loss and waste and translate this to a mathematical level.	25 min
Find the differences	... find the difference and colour in two pictures of Anna, Theo and the Food Savers.	Students identify with the Food Savers.	25 min
GAMES			
Memory	... colour in and play a food-waste-themed game of Memory.	Students can recall key facts about, and techniques for, saving food.	45 min
Don't waste it! Bingo	... play a game of food-waste-themed Bingo.	Students can recall key facts about, and techniques for, saving food.	20 min
DRAMA EXERCISES			
DO GOOD: SAVE FOOD! 	... enact a story in which Anna and Theo are telling a friend about food waste.	Students can determine and creatively translate food-saving techniques.	45 min
I am a food saver!	... enact an imagined adventure featuring them as Food Savers.	Students can verbalise possibilities for behavioural change and imagine themselves as agents of change.	45 min
CORE LESSON 2: Feed yourself, don't feed the bin!			
Feed yourself, don't feed the bin! 	... read or listen to a presentation highlighting nine key tips for avoiding food waste at home.	Students can recall the key tips for saving food.	30 min

Activity	Students are asked to ...	Learning objective	Time requirement
FOLLOW-ON ACTIVITIES FOR CORE LESSON 2: Feed Yourself, Don't Feed the Bin!			
WORKSHEETS			
Let's stop food waste 	... evaluate their treatment of food at home and consider steps to reduce food waste in their family.	Students investigate key food-saving tips and specify tips of their own.	25 min
Storage Knowledge	... colour in illustrations of different foods and determine where these should be kept and stored.	Students acquire information about safe food storage.	25 min
Fridge frenzy	... after a group discussion, students colour in, cut out and paste different items of food onto a picture of a fridge.	Students can recall information about safe food storage	25 min
DISCUSSIONS			
You can do better!	... from a story about Anna and Theo wasting food, spot food-wasting actions and replace them with food-saving ones.	Students can determine and describe food-wasting behaviour and food-saving practice.	30 min
Stop food waste!	... create posters on "How we can avoid wasting food", and "What we can do with left-overs".	Students can recall key concepts of food-waste reduction and investigate their application at home.	90 min
Class contract	... illustrate one poster for each key tip and discuss how food-saving practices can be implemented at home and in school.	Students can recognise and discuss key concepts of food waste reduction.	90 min
GAMES			
Don't waste it! Board game	... play a board game featuring key facts about how to avoid food waste.	Students recall key tips for food waste reduction.	30 min
PROJECTS			
Save Food Diary 	... keep track of and evaluate their efforts of reducing food waste at home.	Students practice and evaluate food-saving actions and introduce them to their families.	3 day period
Food savers' token board	... keep track of milestones in their food-saving activities at home and in school.	Students practice and evaluate food-saving activities.	A few weeks
Spread the word	... design flyers with key tips and distribute these to friends and family.	Students can recall, categorise and evaluate food-saving practices.	90 min



■ CORE LESSON 1

DO GOOD: SAVE FOOD!

■ CORE LESSON 1: DO GOOD: SAVE FOOD!



CORE LESSON 1: DO GOOD: SAVE FOOD! In the first core lesson, students will learn about the causes and consequences of food waste and also begin to understand how they can prevent food waste at home and in school. The main tool for teaching the contents of Core Lesson 1 is Presentation 1, "DO GOOD: SAVE FOOD!" Depending on time and resource availability and the technical appliances at your disposal, you can decide to project or print the illustration slides (to be found in the annex of this document).

The presentation is designed to go with the accompanying voice-over text (to be found on the following pages) for you to read out or draw inspiration from for telling a story.

Within the voice-over text you will find questions for discussion and engagement with the students. These are only suggestions, so feel free to change, complement or shorten them.



45 min

You will need:



- A video projector and a computer that can open PDF files
- A digital copy of the presentation
Alternatively, print the slides on transparencies and use an overhead projector, or print them on A4 sheets of paper and have a student hold them up while you are reading the voice-over to the class.
- A printout of the voice-over script for yourself



1 —
2 —
3 —

Instructions:

1. Show the presentation and read/narrate the accompanying voice-over script or have students read the voice-over script during class.
2. Discuss the content with the students. You might find the questions provided in the voice-over a good starting-point for discussion.
3. Discuss: What did the students learn from the core lesson? What is the relevance of this information to their own lives? How can they change their own behaviour to reduce food waste? Why is it important for each of us to change our behaviour?

■ CORE LESSON 1: VOICE-OVER

DO GOOD: SAVE FOOD!



1 "I'm shattered!" Theo moans and sits himself down at the dinner table. "And starving!" Anna adds, throwing her bag into the corner, where it bangs against the wall and comes very close to knocking down the family portrait from last Christmas.

It's dinner time and after a long day at school, Anna and Theo are ready for a big meal.

"There's chicken with potatoes in the oven," Dad shouts from the living-room, where he is busy ironing.

The children's eyes light up: Chicken – their favourite food of all time!

"Yummy!" Anna declares with a grin. They each fill up their plates with a massive chunk, lots of potatoes and tomato salad, and dig in, munching and chewing and getting covered in chicken juice from ear to ear. Nino, the family's dog, has a little feast under the table, licking up all the bits that Theo and Anna drop.

After a while, however, the children slow down. Anna starts pushing the food around on her plate and Theo rubs his blown-up belly. "I've had enough," Anna says and hiccoughs, "I can't finish all that." "Never mind," says Theo and pops open the button on his jeans. "Let's just dump the rest in the bin."

Q: Do you sometimes put more food on your plate than you can finish? When does this happen?

What do you or your parents normally do with the food you don't eat?

Do you think throwing away food is a problem?

So Anna pushes back her chair with a loud scraping noise and is just about to throw away the rest of her chicken leg when there is a sudden burst of loud music. *Tatatataaaaaaa!*



2 Anna nearly drops her plate, and Theo gets such a fright he falls off his chair, scattering bits of chicken, potatoes and tomatoes all over the kitchen.

Wrroooooomms! The door flies open, the family portrait tumbles off the wall, and Nino gives a squeaky yelp and hides under the table. In jump a couple of kids in brightly coloured clothes and capes.

"Don't do that!" they yell together. "Don't waste food!"

Anna and Theo just stare at them with their mouths wide open.

Q: How about that? Who do you think these kids are?

And why are they dressed like that?

What do you think they want of Anna and Theo?

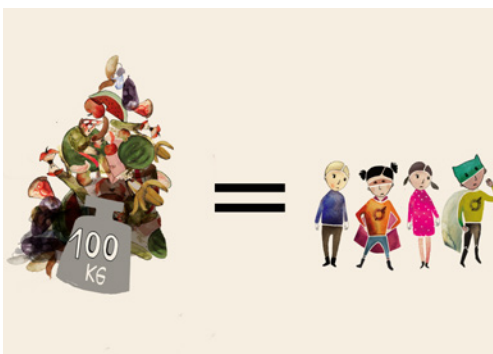
"Sorry we startled you," one of the intruders finally says. "But we can't let you do that." And she frowns and shakes her head a little.

"Do what?" Theo stutters from down on the floor.

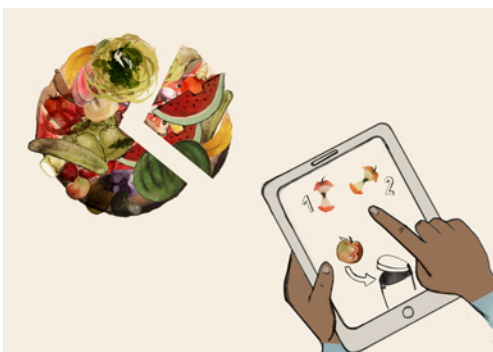
Q: What do you think the kids can't let Theo and Anna do?

"We can't let you throw away food," pipes up the smaller of the newcomers. Anna snorts. "That's ridiculous. What do you want us to do with it instead? I can't finish it off, I'm too full. And anyway, it's none of your business. It's not like you paid for it, or anything."

The girl waves her finger in the air. "You're wrong. Wasting food is everyone's business. And the two of us, the Food Savers, we're trying to make sure people know about why we shouldn't waste food. I'm Reyna, by the way, and this is Mika. And together, we're the **"Food Savers!"** they shout.



3 Anna and Theo find all this shouting quite confusing, and exchange sceptical glances. "They think we're being silly," Reyna muses. "Show them the facts." Mika whips out a fancy-looking screen. "Look," he says, pointing at a picture that has appeared. "Each year, every one of us throws away 100 kg of food. This is about four times the ideal body weight of a 7-year-old child, or the weight of a baby elephant!"



4 "Worldwide, nearly one-third of all the food that is produced is not eaten. "One-third?" Theo says and frowns.

"It means that for every two apples that are eaten, one apple goes to waste or it is lost before it reaches our tables," Mika explains. "You buy three yoghurts but you only eat two and throw away the other one because it has gone off in your fridge. Three carrots are harvested, but one of them is thrown away because it is too small or too crooked or because mice have eaten it while it was being stored."

"Or," Reyna says and looks pointedly at Anna's plate, "you eat two big mouthfuls of chicken and throw away the third."

Anna blushes. "I still don't see why that's a problem. It's my family's money that I'm wasting, isn't it?" she says sadly.



5 “But it’s not just an issue of money,” Reyna explains. “Producing food uses up a lot of what we call resources: We need water to grow plants. But at the same time, some places don’t have enough water, and the land there turns into desert. Some people don’t even have enough clean water to drink. The soil in which the plants are grown gives up a lot of its goodness to them, and is left a little less rich for every plant that grows in it. Furthermore, food that ends up uneaten is also taking up land. That land cannot be used to grow anything else at the same time, and is therefore wasted.”



6 “Transporting the food to the shop and from the shop to your home uses up a lot of fuel, produces pollution and contributes to climate change.”
 “And you may already know that those are very bad,” Mika adds. “Pollution makes it more difficult for people, animals and plants to breathe and leads to all sorts of problems.”



7 “Shopping for food and preparing food to be eaten takes time and physical effort,” Reyna explains. “Just think about the time your father spent cooking the dinner that you’re now throwing away! Even more work goes into getting the food ready to be sold to you and your family before it’s taken to your home: Many people work hard to grow, process and transport food before it comes to you, and if you throw away food, all that work has been wasted, too. Moreover, throwing away food creates waste that needs to be taken care of, and many people have to work to get rid of waste that could have been avoided.”

“So producing food uses a lot of water, work and fuel, and getting it into our homes produces a lot of pollution and greenhouse gases,” Mika summarises. “If we eat the food, that’s not so bad. But if we waste the food, all that water and energy has been wasted, too, and we have contributed to climate change for nothing.”



8 “And finally,” Reyna explains, “there are a lot of people in the world who don’t have enough food – not just in countries far away from us, even right here, in your town, and at your school. And if all the land and water and work that go into producing food waste could be used for food that is actually eaten, there would be much less hunger in the world.”



9 “So reducing food waste really is good for our planet and for everyone on it?” Theo asks.

Mika nods. “Wasting less food means wasting less water, less fuel, less land and less labour. It means that more people will be fed from the food that is available and that fewer people will go hungry. And it means that you and your family save money and can spend it on other nice things.”

Anna whistles. “So how can we avoid this – what did you call it?”

“Throwing away food that you could have eaten is called food waste,” Reyna explains. “And we can all do a lot to avoid food waste.”



10a Food is wasted when we put too much food on our plates.

10b It’s wasted when we buy food and don’t eat it before it goes off.

10c And food is wasted when restaurants or school cafeterias serve portions that are too big or when we ask for too much to be put on our plates.”

Q: Have you ever been to a restaurant where you couldn’t finish what was on your plate?

Can you remember what happened to that food?

(If the school has a cafeteria: Do you find that you cannot eat everything on your plate at during lunch at school? Are you sometimes asking for too much to be put on your plate?)



11 “So mostly,” Mika says, “we need to make sure that we don’t put more on our plates than we can eat. After all, you can always have seconds if you’re hungrier than you thought you were. If the portions at the cafeteria or restaurant are too big, you can ask them to serve you a smaller portion from the start. If you do end up having too much food on your plate, just ask your parents/guardians to put it in a closed container in the fridge, and eat it the next day.”



12 “And when you’re out shopping with your parents,” Reyna adds, “make sure that you only buy what you’ll be able to use. And you can get your family to do the same – the more people know about how to fight food waste, the better!”

“Wow!” Theo exclaims. “So the way we treat food can really make a difference?”

Mika nods. “It can make a big difference. Everyone eats food, so everyone can do something about food waste, too.”

Theo looks at Anna. “Do you think we can do this?”

“I’m sure we can,” Anna nods. She looks at her plate. “So what shall we do with this food now?”

Q: What do you think they should do with the food?



13 “Are you hungry?” Anna asks the Food Savers. “For chicken?” Mika laughs. “Always!”

“And whatever we don’t eat, you can put in your fridge for tomorrow,” Reyna adds.



14 The kids beam. “Do good!” Reyna shouts, and everyone joins in: “Save Food!”



■ FOLLOW-ON ACTIVITIES

for core lesson 1

DO GOOD: SAVE FOOD!

The FOLLOW-ON ACTIVITIES are designed to further engage the students and deepen their understanding of the key points outlined in core lesson 1.

■ CORE LESSON 1: WORKSHEETS



■ We are the food savers!

Through discussing the “personalities” of the food savers and creating their own superhero persona, students become aware of their role in fighting food waste and imagine themselves as key agents of change.

Drama Exercise “I Am a food saver!” picks up from here by asking students to think up a story about themselves as food savers.



60 min (30 mins for Part 1, 30 mins for Part 2)



You will need:



- Printouts of worksheets WS 1a, “Meet the food savers!”, WS 1b, “You can fight food waste!”, and WS 1c, “Mask cut-outs” (one per student)
- Coloured pens, crayons, or water colours
- Scissors
- Elastic band, string, or wool



Instructions:

Part 1:

1. “Now that we have heard the story of how Anna and Theo meet the food savers, would you like to get to know some of the other food savers, too?” Show the pictures and read out the descriptions from worksheet WS 1a (“We are the food savers!”). Discuss: Which of the food savers is your favourite? What do you like about them?
2. Hand out the worksheet WS 1b (“You can fight food waste!”). Encourage the students to come up with their own food savers, thinking of a name for themselves and drawing pictures of the different items on the worksheet (favourite food, things they like or hate, superpower etc.).
3. Split students into groups of four and let them present their heroes to each other. Depending on the size of your class and the amount of time you have, you can also invite students to present to the whole group instead of forming small groups.

Part 2:

4. Hand out copies of the Mask cut-outs (WS 1c, “Mask cut-outs”) and ask students to cut them out and colour them in. If students are using paper of normal thickness, the masks can be made more durable if you glue two pieces of paper together before cutting out the masks from them. By punching holes in the assigned spots and threading them with elastic band, string, or wool, these can be turned into real masks.

FOOD SAVERS



Reyna is the youngest and the smartest of the Food Savers. She always knows the answers to the trickiest questions, and if you were to wake her up in the middle of the night (which Mika routinely does), she could tell you exactly what the next steps in your food waste reduction plan are. Reyna will not take "no" for an answer, and she will bother the others until they end up doing exactly what she wants them to.

LIKES: DOING MULTIPLICATION TABLES WHILE HANGING OFF HER BEDROOM CLIMBING FRAME.
HATES: WHEN MIKA TIES HER SHOE LACES TOGETHER, OR STEALS HER LAST COOKIE.
NICKNAME: BRAINA.
FAVOURITE FOOD: CHICKEN ENCHILADAS.
SUPERPOWER: CAN CALCULATE ANYONE'S FOOD WASTE WITHIN SECONDS.



Why walk if you can run? Why whisper if you can shout? Mika is the loudest, most energetic and troublesome whirlwind ever to become a Food Saver. Even though he is little, the others are always able to spot Mika in a crowd: He is at the centre of the action. Mika had to spend quite a lot of time in hospital when he was younger, so he knows all there is to know about eating food that you can't choose and being given portions that aren't the right size. Mika is fast and witty, and he is feared for his devious little tricks and pranks. The other food-waste fighters are just pleased he hasn't figured out how to use their emergency helicopter yet.

LIKES: STEALING LOU'S SKATEBOARD AND TAKING IT FOR A RIDE DOWN HELL'S SLOPE.
HATES: GOING TO BED BEFORE TEN P.M.
FAVOURITE FOOD: PIZZA.
NICKNAME: THE FLASH.
SUPERPOWER: ENDLESS ENERGY.

YOU CAN FIGHT FOOD WASTE !

Mika and Reyna are always looking for back-up, so let them know you want to become a food waste fighter, too!



My food waste fighter name:

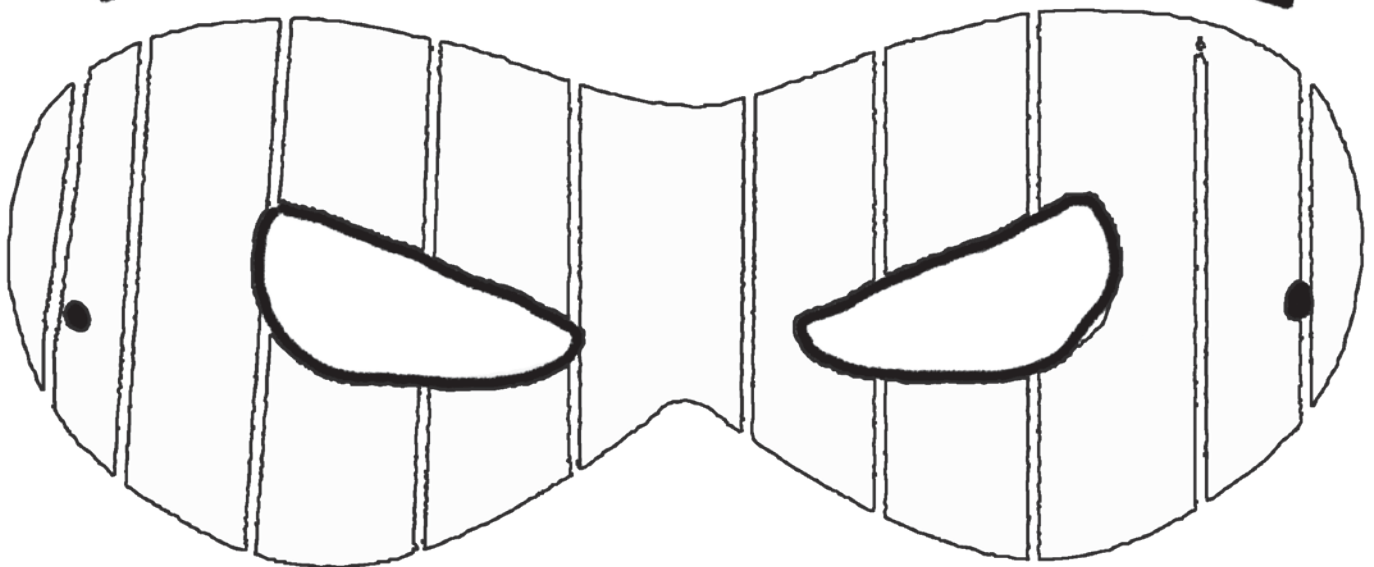
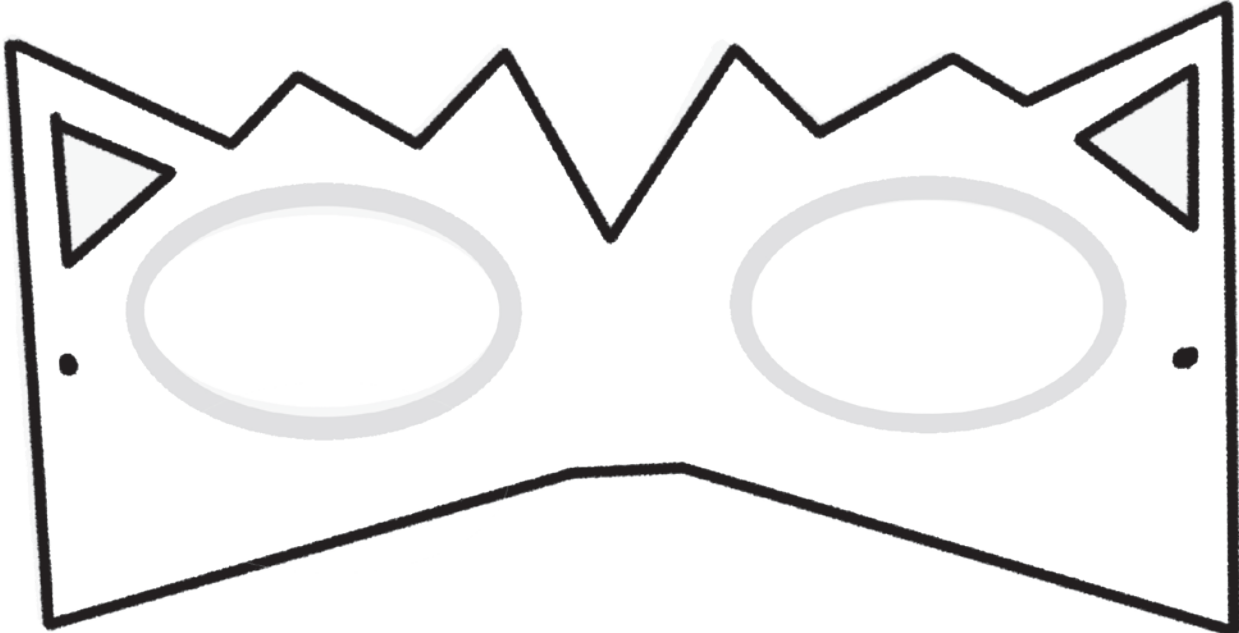
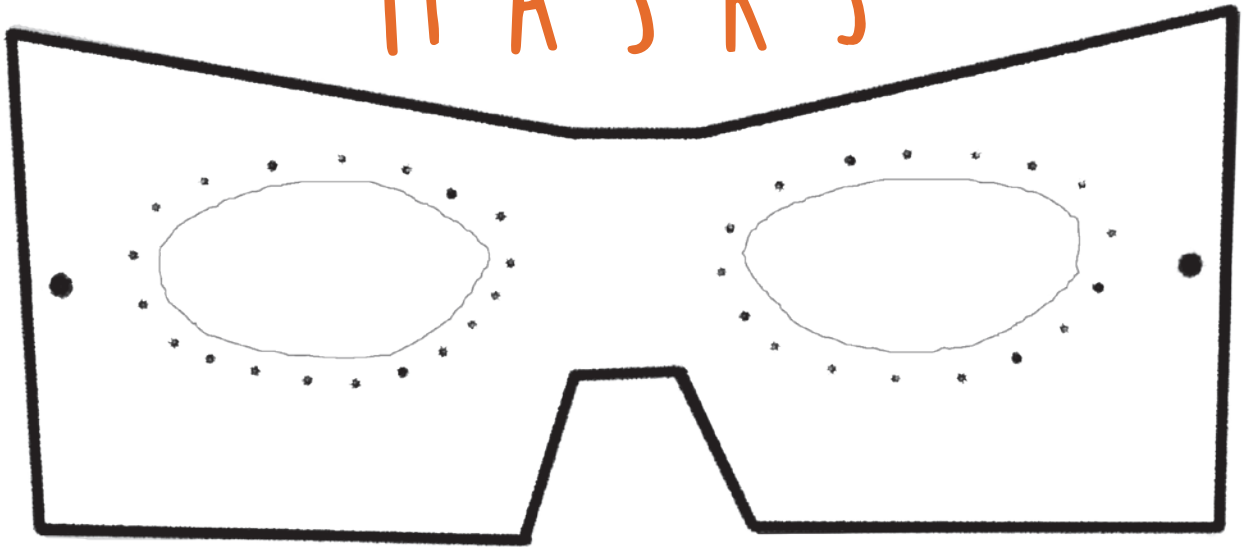
I like:

I hate:

My favourite food:

My superpower:

MASKS



■ Colour me in

Colouring in this picture of the food savers further connects the students with the story and thus subtly reinforces its key themes.

Ideal for younger students, as homework, or if you have time left at the end of a lesson.



20 min

You will need:



- Printouts of worksheet WS 2 (one per student)
- Coloured pencils, crayons, or watercolours



Instructions:

1. Hand out copies of the picture.
2. Ask students to colour them in.



■ Sum it up, waste it down!

This activity allows students to connect with the presentation's content on a mathematical level.

For worksheet WS 3, students will need to know how to add.



25 min

You will need:



- Printouts of worksheet WS 3, "Sum it up, waste it down!" (one per student)
- Printout of solution sheet for yourself



Instructions:

1. Hand out one copy of worksheet WS 3 per student.
2. Ask students to solve the exercises (in groups or individually).
3. Compare results.

SUM IT UP,
WASTE IT DOWN!



1. Anna and Theo buy 4 apples and 3 bananas. Theo eats one apple at school and shares another one with a friend. One banana has gone brown, so he throws it out. Anna drops one apple on the way home and it rolls into the gutter and is lost. At home, the kids prepare a fruit salad using one banana and one apple. Their dog, Nino, runs off with the last banana.

The children have eaten pieces of fruit. They have wasted pieces of fruit.

2. Anna and Theo's dad is preparing a stew for the family. He has bought 2 crooked carrots, 1 bent leek and 1 small broccoli at the farmers' market. He cuts them up together with some of vegetables from home – 3 potatoes, 1 onion and 1 pepper – and then cooks and seasons the dish. The family is in for a treat!

Anna and Theo's dad has bought vegetables.

There were already vegetables in the kitchen.

The stew is made of vegetables.

■ Sum it up, waste it down! (Solutions)

1. Anna and Theo buy 4 apples and 3 bananas. Theo eats one apple at school and shares another one with a friend. One banana has gone brown, so he throws it out. Anna drops one apple on the way home and it rolls into the gutter and is lost. At home, the kids prepare a fruit salad using one banana and one apple. Their dog, Nino, runs off with the last banana.

The children have eaten pieces of fruit. They have wasted pieces of fruit.

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Anna and Theo's dad has bought vegetables.

There were already vegetables in the kitchen.

The stew is made of vegetables.

■ Find the differences

These search images show the food savers in action, and students are asked to find the differences between the two.

Ideal for younger students, as homework, and/or if you have time at the end of a lesson.



25 min

You will need:



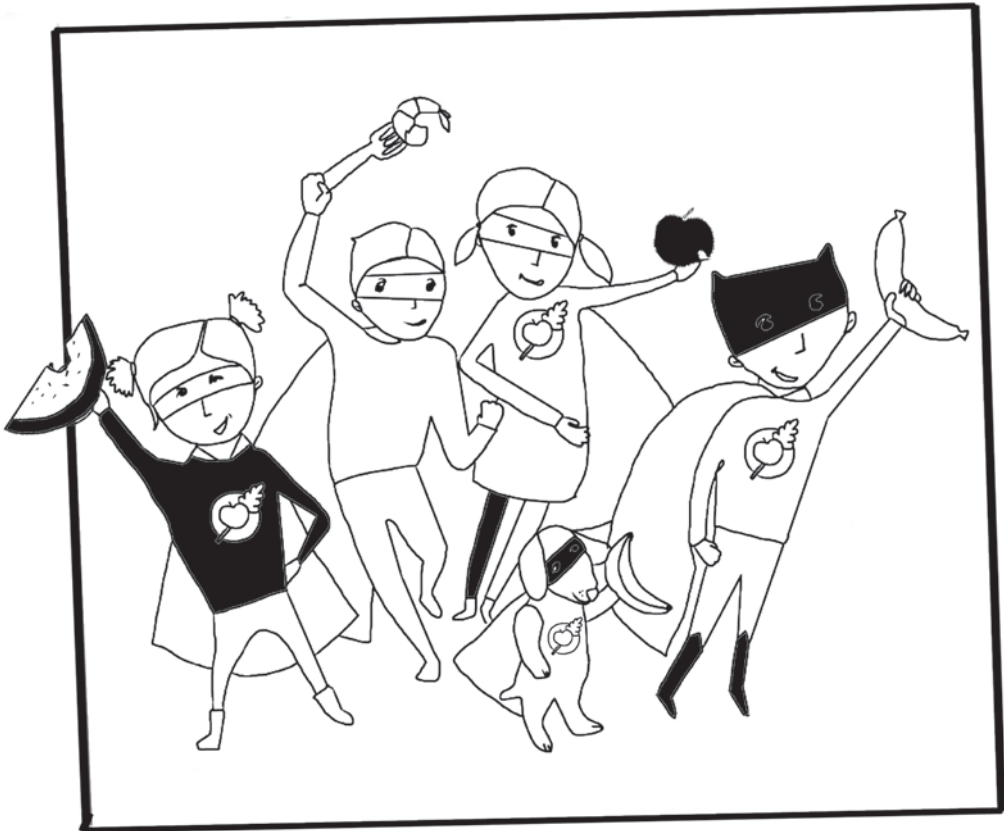
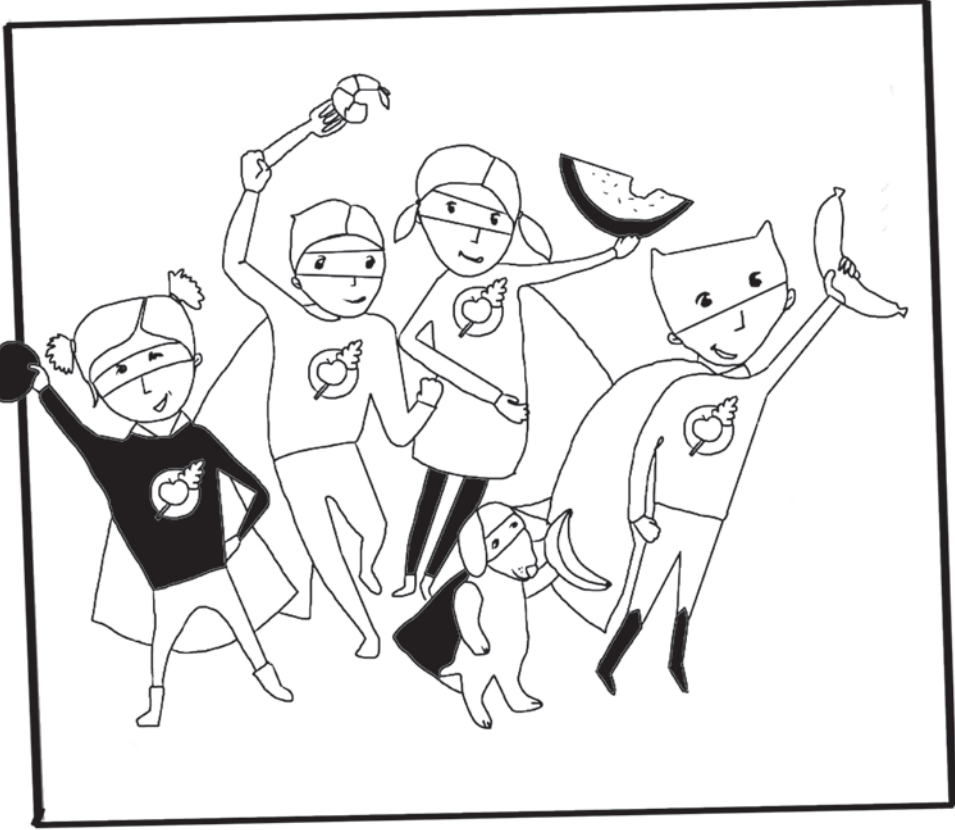
- Printouts of worksheet WS 4, "Find the differences" (one set per student)
- Coloured pencils



Instructions:

1. Hand out one sheet per student.
2. Ask students to circle the differences and to colour in the pictures.
3. Compare results.

FIND THE DIFFERENCES!



■ CORE LESSON 1: GAMES



■ Memory

In this version of the popular “Memory” game, students revisit some of the key ideas and concepts of the presentation.



45 min

You will need:



- Printouts of the memory game G 1a, “Memory game cards” (one per three to four students)
- Coloured pens or crayons



Rules:

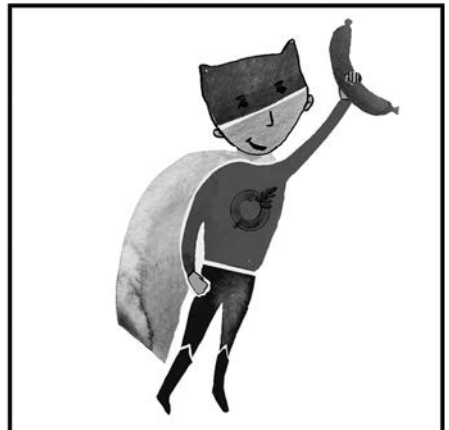
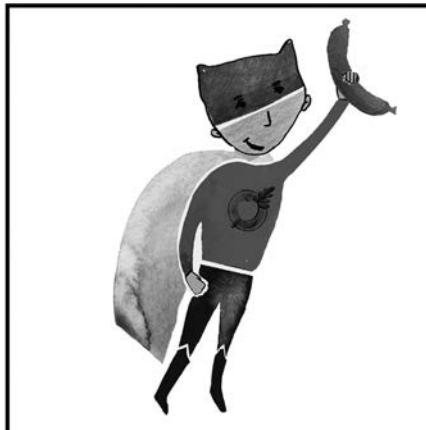
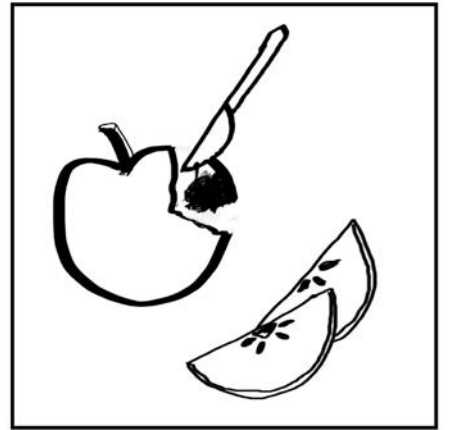
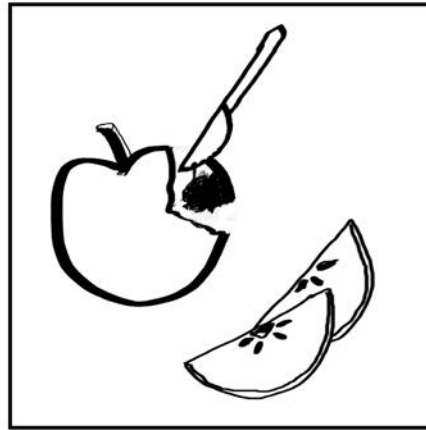
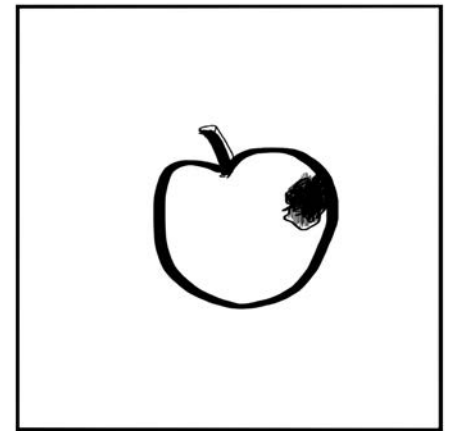
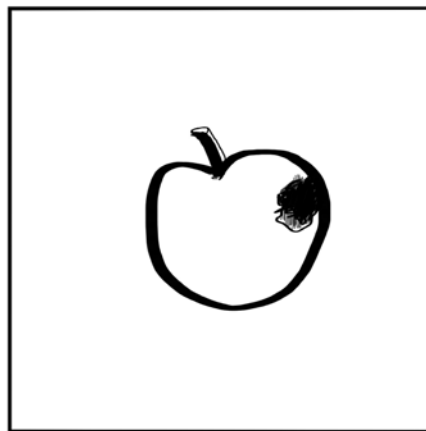
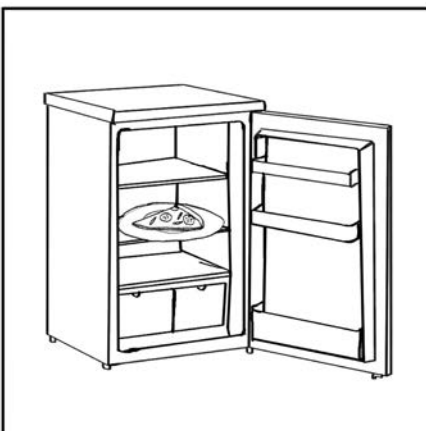
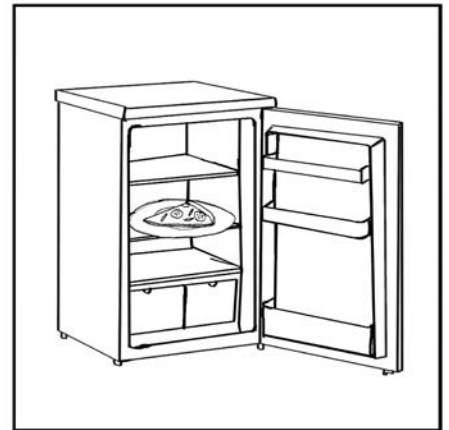
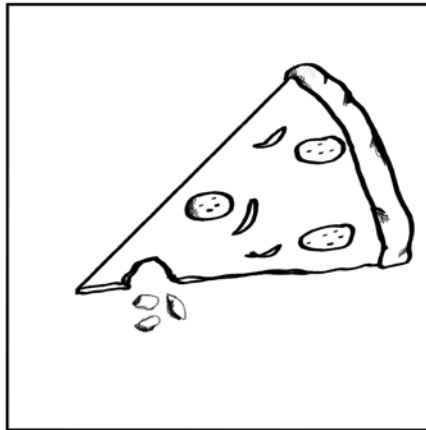
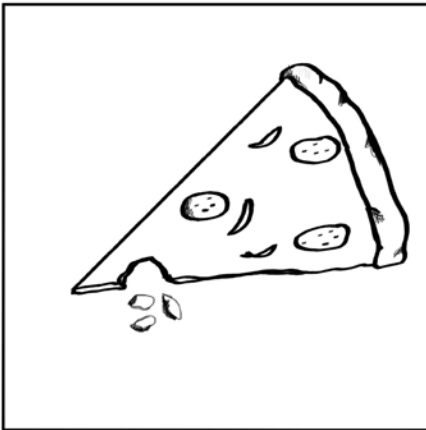
Mix up the cards and lay them in rows, face down. The first player turns over any two cards. If they match, the player keeps them and is allowed to go again; if they don’t match, it’s the next player’s turn. The game is over when all the cards have been matched, and the player with the most matches wins.



Instructions:

1. Using the flashcards or the presentation, go through the sets of pictures. Discuss what is depicted in each picture.
2. Split students into groups of three to four. You will need one printout of the memory game G1.
3. Ask the students to cut out and colour in the game. To make the cards stronger, you can instruct students to glue the cards onto a blank sheet of paper before cutting them out.
4. Explain the rules (see above).
5. Play!
6. Discuss what you have learned.

MEMORY



MEMORY



■ Don't waste it! Bingo

This activity playfully revisits some of the key ideas of the presentation.



20 min

You will need:



- Printouts of flash cards G 2a, "Bingo game cards" (one per student)
There are 25 cards. If your class consists of more than 25 students, print out however many copies more you need; different students using copies of the same card will not pose a problem.
- One printout of the teacher cards G 2b, "Bingo teacher's cards"
- Plastic chips or other small items (e.g. paper clips)



Rules:

- Each player is given a Bingo card. From the flashcards, the teacher draws different pictures and calls out their name.
- If a picture is on a player's card, it can be covered with a chip or crossed out with a pencil. (Bear in mind that cards cannot be used again if items have been crossed out on them.)
- When a player has a full line straight across a row or straight down a column, he or she yells out "Save Food!" and wins the game.



Instructions:

1. Hand out the Bingo cards G 2a.
2. Explain the rules of Bingo.
3. Show the flash cards (G 2b). Name and discuss what is depicted.
4. Mix up the flashcards.
5. Play!

BINGO!



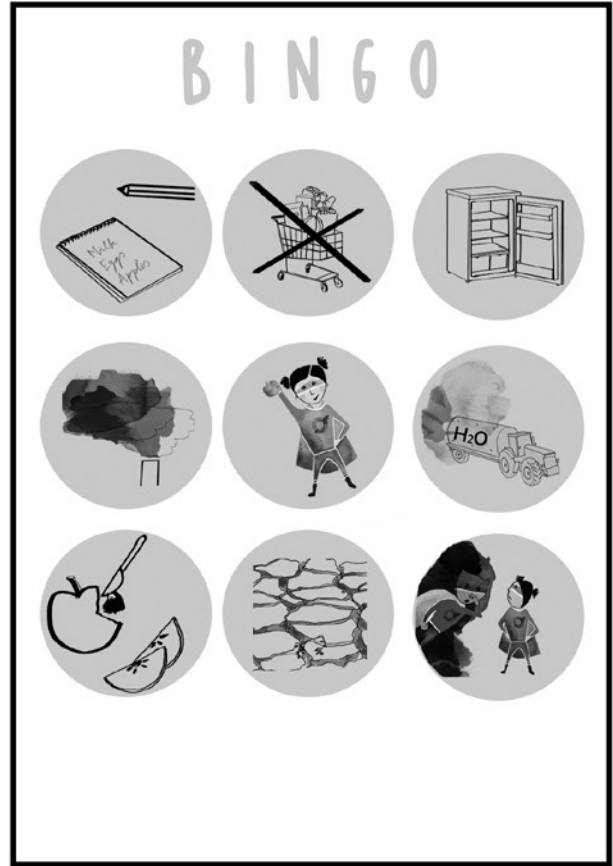
BINGO!



BINGO!



BINGO!












BINGO!

BINGO

BINGO

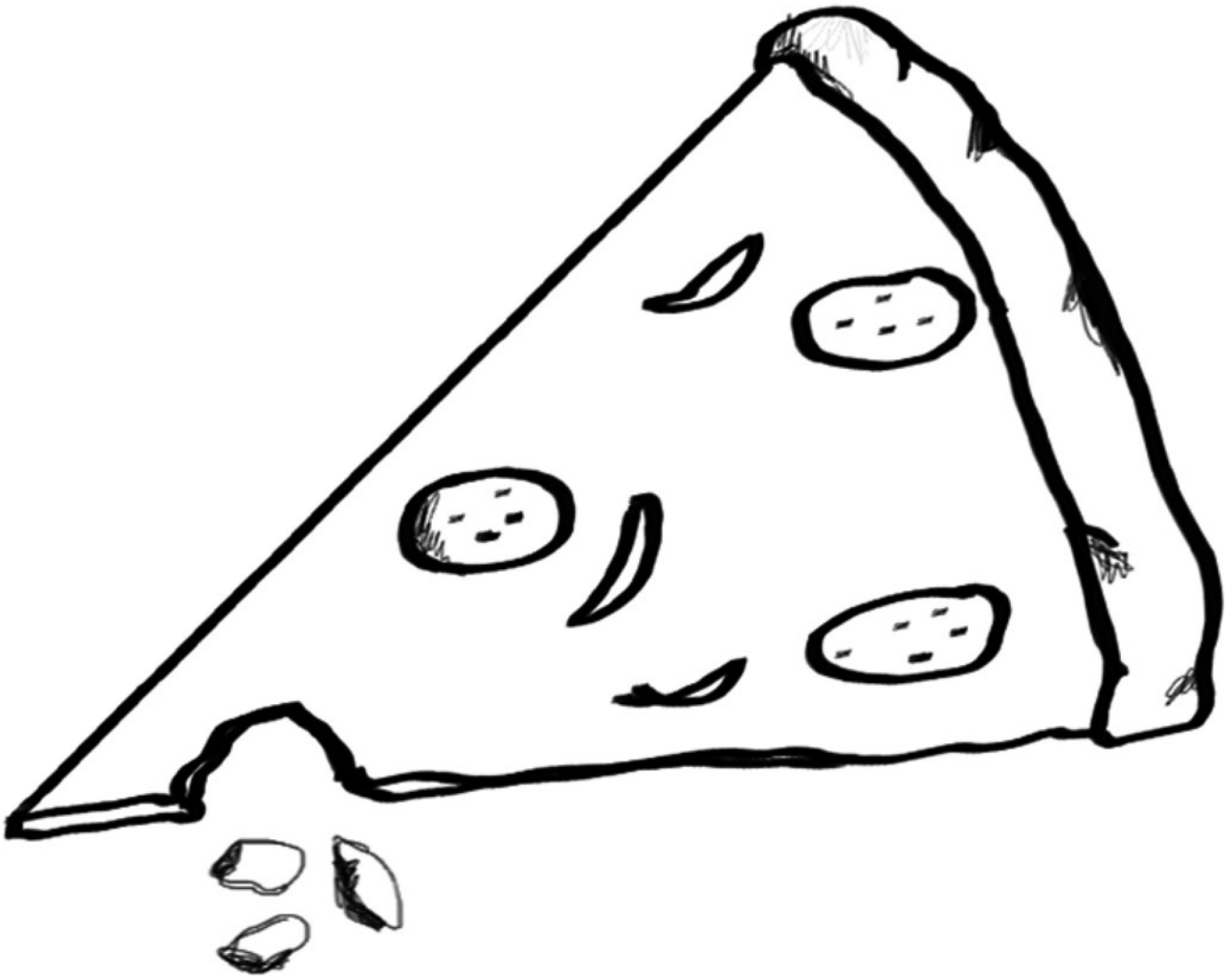
BINGO

BINGO

BINGO!



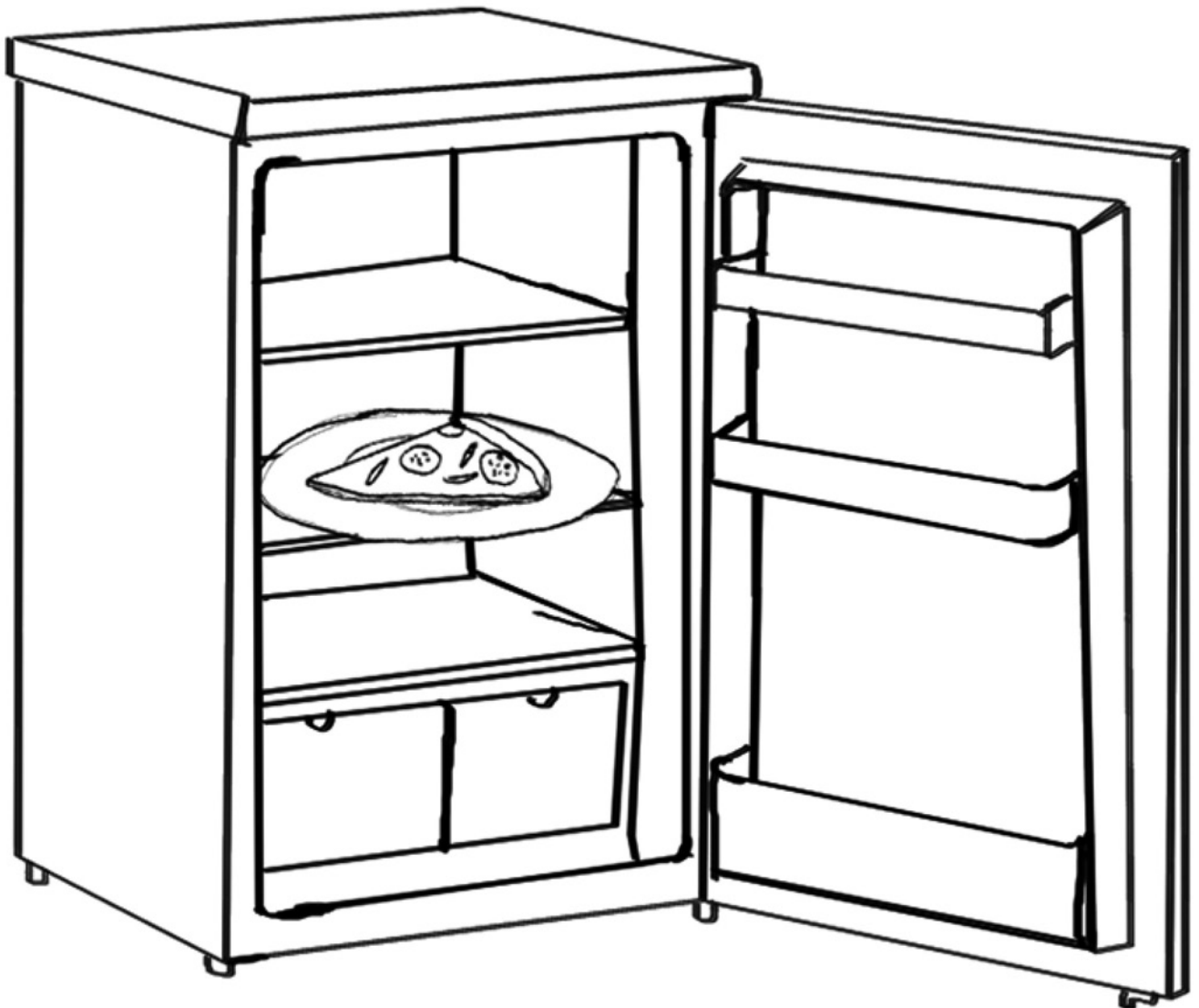
KEEP ANY LEFTOVER PIZZA FOR THE NEXT DAY!

BINGO!



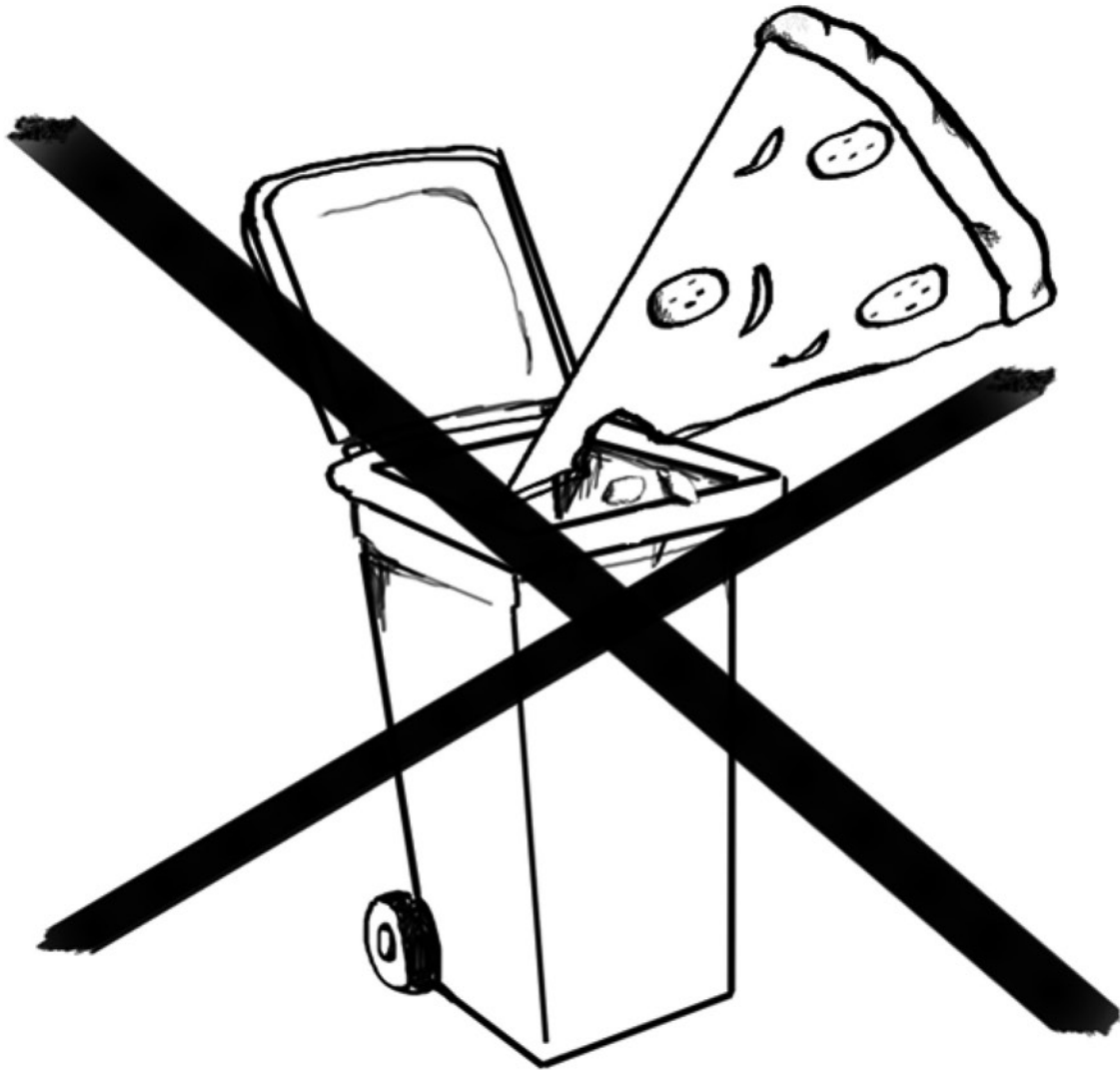
ANNA IS ENJOYING HER FOOD.

BINGO!



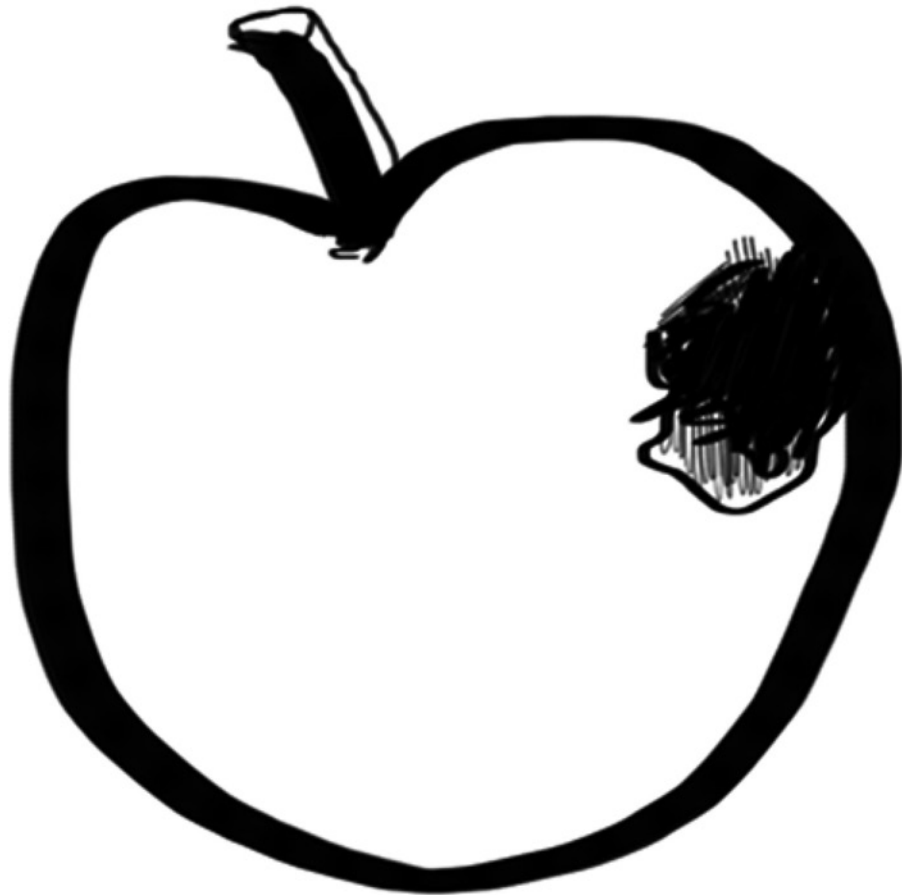
KEEP YOUR LEFTOVERS IN THE FRIDGE TO EAT ANOTHER DAY!

BINGO!



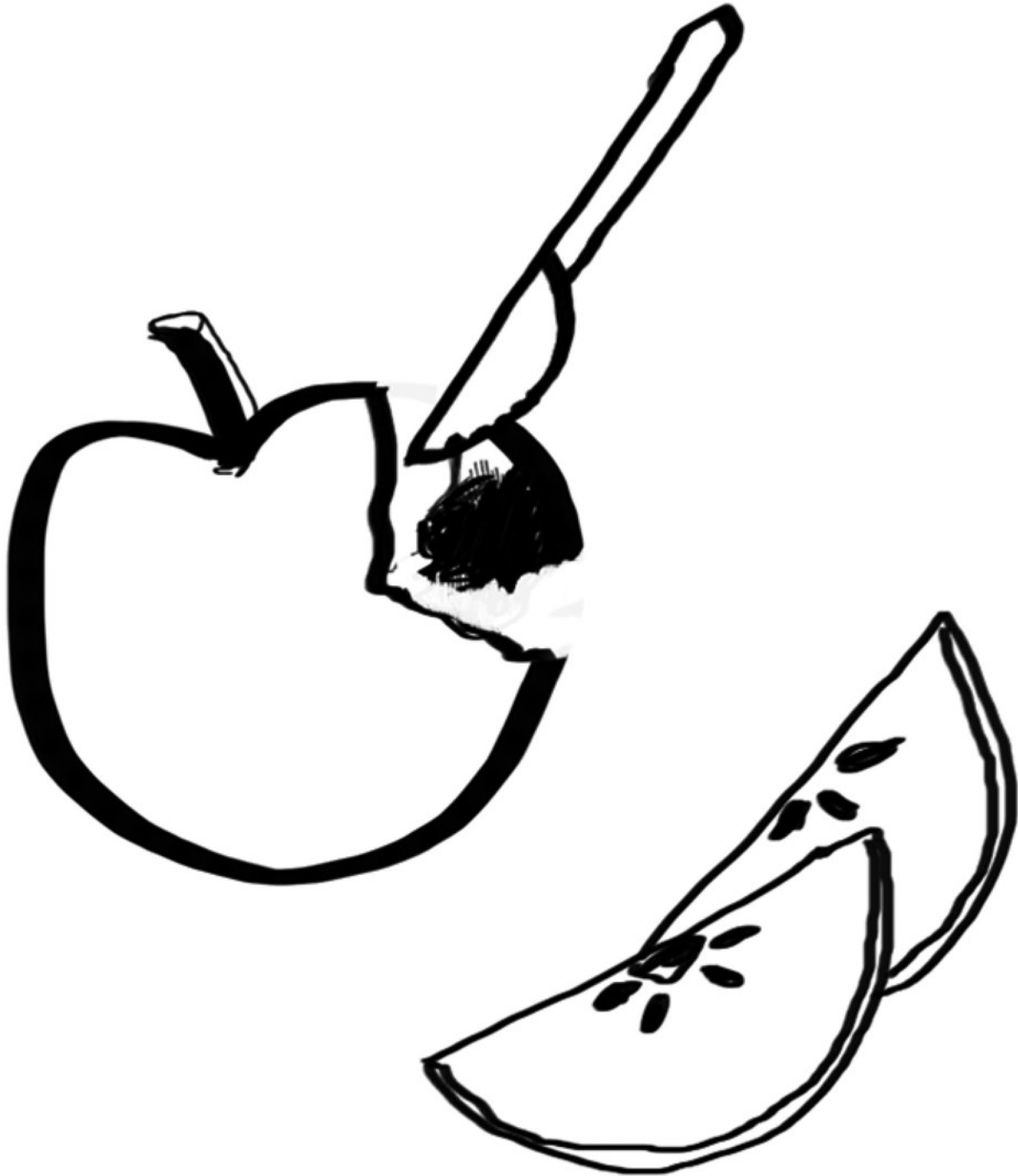
FEED YOURSELF, DON'T FEED THE BIN!

BINGO!



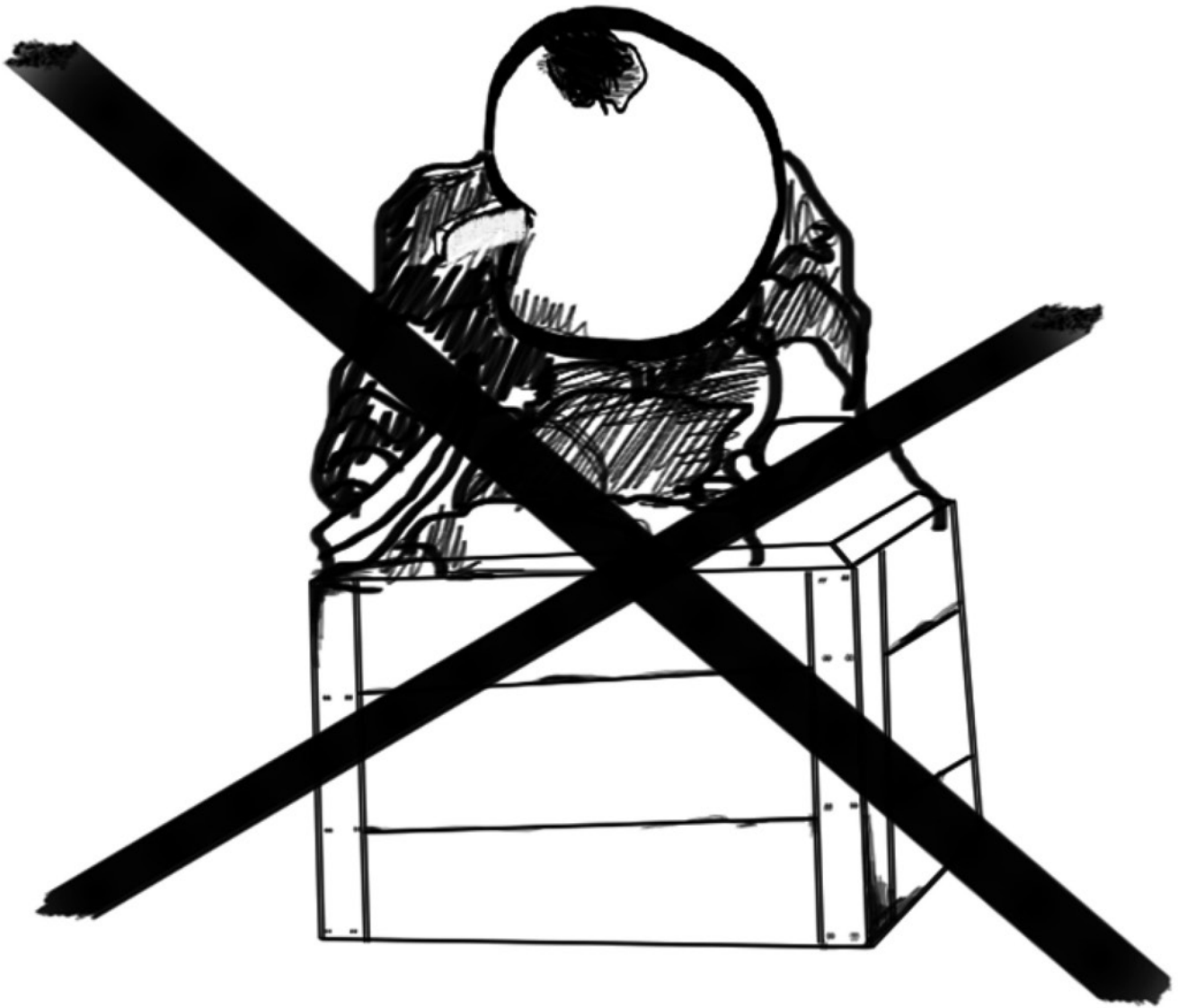
AN APPLE WITH A BROWN SPOT CAN STILL BE EATEN.

BINGO!



CUT OUT ANY BAD SPOTS AND EAT THE REST OF YOUR APPLE.

BINGO!



DON'T THROW AWAY ANY FOOD THAT IS STILL GOOD TO EAT!

BINGO!



THINK BEFORE YOU SHOP!

BINGO!



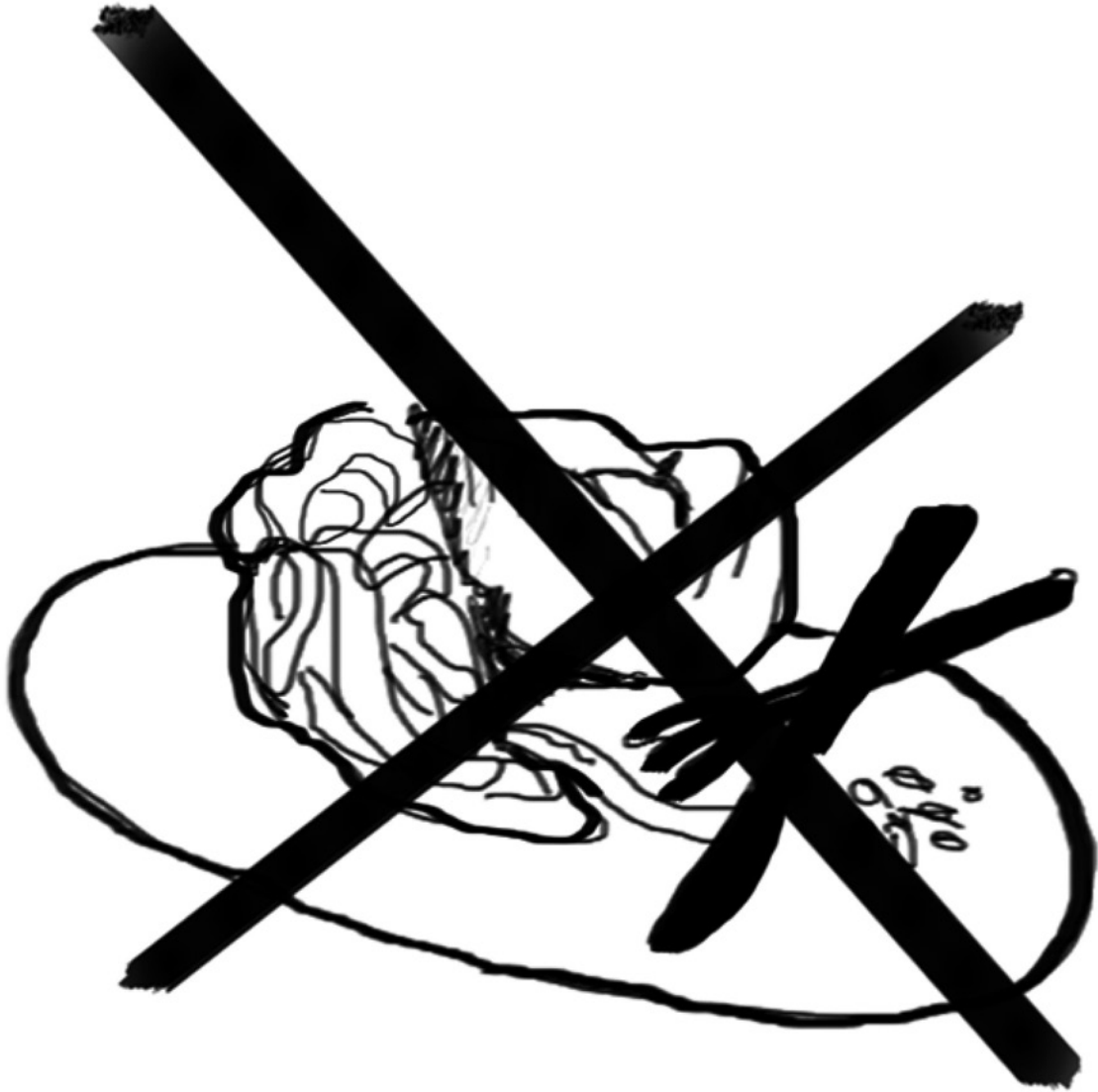
TAKE A SHOPPING LIST WITH YOU TO THE MARKET.

BINGO!



ANNA ASKS FOR A SMALLER PORTION.

BINGO!



DON'T THROW AWAY ANY FOOD!

BINGO!



DON'T BUY MORE THAN YOU NEED!

BINGO!



REYNA, THE FOOD SAVER

BINGO!



MIKA, THE FOOD SAVER

BINGO!



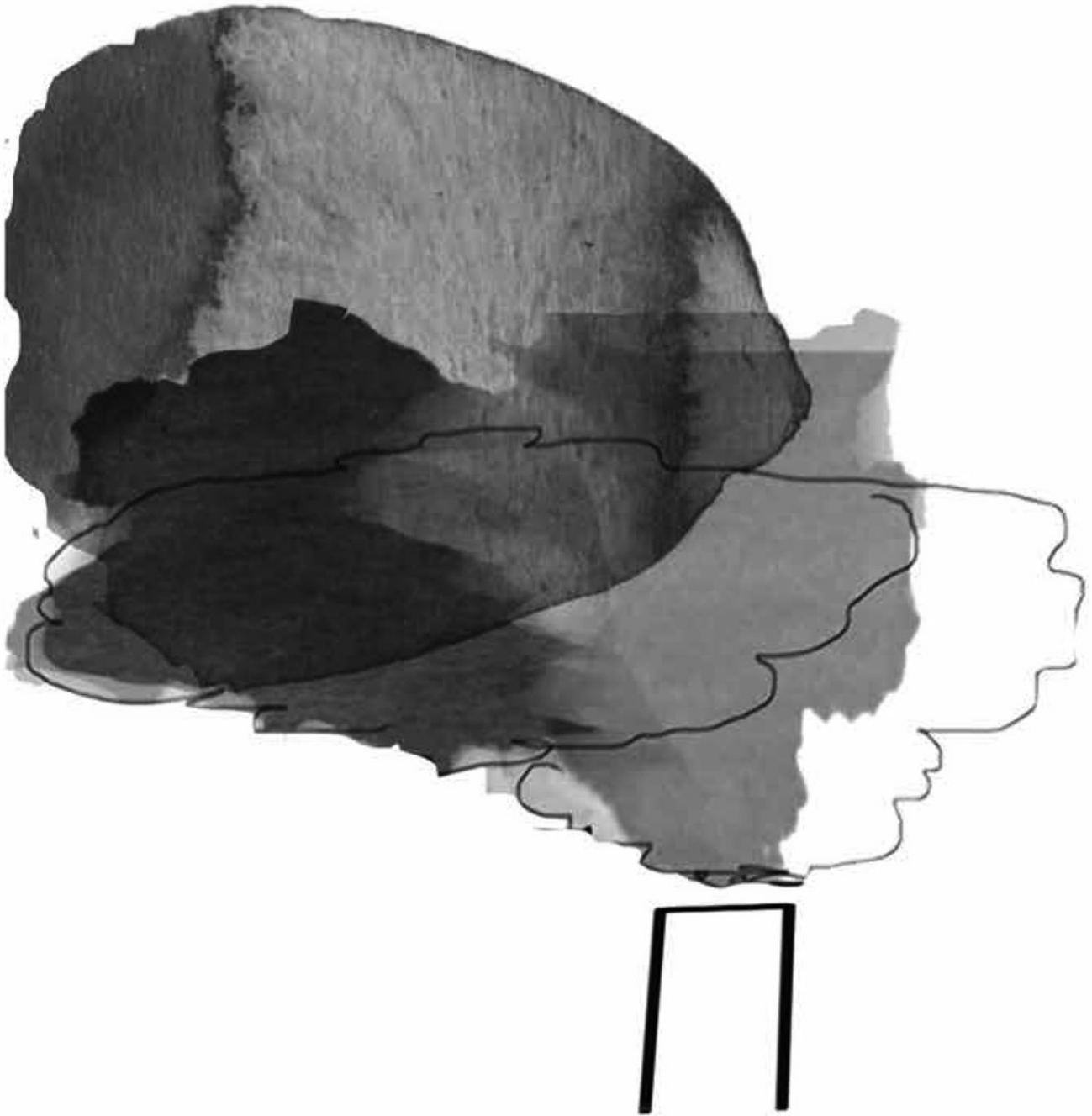
ANNA AND THEO AS FOOD SAVERS

BINGO!



OUR FOOD IS TRANSPORTED A LONG WAY.

BINGO!



FOOD PRODUCTION AND TRANSPORTATION PRODUCE
GREENHOUSE GASES.

BINGO!



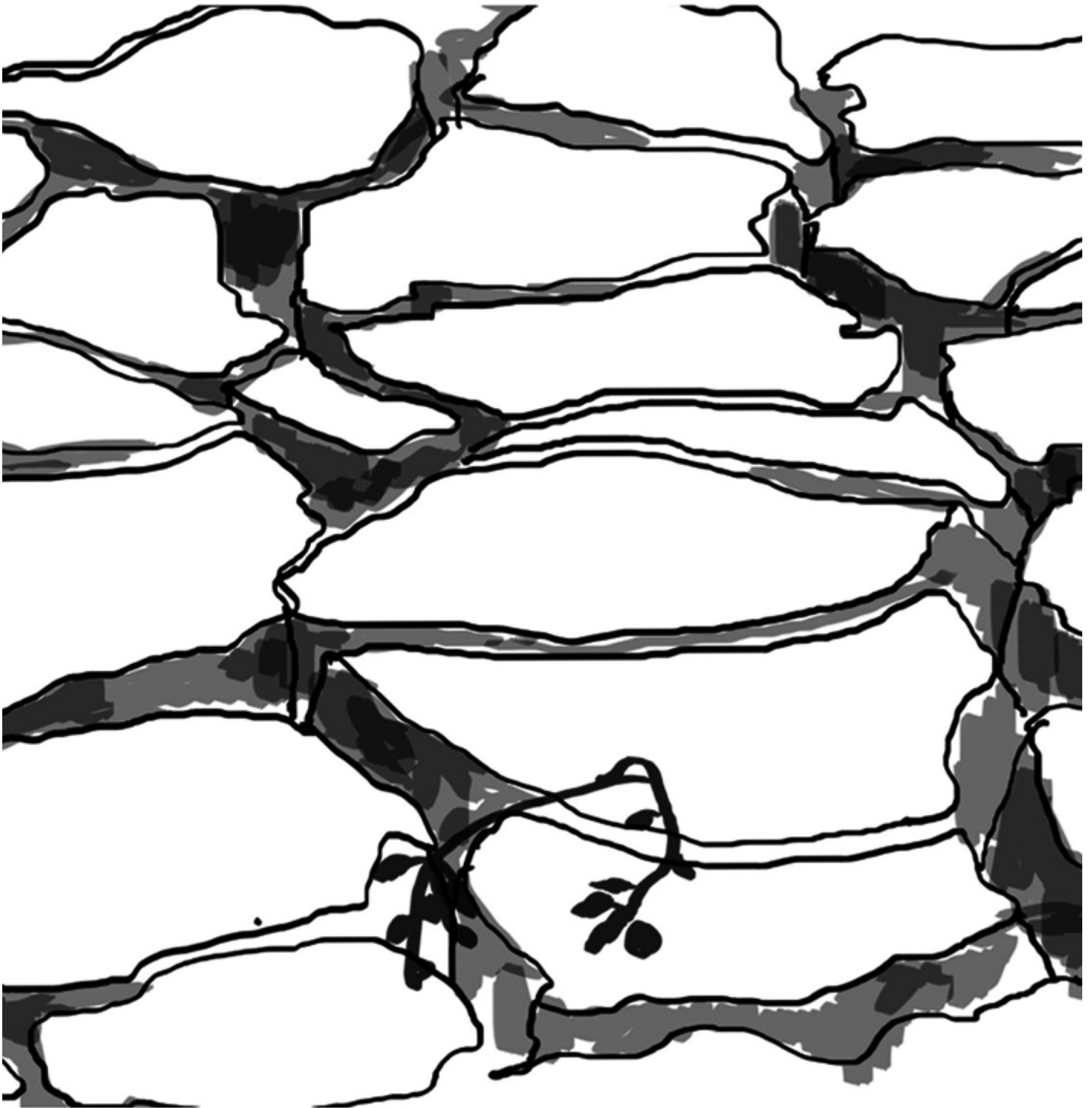
GREENHOUSE GASES ARE BAD FOR THE ENVIRONMENT
AND OUR HEALTH.

BINGO!



GROWING AND PRODUCING FOOD USES UP WATER.

BINGO!



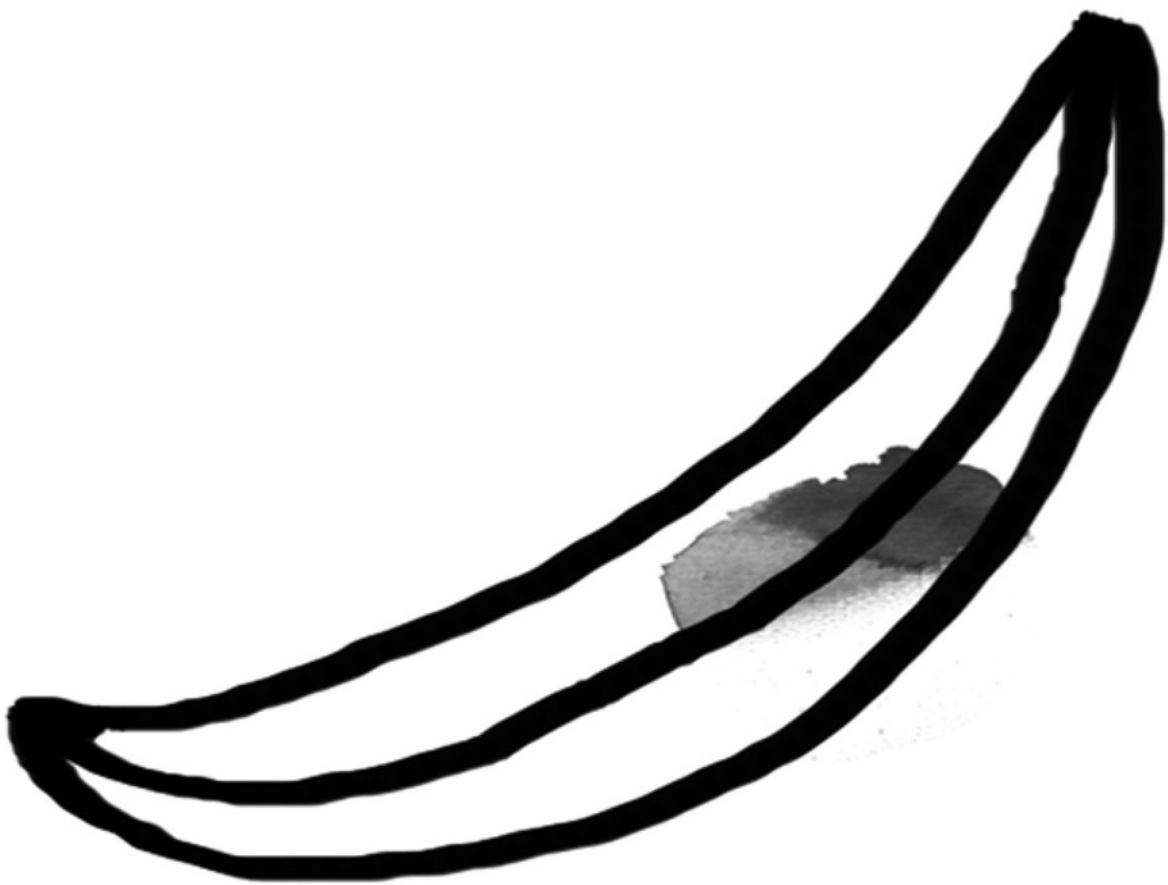
GROWING AND PRODUCING FOOD CAN LEAD
TO WATER SHORTAGES.

BINGO!



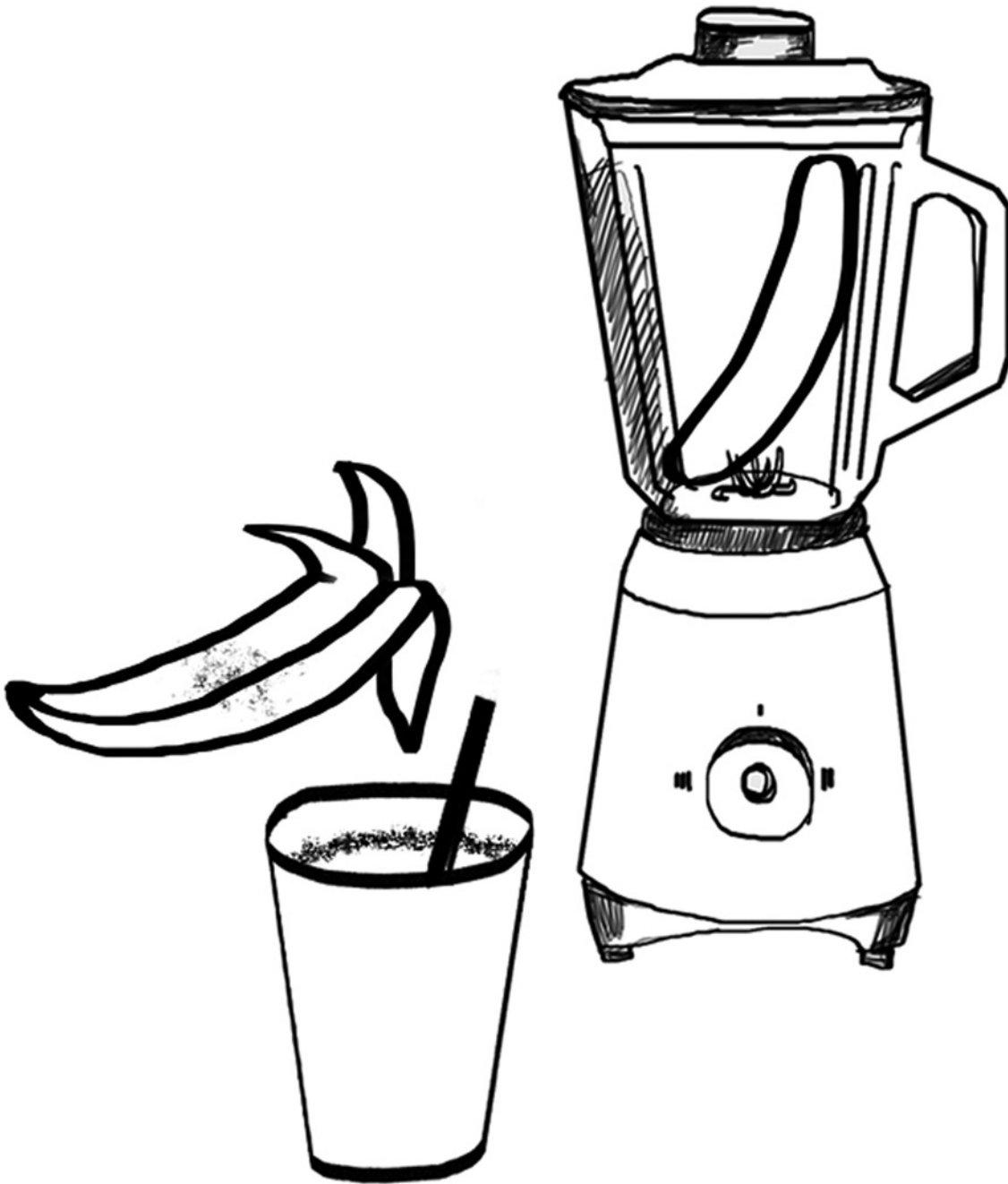
PLANTS CANNOT GROW WITHOUT WATER.

BINGO!



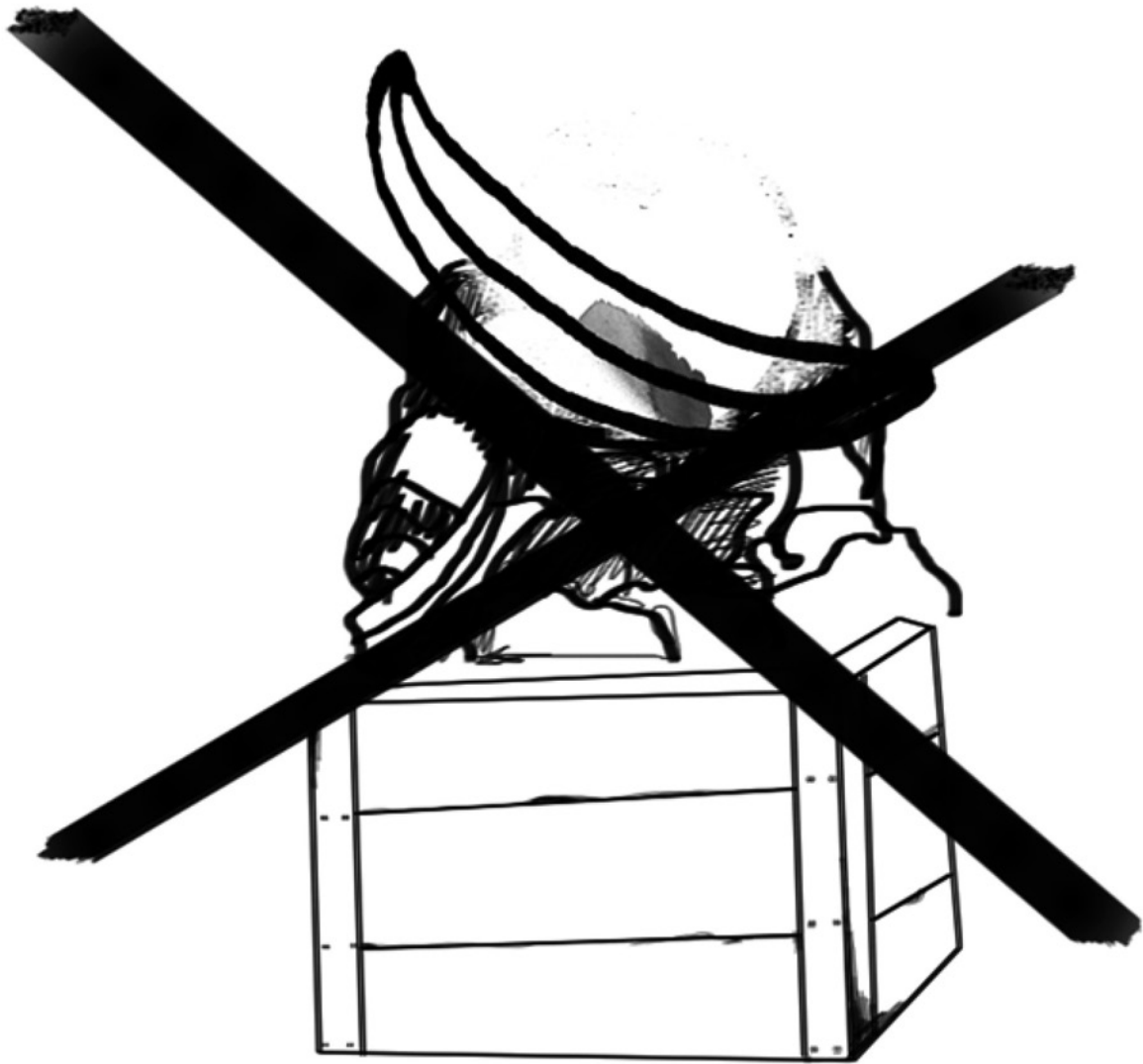
EAT YOUR BANANA EVEN WHEN IT IS A LITTLE BROWN.

BINGO!



USE EXTRA-RIPE FRUIT TO MAKE SMOOTHIES AND JAMS.

BINGO!



DON'T THROW AWAY ANY FOOD THAT IS STILL GOOD TO EAT!

■ CORE LESSON 1: DRAMA EXERCISES



Drama exercises foster creative and cognitive involvement with the topic. Invite your students to join in these exercises individually or in pairs and share the written works with each other.

DE 1: DO GOOD: SAVE FOOD!

“Wasting food is not such a big issue,” one of your friends proclaims. Take them on a journey to see why food waste is such an important issue and what we can do to stop wasting so much food.

DE 2: I am a food saver!

Imagine you are one of the food savers and think of an adventure you might have fighting against food waste. Alternatively, students could also draw a comic strip.



9 EASY TIPS

■ CORE LESSON 2

**FEED YOURSELF, DON'T FEED
THE BIN: NINE EASY TIPS
TO REDUCE FOOD WASTE**

■ CORE LESSON 2: FEED YOURSELF, DON'T FEED THE BIN: NINE EASY TIPS TO REDUCE FOOD WASTE

9 EASY TIPS

In the second core lesson, students learn more about how they can reduce food waste. Specifically, this lesson outlines nine useful tips that can help students and their families reduce food waste.

The main tool to teach the contents of core lesson 1 is Presentation 2, “Feed yourself, don’t feed the bin: nine easy tips to reduce food waste.” Depending on time and resource availability and the technical appliances at your disposal, you can decide to project or print the illustration slides (to be found in the annex to this document). The presentation is designed to go with the accompanying voice-over text (to be found on the following pages) for you to read out. Within the voice-over text, you will find questions for discussion and engagement with the students. These are only suggestions, so feel free to change, supplement or shorten them.

NB: We acknowledge that students may be unable to implement all of the nine tips by themselves. This is reflected in the fact that throughout the voice-over for core lesson 2, reference is made to the crucial role of parents in assisting children with food-saving activities. Fundamentally, core lesson 2 aims to inform pupils about concrete food-saving activities and consequently empower them as important agents of change among their families and communities.



45 min



You will need:



- A digital copy of the presentation
Alternatively, print the slides on transparencies and use an overhead projector, or print them on A4 sheets of paper and have a student hold them up while you are reading the voice-over to the class.
- A printout of the voice-over
- If you want to use them: printouts of the letter to parents and the “9 easy tips” flyer



Instructions:

1. Show the presentation and read/narrate the accompanying voice-over script, or else have students read the voice-over script during class or as homework.
2. Discuss the content with the students. You might find the questions provided in the voice-over a good starting-point for discussion.
3. Hand out the letter to parents and the “9 easy tips” flyer and ask students to take them home to give to their families.

■ CORE LESSON 2: VOICE-OVER

FEED YOURSELF, DON'T FEED THE BIN: NINE EASY TIPS TO REDUCE FOOD WASTE



Wasting food is bad for the environment: It contributes to climate change that makes our planet warmer than it should be. Forests are cut down to make room for fields, and many animals lose their homes because of that. Wasting food means that more people in the world go hungry. When we waste food, we waste money, labour, energy and other resources.

But the good news is that there are easy ways to make good use of our food. Let's find out about some of them!



1 Ask for smaller portions. The easiest way to reduce food waste is to put less on your plate. Ask for smaller portions, and go back for seconds if you still feel hungry after finishing your plate. That way, you only eat as much as you need, and no left-over food is thrown away.



2 Love your left-overs. If you do end up with left-overs, keep them for another day. Instead of scraping left-overs into the bin, you could use them as tomorrow's ingredients. You can also ask your parents to put your left-overs in the fridge and to heat them up the next day. If you're not sure whether you will be able to eat left-overs the day after they have been cooked, ask your parents to freeze and save them for later.



3 Shop smart. Asking for a pineapple that looks so good in the shop but that goes to waste because you're the only one in your family who likes it; loading another packet of biscuits into the shopping trolley that eventually land in the bin because you couldn't finish them off after all: We often buy more food than we are able to eat. There are easy ways, however, to avoid over-shopping.

Q: Can you think of any ways to reduce over-shopping?

Most importantly, you should think before you buy: Ask your parents to plan meals and to buy only what is needed. Ask your parents to write a shopping list together before you set out for the shop or market. That way, you're less likely to buy things you don't need and won't eat.



4 Buy “ugly” fruits and vegetables.

What is the funniest looking fruit or vegetable you have ever seen? This could be followed up with, “Do you think ugly fruits or vegetables taste any different?”

An apple should be round and plump, a carrot long and straight, a potato perfectly smooth – or should they? Not really! Fruits and vegetables come in all shapes and sizes, and each one of them is just as tasty and good to eat as the next: An apple can have rough spots, a carrot can be a little bent, and a potato can be crooked and knobby – they will still taste the same and be just as healthy to eat. If you see some oddly-shaped fruits and vegetables, think about buying them instead of the regular-looking ones, or ask your parents to do so.

5 CHECK YOUR FRIDGE



5 Check your fridge. To keep it fresh and safe to eat, chilled food needs to be stored at between 1 and 5 degrees Celsius. When it’s cooked, food should be stored in a closed container in the fridge. Together with your parents, make sure your fridge is set to the right temperature, and get to know where different types of food should be kept in the fridge. Also make sure that the fridge isn’t packed too full! An overloaded fridge uses more energy, and it is quite likely that you will forget to use something that has been shoved into the furthest corner.

6 FIFO: FIRST IN, FIRST OUT!



6 FIFO: First in, first out! This funny-sounding rule is one of the easiest ways of avoiding food waste: When you or your parents put your shopping away, rotate the food in your fridge and cupboard so that the older stuff comes forward and the newest – which may keep the longest – goes right to the back. This way, you will use up your earlier buys first, and your newest food will still be good when you get around to eating it.

7 LEARN TO UNDERSTAND THE DATES ON YOUR FOOD



7 Learn to understand the dates on your food

Q: Have you ever noticed the dates on your food? What do you think they mean?

A lot of packaged food comes with dates stamped onto it. The most important of these date labels is the “use-by” date. It tells us when easily perishable food such as raw meat is expected to go off. Eating this food after the “use-by” date can make you very ill. If you find that you won’t be able to eat food before the date on its “use-by” label, you can freeze it, and defrost and eat it at a later time. But once the “use-by” date has passed and you haven’t frozen the food, you will have to throw it out.

A lot of food has a “best-before” rather than a “use-by” date. If something is labelled “best before” a certain date, it means just that: The food probably tastes, smells, and looks best before that date. But this says very little about when the food actually might go off and not be safe to use anymore. If the packaging is intact and the food has been stored correctly, food is generally still safe to eat after the “best-before” date. You can normally tell by having a good look at your food or asking an adult to do so: If the food looks, smells, and tastes good after its “best-before” date, it is normally still good to eat.

8 TURN IT INTO GARDEN FEED



8 Turn it into garden feed. If you do end up wasting some of your food, make use of it by turning it into garden feed: Set up a compost bin for food waste and fruit and vegetable peelings! In a few months, you will end up with rich, valuable compost for your plants.

You can set up a compost bin with the help of your parents. Remember, it is possible to set up a compost bin even if you have only limited space. Plenty of information on setting up compost bins can be found online.

9 SHARING IS CARING



9 Sharing is caring. In many places, people worried about food waste help shops and customers share food: Soup kitchens use food that is nearing its “best-before” date to make meals for poor people. School cafeterias donate left-over food to food banks. “Taste the Waste” restaurants cook only with safe and nutritious food that was destined to be wasted in the shops. There is a growing global network of Food Savers – check them out and join them!

Wasting food means wasting money, labour, energy and other resources. When we use our food smartly, we save money and fight climate change. So shop with care, store your food smartly, and re-use and share your left-overs. Get your friends and families to do the same: Together, we can DO GOOD: SAVE FOOD!

9 EASY TIPS

■ FOLLOW-ON ACTIVITIES

for core lesson 2

FEED YOURSELF, DON'T FEED THE BIN: NINE EASY TIPS TO REDUCE FOOD WASTE

These FOLLOW-ON ACTIVITIES feature a more hands-on approach and introduce concrete action to reduce food waste as outlined in core lesson 2.

They are designed to encourage students to take action against food waste and to deepen their practical understanding and knowledge of how to do so.

■ CORE LESSON 2: WORKSHEETS



■ Let's stop food waste!

In this exercise, students are asked to evaluate their treatment of food at home and to consider steps to reduce food waste in their family.



25 min



You will need:



- Printouts of worksheet WS 5, "Let's fight food waste!" (one per student)



Instructions:

1. Explain: "Now that we've heard about ways to reduce food waste, let's think about how each of us can do so at home."
2. Ask students whether they or their families already follow some of the advice given in the presentation at home. How could they avoid wasting food in the future, and what might their next steps look like?
3. Hand out copies of worksheet WS 5 and ask students to answer the questions by making drawings or writing very short paragraphs.

LET'S STOP FOOD WASTE!

This is how my family saves food at home ...

In order to save more food, my family should....

My next steps to save more food ...

■ Storage knowledge

This worksheet explains how different foods such as raw meat, cooked meat, fruit and vegetables, should be kept and stored.



25 min (+ homework)

You will need:



- Printouts of worksheets WS 6a and 6b, "Storage knowledge" (one per student)
- Scissors
- Glue
- Crayons or colouring pencils
- Printout of the support sheet for yourself



Instructions:

1. Ask students what they know about storing food correctly. Why is it important to know where and how to store food?
2. Hand out copies of worksheet WS 6a and WS 6b and ask students to colour in and cut out the illustrations on worksheet WS 6b.
3. In groups of two or three, ask students to discuss whether they think the various foods need to go into the fridge or can stay unrefrigerated.
4. Discuss their findings and, where appropriate, provide additional information from the solutions sheet. Once your students understand where the different food types should be stored, instruct them to glue the pictures into the correct areas.
5. As homework, ask students to complete worksheet WS 6a with their parents by picking one of their favourite foods, researching how it should be kept and stored, and filling in the blanks in the worksheet.

■ Storage knowledge - Support sheet

Food is sometimes wasted because it has gone bad. If we store our food properly, we will waste less of it. Follow these tips to keep your food fresh and healthy to eat!

Take great care with ...

... raw meat: Raw meat absolutely must be kept refrigerated, so make sure you take it home straight from the shop and put it in the fridge as soon as possible. Do not use raw meat after the “use-by” date has passed (unless it has been frozen from before that date). If you cannot use it before the “use-by” date has passed, freeze it. Frozen meat will stay edible for a very long time. All food items once defrosted cannot be frozen again.

Refrigerate these foods as soon as possible:

Cooked chicken: Cooked chicken needs to go into the fridge or freezer as quickly as possible. Help it cool down by putting it into several shallow dishes or containers. If you want to reheat the chicken, make sure you heat it up thoroughly for at least two minutes to kill off any bacteria.

Cooked rice: Dried rice will last a very long time, but once it is cooked, it will only keep for two to three days. It is vital that cooked rice should be put into the fridge as quickly as possible. To cool it down quickly, put the rice into several shallow containers, and then place it in the fridge as soon as it is no longer hot. Cooked rice that is left to cool down slowly and is not refrigerated promptly can cause food poisoning.

Cooked pasta: Just like dried rice, dried pasta will keep for a very long time, but needs to be consumed within two or three days of being cooked. Put left-over cooked pasta in the fridge once it has cooled down sufficiently. Put it into shallow containers to speed up the cooling-down. When cooked pasta is left to cool down slowly and is not refrigerated, it can cause food poisoning.

Cheese: Cheese needs to be refrigerated. Once opened, sliced cheese will stay soft and moist if you cover it with plastic foil or put it in an airtight container. If it not covered up properly, it will go hard.

Left-over pizza: Left-over pizza will stay safe for three to four days if it is refrigerated properly. Please make sure that you put it in the fridge as soon as it has cooled down.

These food items don't spoil easily:

Bread: Fresh bread is best stored in a paper bag: the paper allows the bread to breathe, so there is less chance of mould affecting the loaf. Sliced bread is best stored in the plastic bag that it comes in to keep it fresh. You can also freeze bread in an airtight freezer container or in the plastic bag it came in. Pay close attention to mould on bread: Once the bread is mouldy, do not eat it. Even if the mould is only on one slice, throw away the whole loaf. If your bread has gone stale but there is no sign of mould, it is perfectly safe to eat and you can still use it for croutons, French toast, or stuffing.

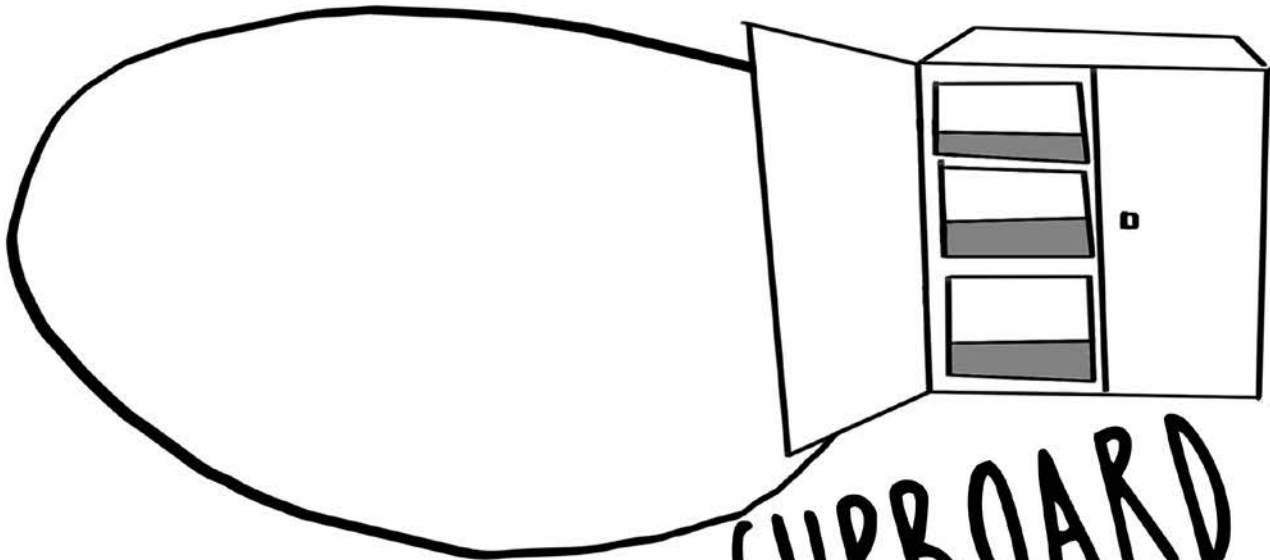
Fruits and vegetables: Some fruits and vegetables, such as nectarines, peaches, tomatoes, kiwis and pears, can be left on the kitchen worktop to ripen. After they have ripened, they will keep longest if refrigerated. Sliced fruit should be covered up and placed in the fridge. This reduces discolouring and maintains quality and safety. Drizzling lemon juice onto sliced fruit and vegetables such as apples or avocados will keep them from going brown for a while. Apples will go brown rather quickly once they're cut, but they're still good to eat, as long as they are not slimy.

FOOD IS SOMETIMES WASTED BECAUSE IT HAS GONE BAD. IF WE STORE OUR FOOD PROPERLY, WE WILL WASTE LESS OF IT. CUT OUT THE ITEMS OF FOOD ON THE NEXT PAGE AND PASTE THEM WHERE YOU THINK THEY BELONG.

FRIDGE



CUPBOARD



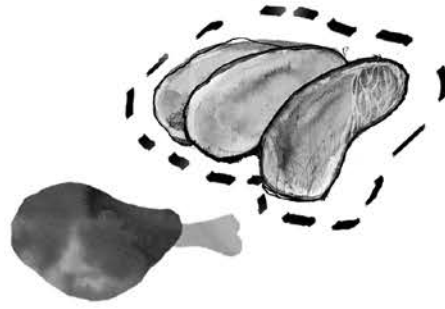
ONE OF MY FAVOURITE ITEMS OF FOOD IS:

IT SPOILS IF I

TO KEEP IT FRESH AND SAFE FOR CONSUMPTION, I HAVE TO

.....

RAW MEAT



COOKED CHICKEN

COOKED RICE



COOKED PASTA



CHEESE



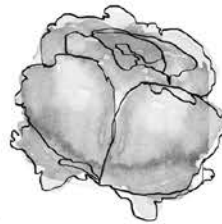
LEFTOVER PIZZA



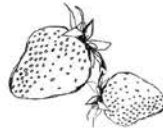
BREAD



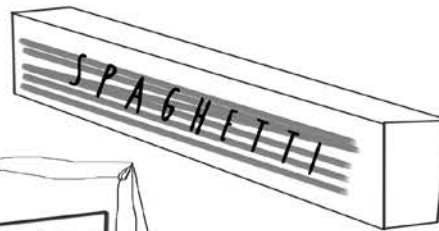
SALAD



STRAWBERRIES



DRY PASTA



FLOUR



■ Fridge frenzy

With the help of this activity, students learn where to place certain foods within the fridge.



25 min (+ homework)



You will need:

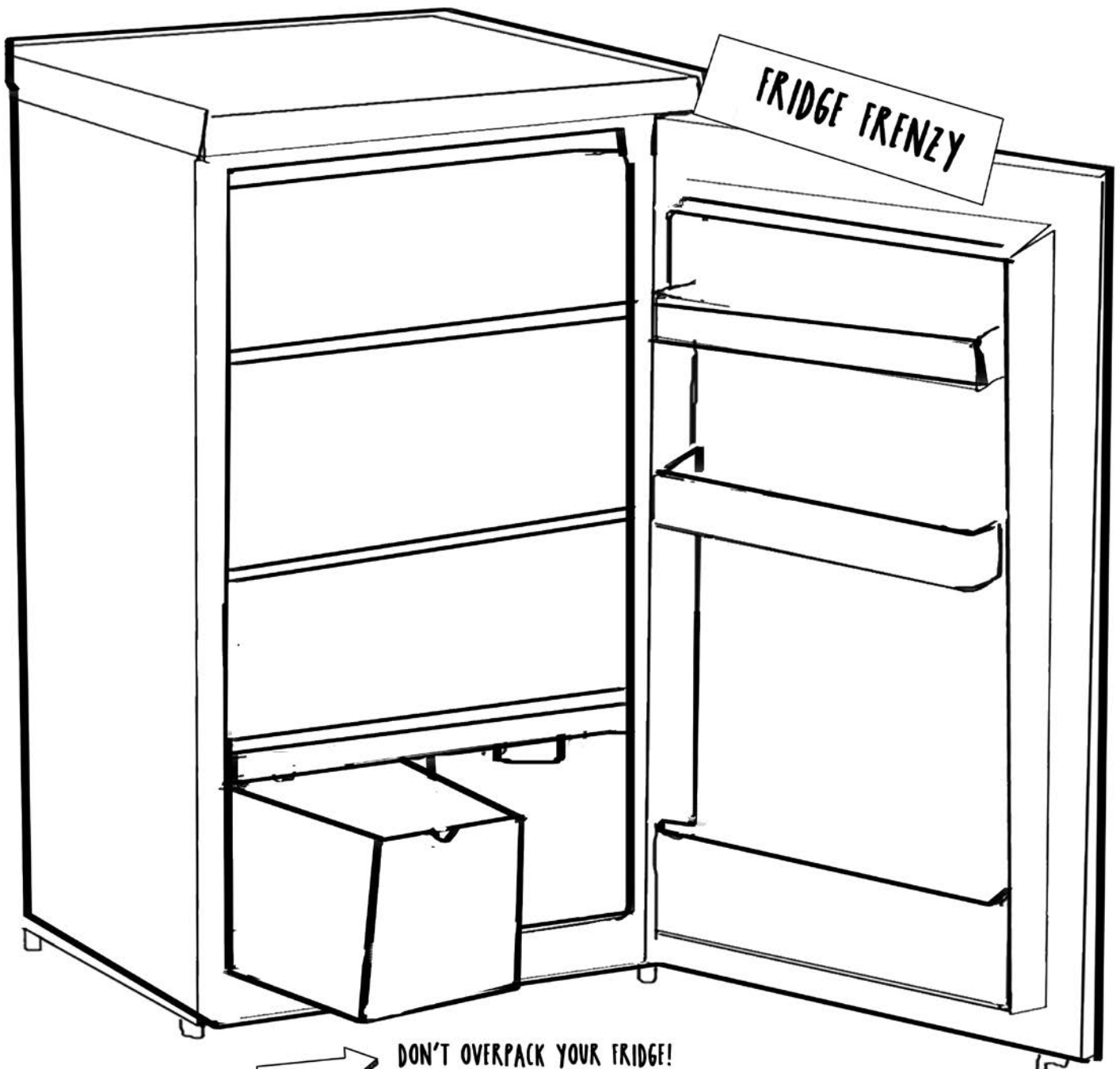


- Printouts of flyer WS 7c, "Fridge frenzy: what goes where?"
- Printouts of worksheets WS 7a and 7b, "Fridge frenzy" (one of each per student)
- Coloured pencils
- Scissors
- Glue



Instructions:

1. Explain: The temperature in the fridge varies, and to keep your food fresh for the longest time possible, you have to know where the best place for it is in the fridge.
2. Hand out copies of worksheet WS 7a and invite students to look at the depiction of the fridge. Ask students: "Where do you think the coolest place is in the fridge? What should be kept there? Where is the warmest part? What do you think should be kept there? Do you know where fruits and vegetables are supposed to go?"
3. Explain: "Most fridges have crisper drawers at the bottom, which keep fruits and vegetables moist. Use one of these drawers for vegetables, the other for fruits." Instruct students to colour in the crisper drawers in green.
4. Explain: "Above the crisper drawers (on the bottom shelf) is the coolest place within the fridge. This is where you should keep food that spoils easily: raw fish and meat. Make sure that you keep raw fish and meat in airtight containers. This will help to keep them fresh but it will also stop juice from them from dripping onto other food: The juice from raw meat and fish can contain bacteria that can make you very ill, so make sure it doesn't come into contact with any food that you might eat without cooking it first (such as salad or cheese)." Instruct students to colour in the bottom shelf in blue.
5. Explain: "The top shelves are the second-warmest part of the fridge. Here, you can store food that doesn't need to be cooked, such as left-overs, sliced meat, yoghurts and cheese." Ask students to colour in the two top shelves in orange.
6. Explain: "Doors are the warmest part of the fridge, so you should only keep food in there that won't spoil easily, such as juices or tomato ketchup. Even though many fridges have a special compartment for eggs in their door, eggs should not be kept here but rather on the top shelves of the fridge. The same goes for milk." Ask students to colour in the fridge doors in red.
7. Go through the food items on page 2 together, and name and explain the different food so that everyone knows what is depicted.
8. Ask students to colour in the food and cut it out.
9. Split the students up into groups of four. Ask them to determine where various foods should go and to place it in the respective areas within their fridge.
10. Compare results and, afterwards, ask students to glue the food into place.
11. As homework, with the help of flyer WS 7c, students should have a look into their fridge at home together with their parents or guardians to check whether the food in there is stored correctly. If it is not, ask them to rearrange it with the help of their parents or guardians. Ask them to pin up their illustrated fridge on the door of their actual fridge.
12. When the homework is due, discuss: How did their fridge "hold up" in comparison to the instructions they received at school? Did they rearrange anything and if so, what?



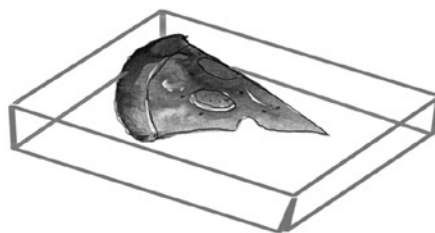
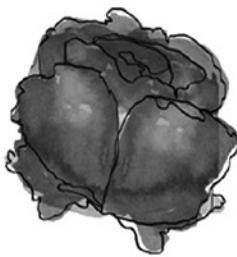
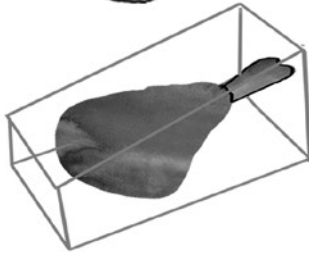
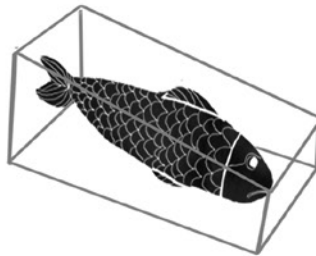
DON'T OVERPACK YOUR FRIDGE!

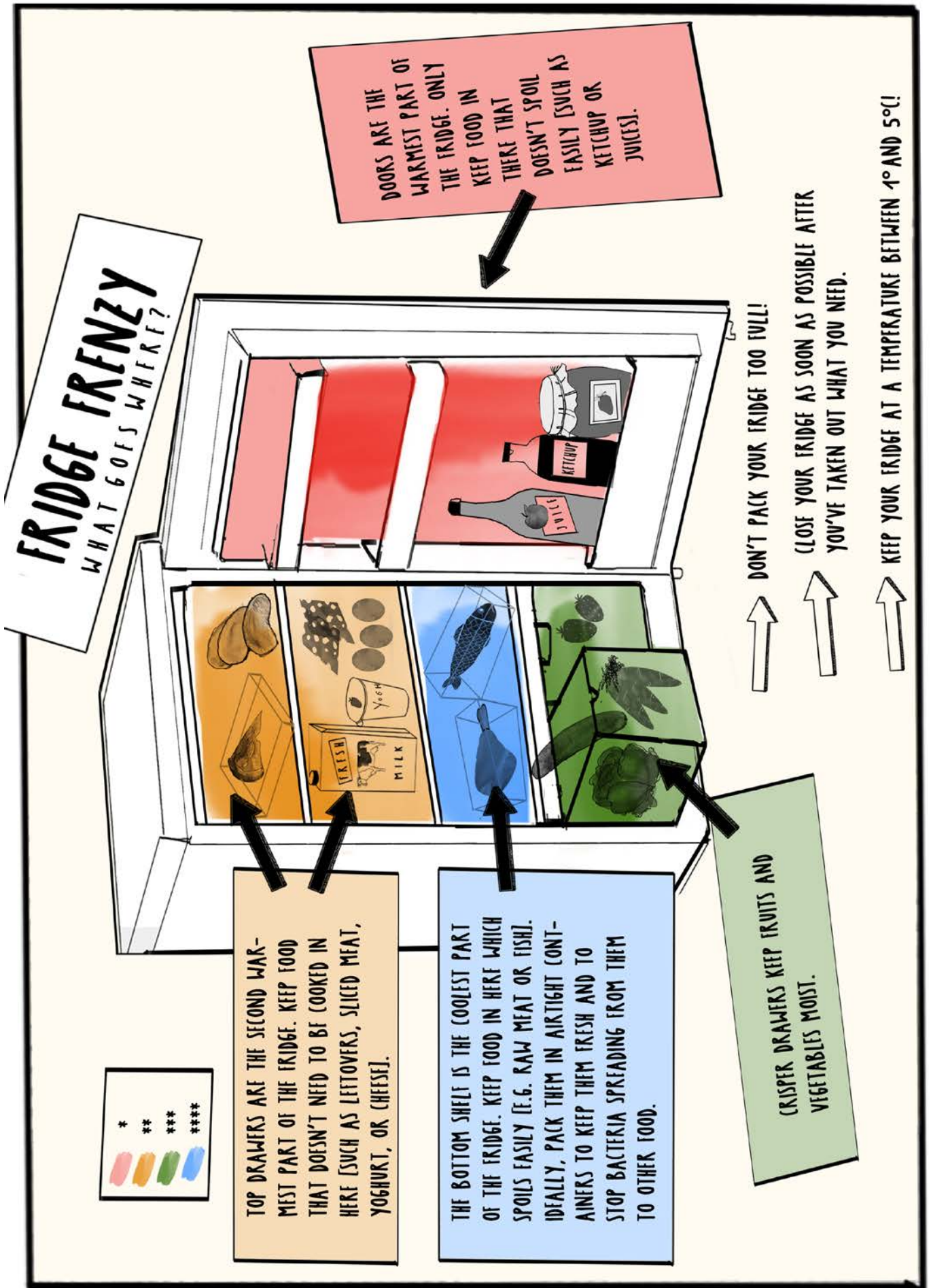


CLOSE YOUR FRIDGE AS SOON AS POSSIBLE AFTER YOU'VE TAKEN OUT WHAT YOU NEEDED.



KEEP YOUR FRIDGE AT A TEMPERATURE BETWEEN 1 AND 5°C!





■ CORE LESSON 2: DISCUSSIONS



■ You can do better!

From a story about Anna and Theo wasting food, students determine food-wasting actions and think of food-saving alternatives.



25 min

You will need:



- Printouts of worksheet D 1, "You can do better!" (one per student)
- Printout of solution sheet for yourself.



Instructions:

1. Read out the story on D1 ("You can do better!").
2. Explain: "Some of the things Anna and Theo did meant that they were wasting food. Maybe we can spot these things together."
3. Read through the story again, pausing after each sentence to let the students discuss whether Anna and Theo were contributing to food waste through their actions. If students agree that Anna and Theo were in fact wasting food, discuss what they could have done instead. You can use the solution sheet to help you spot food-wasting behaviour and think of food-saving alternatives.

YOU CAN DO BETTER: DO GOOD: SAVE FOOD!

Theo and Anna are hungry. Follow their story and see whether they remember everything the food savers have explained about avoiding food waste. Are they doing everything right, or could they have acted more sensibly to avoid wasting food?

Anna and Theo arrive home from school feeling hungry. Dad tells them to go and buy a snack from the local shop while they are waiting for dinner. Before leaving, they quickly look in the fridge and find a few oranges, strawberries and some pasta. They do not spot the packet of yoghurts. "Should we make a list?" asks Theo. "We don't need to, we're only getting a snack" replies Anna.

They go to the shop and pick up a basket, and put bananas and strawberries into it. A shopkeeper suggests that they try the ugly fruits and vegetables. "We have an offer on ugly fruits and vegetables. They taste just as nice!" he says. "They're not the same," Theo says to Anna, and they move on. "Do we need yoghurts?" Anna asks. "Not sure," replies Theo. "But they're 'buy-one-get-one-free', so we have to get them!" Anna shouts, and into the basket they go!

When they arrive home, they put all of the shopping on the kitchen worktop. Dad tells them to do their homework before watching TV. They rush to the living-room to watch their favourite show. "Hey!" dad shouts. "No TV until the food has been put away in the fridge." With a groan, they dash to the kitchen and throw the food into the fridge. "Anywhere will do!" shouts Anna. "Yes, *Star Crackers* is about to start," agrees Theo. They throw the food into the fridge as fast as they can and hurry back to the living-room, just in time for their favourite show.

■ You can do better: DO GOOD: SAVE FOOD! (Solutions)

(Food-wasting behaviour is underlined, suggestions for food-saving alternatives are *italicised*.)

Anna and Theo arrive home from school feeling hungry. Dad tells them to go and buy a snack from the local shop while they are waiting for dinner. Before leaving, they quickly look in the fridge and find a few oranges, strawberries and some pasta. They do not spot the packet of yoghurts. (*They should have looked closely to make sure they hadn't missed anything.*) "Should we make a list?" asks Theo. "We don't need to, we're only getting a snack" replies Anna. (*You should always make a shopping list to avoid buying things that you don't really need.*)

They go to the shop and pick up a basket, and put bananas and strawberries into it. (*There are already strawberries in the fridge.*) A shopkeeper suggests that they try the ugly fruits and vegetables. "We have an offer on ugly fruits and vegetables. They taste just as nice!" he says. "They're not the same," Theo says to Anna, and they move on. (*Crooked or ugly fruits and vegetables are just as nutritious as normal ones, as long as they are not damaged.*) "Do we need yoghurts?" Anna asks. "Not sure," replies Theo. "But they're 'buy-one-get-one-free', so we have to get them!" Anna shouts, and into the basket they go! (*They already have yoghurts at home. Don't be tempted by offers such as 'buy-one-get-one-free'; only buy the food that you will eat. Don't buy too much food just because it's cheap.*)

When they arrive home, they put all of the shopping on the kitchen worktop. (*They should have put the shopping away carefully straight away.*) Dad tells them to do their homework before watching TV. They rush to the living-room to watch their favourite show. "Hey!" dad shouts. "No TV until the food has been put away in the fridge." With a groan, they dash to the kitchen and throw the food into the fridge. (*You must handle food carefully: Don't throw it around!*) "Anywhere will do!" shouts Anna. (*Food should be put in the correct parts of the fridge, not just anywhere!*) "Yes, *Star Crackers* is about to start," agrees Theo. They throw the food into the fridge as fast as they can and hurry back to the living-room, just in time for their favourite show.

■ Stop food waste!

Creating posters together, this activity lets students revisit and deepen their understanding of the key concepts of food waste reduction.



60 min

You will need:



- A2 or A3 paper (one sheet for every two to four students)
- Coloured pencils, crayons, or watercolours
- Scrap bits of material, newspaper and magazine clippings
- Scissors
- Glue



Instructions:

1. Brainstorm together: How can we avoid food waste? What can we do with left-over food?
2. Split students into groups of two or three.
3. Ask each group to choose one of the following topics: "How we can avoid wasting food", and "What we can do with left-overs".
4. Instruct students to create a poster about their topics by drawing, writing, and/or using the newspaper and magazine clippings.
5. Ask each group to come to the front in turn and present their poster.

■ Class contract

Students outline in groups what they intend to do to reduce food waste. The discussion will be followed by students signing a contract to show their commitment to solving the issue.



25 min

You will need:



- One copy of D 2 (Class contract template)



Instructions:

1. Split students up into groups of two or three.
2. Ask each group to come up with three main actions to reduce their level of food waste.
3. The teacher will then lead a classroom discussion, inviting each group to share at least one of their ideas. The ideas can then be collated on the board. These will form the basis for the contract.
4. Teacher will then use the output from the group discussion to draw up a contract for pupils to sign (the contract could be signed by the whole group, or students could sign their own individual contracts). A template can be found in document D 2. The contract(s) could then be displayed in the room as a reminder of the commitment made by the students.

WORKING TOGETHER TO SAVE FOOD: OUR CLASS CONTRACT

Wasting food is bad for the environment, it wastes money, and it contributes to world hunger. In order to save food, we, the students of class _____, will:

1. Take our time to eat.
2. Ask for adequate portions in our lunch boxes.
3. Donate what we cannot eat to our free-for-all left-over plate.
4. Remind each other about not wasting food.
5. Compost or recycle food waste we can't avoid.

Let's DO GOOD: SAVE FOOD!

Name of school and town, date

Signatures

■ CORE LESSON 2: GAMES

■ Don't waste it! Board game

Featuring key facts of how to avoid food waste, this game of chance can be played by two to six people. Students repeat key tips for food waste reduction along the way.



20 min

You will need:



- Printouts of the board game G 4 (one for every three or four students)
- Game pieces (alternatively: differently coloured chips or little stones, one per student)
- A die (one for every three or four students)



Rules:

The object of the game is to be the first player to reach the final square.

The person who has thrown away the smallest amount of food over the past two days starts. If you cannot determine who that was, the person who first throws a six starts.

To take your turn, roll the die and move your game piece forward the number of spaces you threw. The person to your left goes next (unless you threw a six, in which case you are allowed to take an extra turn.)

If you land on an action space, read the message out loud and move your game piece accordingly.



Instructions:

1. Split the students into groups of three or four.
2. Hand out the copies of the game.
3. Explain the rules.
4. Play!

FORWARD **BOARD GAME** **BACK**

START

+2 YOU BOUGHT A CROOKED CARROT

-3 YOU PUT TOO MUCH ON YOUR PLATE AND COULDN'T EAT IT ALL

+3 YOU COULDN'T FINISH YOUR PLATE BECAUSE YOU ASKED FOR MORE THAN YOU COULD EAT

+2 YOU TOOK RESTAURANT LEFTOVERS HOME IN A DOGGIE BAG

-2 YOU DIDN'T FINISH AN APPLE BECAUSE IT HAD GONE BROWN

+4 YOU PRACTICED TIFO: NEWEST FOOD TO THE BACK AND OLDEST TO THE FRONT

+3 YOU WENT SHOPPING WITH A SHOPPING LIST

+2 YOU MADE SURE YOUR FRIDGE IS SET AT BETWEEN 1 AND 5°C

-4 LEFTOVERS SPOILT BECAUSE YOU FORGOT TO PUT THEM IN THE FRIDGE

+2 YOU INVITED FRIENDS OVER TO COOK A MEAL WITH LEFTOVERS

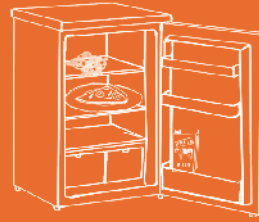
-5 YOU THREW AWAY LEFTOVERS INSTEAD OF PUTTING THEM IN THE FRIDGE

-2 YOU HAD TO THROW OUT SPOILT FOOD AT THE BACK OF YOUR FRIDGE

END

■ CORE LESSON 2: PROJECTS

BREAKFAST



■ Save food diary

The diary will help students keep track of their efforts of reducing food waste and introduce the topic to their families. They are encouraged to keep the diary for three days.



3 days



You will need:



- Printouts of the "Save food diary "(P1), one copy per student per day
- Red, yellow, and green sticky dots (about two per student)
- Letter to the parents (one per student – for an example, see page 96)
- Printouts of food savers awards (one per student – for an example, see pages 93 and 94)



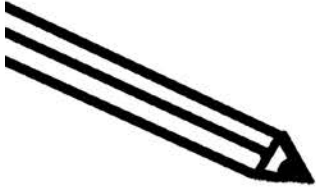
Instructions:

1. Sit down in a circle and ask children to evaluate their behaviour in turn: Do you think that you waste a lot of food? Why?
2. Ask each student to choose for themselves a sticky dot: green if they think they are wasting nothing or very little, yellow if they think they are wasting a moderate amount, and red if they think they waste a high amount.
3. Hand out copies of the Save food diary and ask students to put their sticky dot in the corner.
4. Explain how the diaries work: After each meal (not at the end of the day!), each student should fill out what and how much of it they threw away. At the end of the day, they should fill out any additional food they threw away during the day. Under column 1, students write down the amount of food that they ate for breakfast, lunch and dinner. For column 2, they record how much food was put in the refrigerator as left-overs for each meal. Similarly, for column 3, students record the amount of food that was thrown in the bin. Make sure to tell a parent/guardian what you are doing and ask for their help!
5. Hand out the letter to the parents and ask students to share it with their parents or guardians.
6. Each day, e.g. in morning circle, ask students how they fared with their diaries. After two days, discuss: Were they surprised by the amount of food they wasted? If so, do they think it is necessary to change the colour of their sticky dot?
7. After the three days of keeping the diary are up, discuss: What did you learn during this week? Did your habits change? (If so, ask students to choose a different sticky dot and put it over the old one.) Did your tracking affect the way your family dealt with food waste? Do you think you can keep reducing the amount of food you waste? What could help you to continue doing this?
8. Fill in and hand out a food waste award for each student.

SAVE FOOD DIARY

MY NAME:

DATE:



BREAKFAST

LUNCH

DINNER

SNACKS

■ Food savers token board

The token boards encourage students to practice food-waste reduction at home and in school and to spread the word about food waste over several weeks.

You will need:



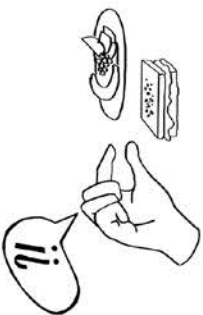
- Printouts of the token board P 2, "Food savers token board" (one copy per student)
- Printouts of Food saver medals (one set per student)
- Printouts of Food savers awards (one per student)
- Ribbon, string or wool
- Scissors and coloured pencils



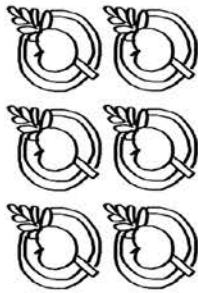

Instructions:

1. Hand out and introduce the token boards: students are allowed to colour in an apple for every time they asked for less on their plate (item 1), ate left-overs from an earlier meal (item 2), went shopping with a shopping list or reminded their parents to do so (item 3), re-organised their fridge or cupboard to bring the least recent food to the front or helped their parents to do so (item 4), used left-overs or food about to go bad for a different meal (e.g. as smoothies, jams, or stews; item 5), or told family members or friends about not wasting food. Five coloured-in apples will turn students into an Apprentice Food saver, ten into a Senior Food saver, fifteen into a Master Food saver, and twenty into a Genius Food saver.
2. Ask students to colour in their token boards, and either pin them up in the classroom or else ask them to keep them safely in one of their folders.
3. Over the course of the next few weeks, turn it into a practice (e.g. during morning circle) to ask students whether they have been active as Food savers either at home or at lunch time and, if they have, to colour in the appropriate apples. Hand out the different Food saver medals at the appropriate time.
4. At the end of the time you set for using the token board, discuss: What did students learn during that time? Did they change some of their habits? How did their families react? What could help them to continue reducing the amount of food they waste?
5. Fill in and hand out the food waste awards. You can also ask parents to monitor this activity at home.

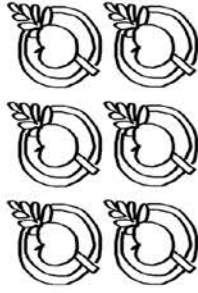
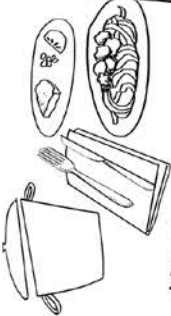
FOOD- SAVERS TOKEN BOARD



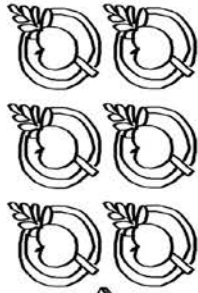
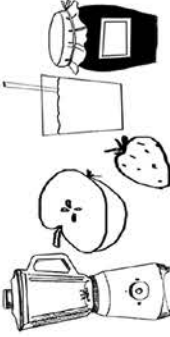
ASKED FOR LESS

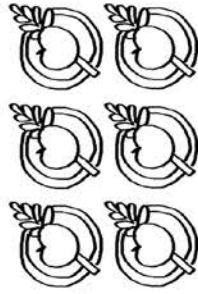

**RE-ORGANISED
OUR FRIDGE:
FIRST IN-
FIRST OUT!**

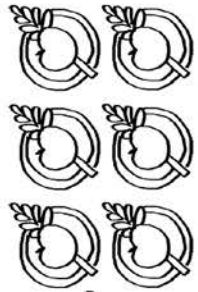
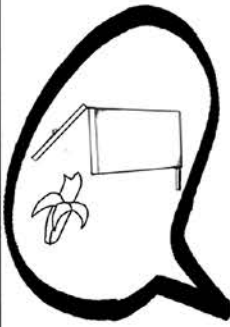
ATE LEFTOVERS

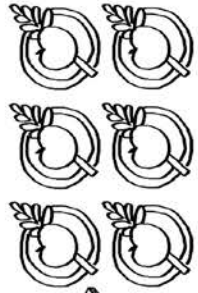
**USED LEFTOVERS FOR A DIFFERENT MEAL
E.G. AS SMOOTHIES OR JAMS**

**WENT SHOPPING
WITH A SHOPPING LIST**

**TOLD FRIENDS OR FAMILY MEMBERS ABOUT
AVOIDING FOOD WASTE**



AWARD

FOOD-SAVER

THIS FOOD SAVER CERTIFICATE
IS AWARDED TO:

FOR LEARNING AND PRACTISING HOW TO SAVE FOOD AND AVOID
FOOD WASTE.

DO GOOD - SAVE FOOD!



DATE

SIGNED



MEDALS



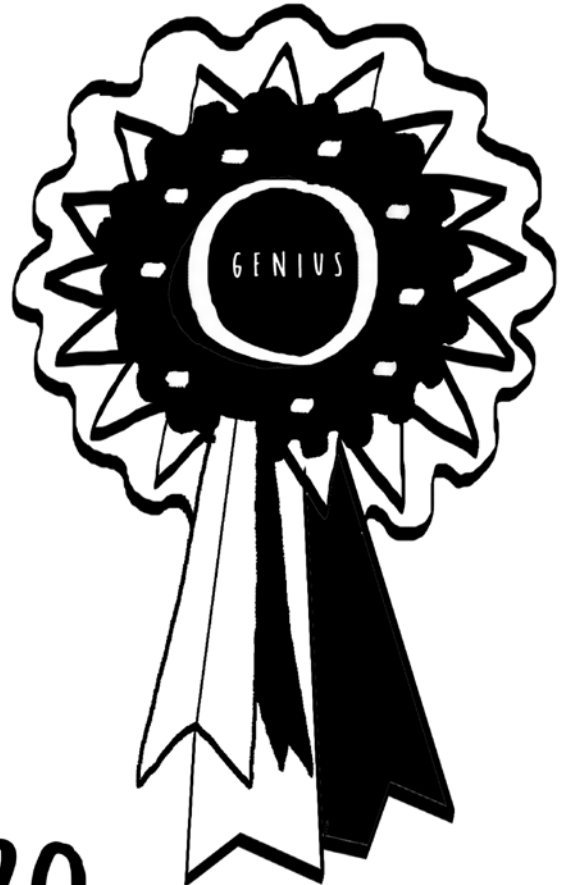
5 COLOURED APPLES



10 COLOURED APPLES



15 COLOURED APPLES



20 COLOURED APPLES

■ Spread the word!

Students are asked to design flyers with the key tips and take them home to share with family and friends.



90 min

You will need:



- (Coloured) paper
- (Coloured) pencils, water colours or crayons
- Scissors



Instructions:

1. Split students into groups of three or four and ask them to design flyers with the key tips for how to avoid food waste.
2. Set up a few presentation tables on which the students can place their flyers and ask them to walk around and examine their classmates' work.
3. If your school has a photocopier, make four copies per student to take home and give to their parents, other family members and friends. If you do not have access to a photocopier, ask students to do one to two copies by hand to take home. Please add at the end: Make sure that you discuss your work with the students' parents. Be prepared to describe these conversations to the class.

■ Letter to parents & informational flyer

Dear parents and guardians,

Your child may have already talked to you about a topic that our class/school will be involved in over the coming weeks: food waste.

Food loss and waste are a massive global problem: One-third of all the food produced in the world is either lost or wasted, which means that every year, a staggering 1.3 billion tonnes of perfectly good and edible food does not reach the end-consumer – 100 kg for each of us. Not only does this wastage create immense economic costs, both for ourselves as consumers and for the economy; food loss and waste also come at a high environmental and social price.

In class, your child will learn about the consequences of wasting food, and he or she will also learn about ways to avoid food waste. In order to avoid wasting food, we can:

- serve smaller portions;
- shop carefully;
- re-use left-overs; and
- store our food properly.

In the leaflet accompanying this letter, you will find some simple tips on how we can achieve these changes in the way we treat our food.

During the next few weeks, your child will be asked to consider how you can reduce food waste in your family and thus not only save money but also contribute to environmental conservation and protection and the fight against world hunger. Please join your child in his or her endeavours to reduce food waste at home and discuss and participate in the possibility of improving the way you handle food at home.

The efforts are based on a supplementary package of education materials, developed by educational expert from the United Nation's Food and Agriculture Organization (FAO). If you have any more questions or suggestions about this important topic and the way we approach it in class, please feel free to get in touch with me.

Hoping that you will join the students and me in our efforts to, as our slogan goes,
"DO GOOD: SAVE FOOD!"

Yours sincerely,



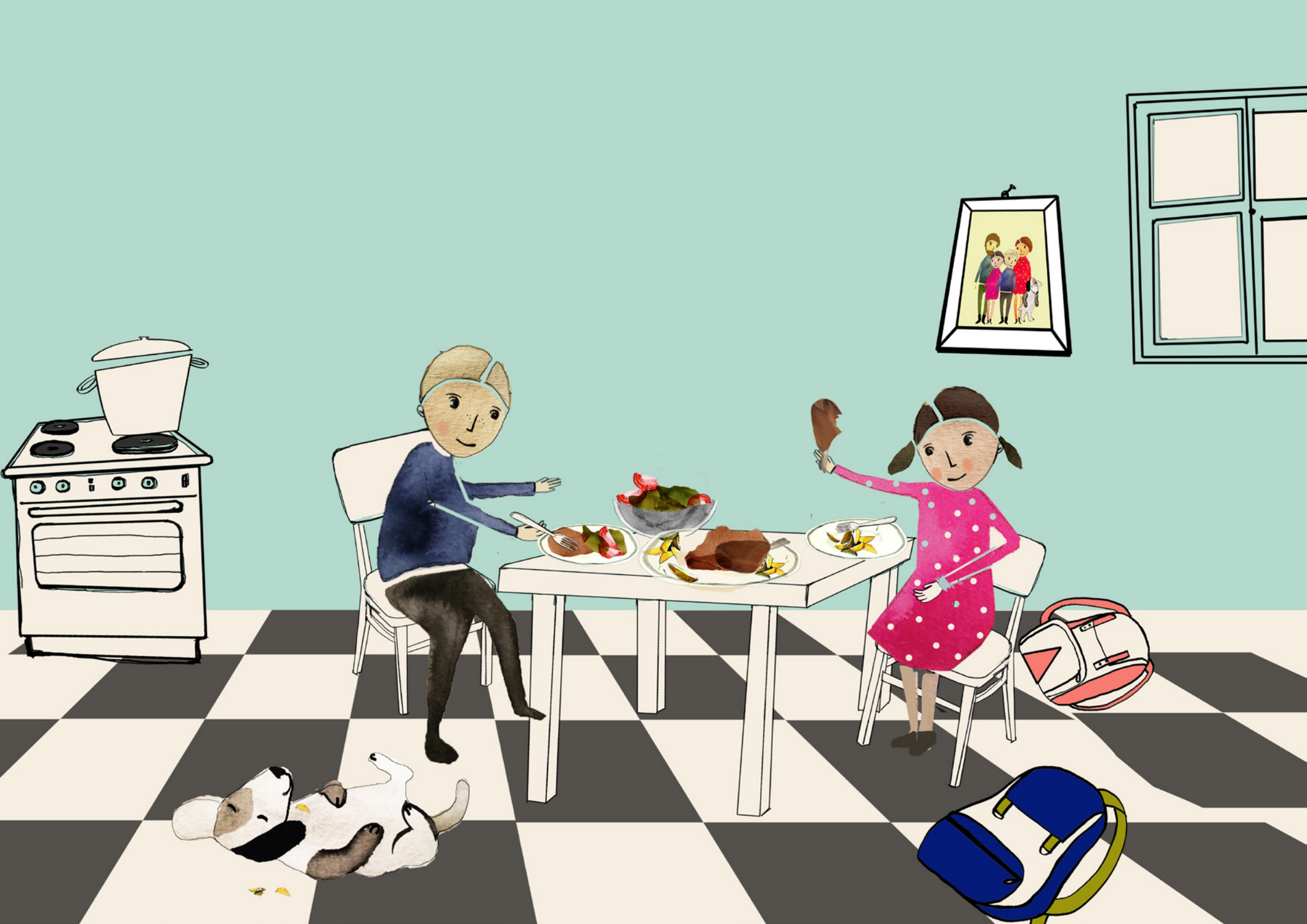
■ ANNEX 1

**PRESENTATION 1:
DO GOOD: SAVE FOOD!**

D O G O O D



S A V E F O O D !





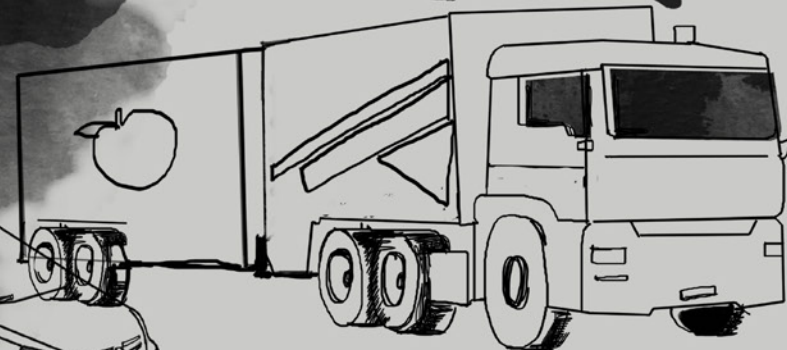
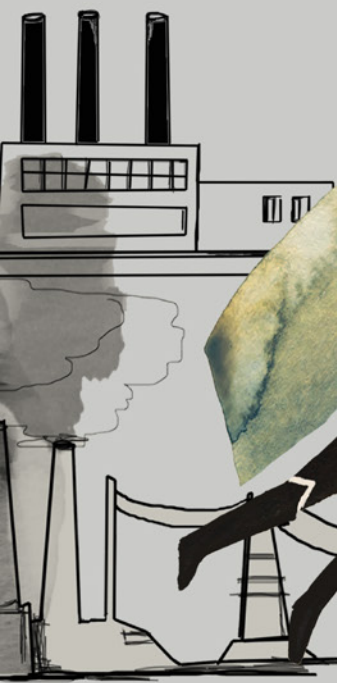


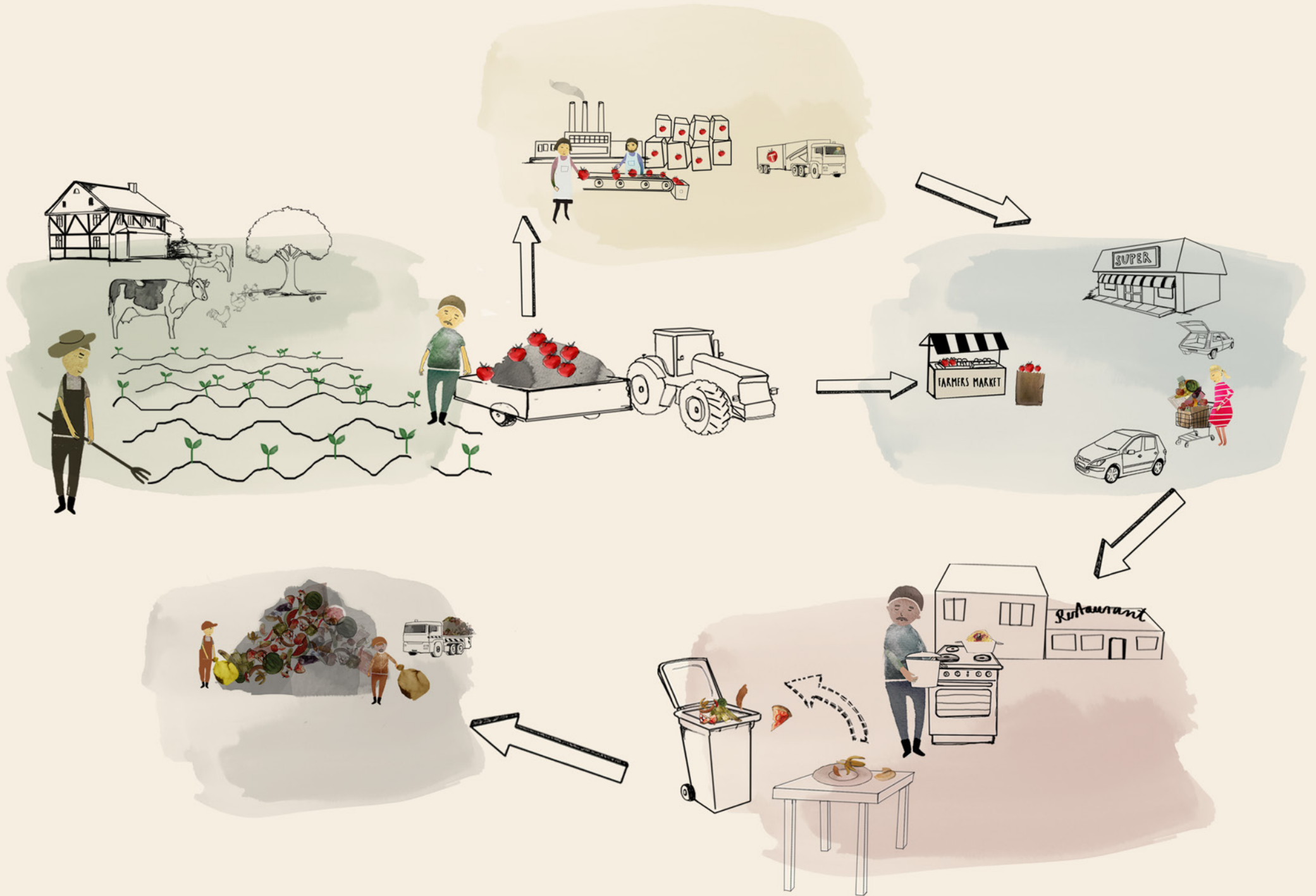
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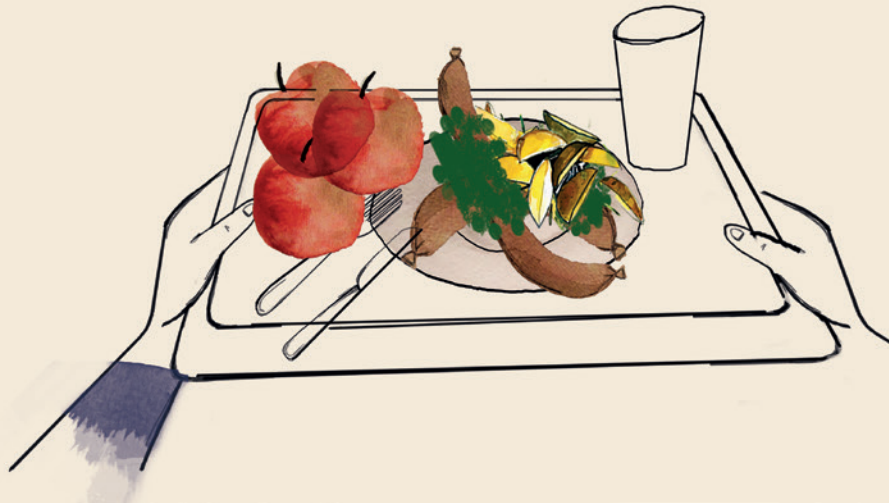












LESS











9 EASY TIPS

■ ANNEX 2

PRESENTATION 2: FEED YOURSELF, DON'T FEED THE BIN: NINE EASY TIPS TO REDUCE FOOD WASTE

FEED YOURSELF, DON'T FEED THE BIN :

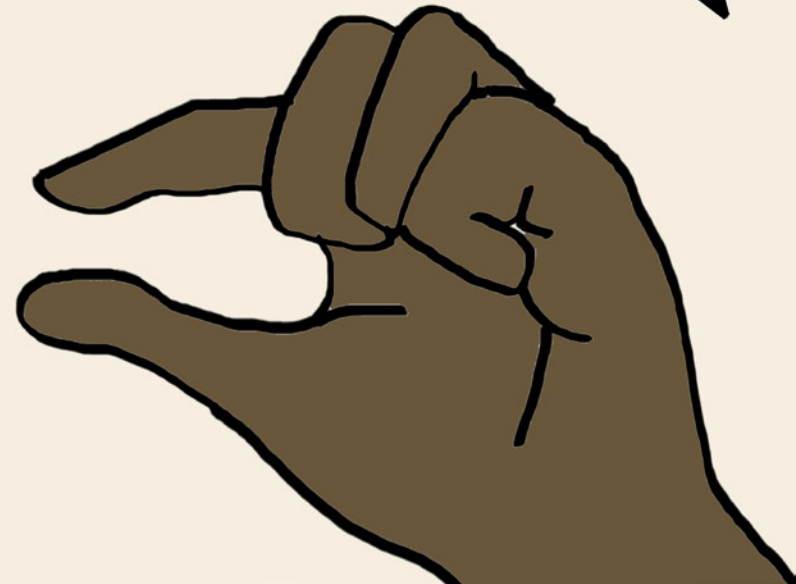


9 EASY TIPS

TO REDUCE FOOD WASTE

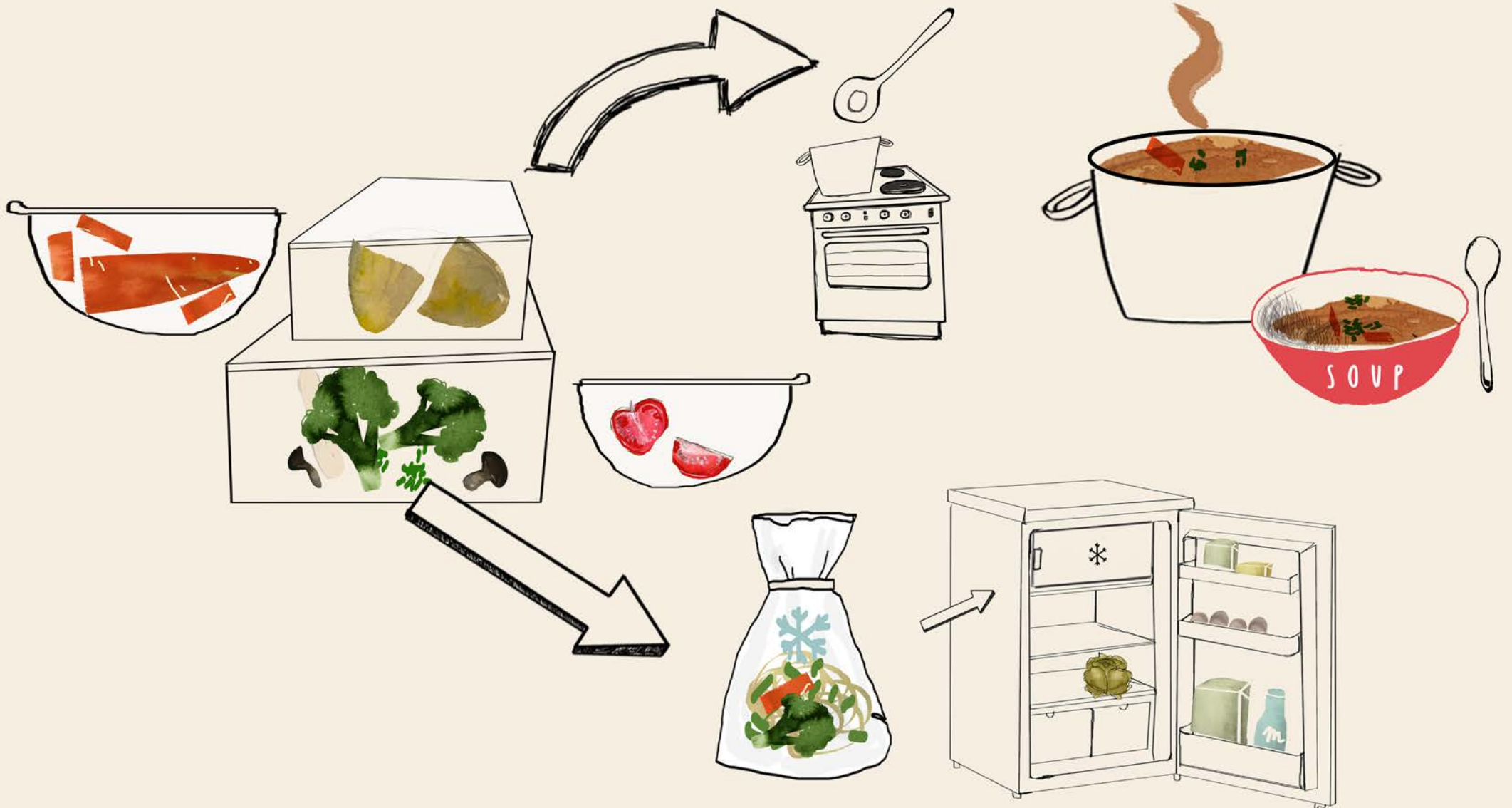
1 ASK FOR

SMALLER PORTIONS



2

LOVE YOUR LEFTOVERS



3 SHOP SMART



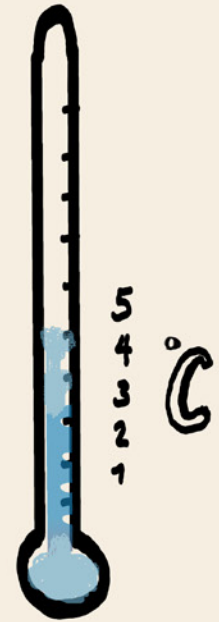
4

BUY "UGLY" FRUITS AND VEGETABLES



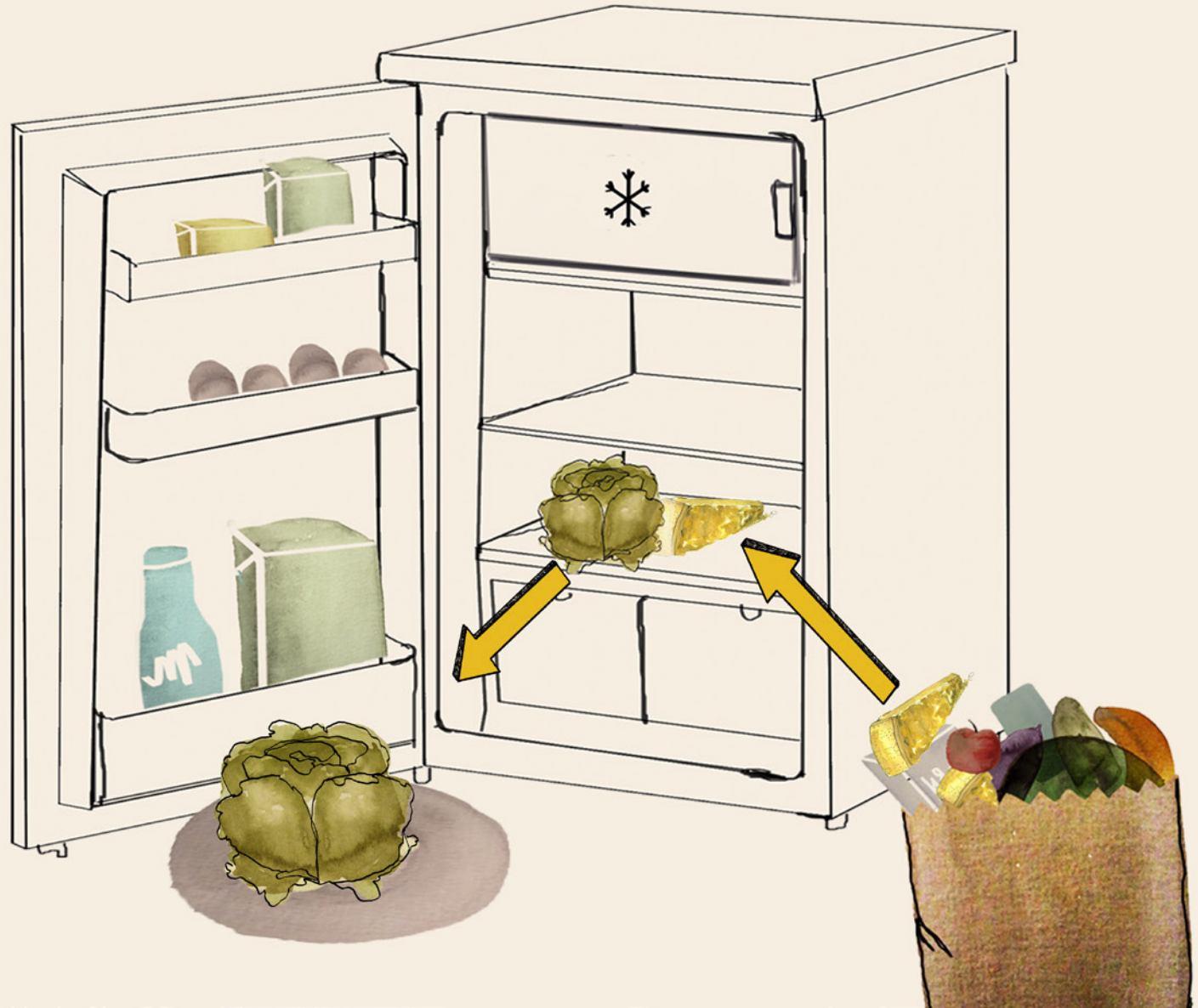
5

CHECK YOUR FRIDGE



6

FIFO: FIRST IN, FIRST OUT!



7 LEARN TO UNDERSTAND THE DATES ON YOUR FOOD



8

TURN IT INTO GARDEN FEED



9 SHARING IS CARING







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