Lennu the Flying Squirrel and the Great Mystery

Material for Lennu the Flying Squirrel environment clubs

Helsinki Metropolitan Area Reuse Centre Ltd
Lennu the Flying Squirrel and the Great Mystery
The Helsinki Metropolitan Area Reuse Centre Ltd. started its environment clubs in 2002 as part of the City of Helsinki Urban II project for small school children. The programme planned for the environment clubs was part of the Ekoarki Project during 2003-2005 in five parks and two schools in Eastern Helsinki. The Ekoarki is a project of the Reuse Centre and The Finnish Association of Environmental Education (Suomen Ympäristökasvatuksen Seura). More than a hundred children of the first two grades at school participated in the environment clubs during four years.

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Material for Lennu the flying Squirrel environment club
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and the Great Mystery

Material for Lennu the Flying Squirrel environment clubs

Pääkaupunkiseudun Kierrätyskeskus Oy-
Helsinki Metropolitan Area Reuse Centre Ltd
Foreword for instructors of the environment club

First meeting
Important mission
Theme: Landfill, waste, prevention of waste

Second meeting
The story of thousands of things
Theme: Useless things

Third meeting
Kosti peeks
Theme: Compost

Fourth meeting
Can you buy happiness?
Theme: Advertising

Fifth meeting
Marked tins
Theme: Duration of products and recycling

Sixth meeting
Rubbish party
Theme: Disposable or reuse?

Seventh meeting
Kaarlo’s durable picnic
Theme: Litterless picnic

Eighth meeting
Something new from the old
Theme: Creative reuse

Nineth meeting
Trip to a repair shop
Theme: Reparation and reuse

Tenth meeting
The society of the smart
Theme: Summary, delivery of club diplomas
Games for club meetings
Craft tips
Information on animals

Copying materials
Kaarlo’s letters
Kerttu’s letters
Answers for the bingo
Club diploma
The story of Lennu the Flying Squirrel

The activity of the environment club is based on a story with Lennu the Flying Squirrel as its main character. Lennu lives in the Old Primal Forest. The story is told by Kaarlo the Bear and it starts when Ville the Crow, who lives in the club members’ area, and Lennu find themselves in a strange situation. Between their areas, a landfill has grown that spreads unpleasant odours and keeps the two friends from seeing each other. This is where the club members can help – to help Lennu and Ville find ways to reduce the amount of waste that goes to the landfill.

Their goal is to make the landfill disappear. The story includes Kosti the Compost Worm who occupies himself in the worm compost and city fox Erkki Merkkinen who will help the two friends solve the problems of the waste mountain.

Theme: Moderate consumption

Lennu and Ville think in different ways of how important things are. Lennu lives in the forest and does not care much about things. He finds things fine as long as his nest hole is warm and he has food and company. Ville, on the other hand, has learned people’s habits and he has filled his home with things of all kinds. Collecting stuff has confused the crow, and Lennu cannot understand why he needs all those things. While the story advances, also Ville realizes the disadvantages that unnecessary consumption may have. Possessing does not make him any happier than other crows, either.

The club members talk about themes related to a durable way of life and moderate consumption. During ten meetings, they talk about necessary and unnecessary things as well as advertising and disposal. They will also discuss everyday consumption habits. The club aims at drawing a clear and wholesome picture about consumption, waste creation and its prevention: The production of even a small article, its use and disposal will wear away the natural resources of the globe and will stain our environment. However, people can diminish the amount of waste by their own choices and actions. The themes are discussed with stories and various active exercises and games. The enthusiasm of the children is encouraged to taking care of their own areas of living. However, there is a clear distinction to traditional nature clubs.

The activities and material of the environment club

The material of the environment club is directed towards school children in the 1st and 2nd classes. The package for instructors includes the club material as well as all the essential background information. Anyone interested in the subject can be an instructor and no previous knowledge of the subject is necessary. The whole package or parts of it can be applied to individual learning situations, in preschool education and in environmental education of older children.

The programme is designed for one meeting a week, during ten weeks. One meeting will last about 1.5 hours. The material includes a story read at each meeting plus exercises, tasks and games. Some of the meetings also include a field trip to the immediate surroundings. Each meeting can be planned according to any wishes and special characteristics of the target group. For this purpose, there are plenty of games and exercises collected in the material.

• It might be a good idea to make a soft toy presenting Lennu and if possible, all the other characters of the story.
• The children ought to have a notebook where they can collect the letters from Kaarlo.
• Kaarlo’s letters are read aloud at the beginning of each meeting.
• The participants might enjoy a sticker or club stamp they could receive each week and put on the story page of their note book.

We wish happy and rewarding meetings for all club members!

Helsinki 2.5.2006
Elena & Tiina
Important exercise

First meeting

**THEME:** Landfill, waste, prevention of waste

Introduction

The first letter from Kaarlo is in the club’s letter box. Kaarlo tells about Lennu the Flying Squirrel and Ville the Crow and about their annoying problem: There is now a landfill between their living areas. The first task is to make a poster with outlines of the following places:
- Lennu’s home in the Old Primeval Forest,
- Ville’s nest tree near the club

The children collect items that have been thrown away and build a landfill to the poster. The poster is used at the following meetings as well. Items are removed from the poster according to the theme of each meeting (repairable, borrowable, needless).

The goal is to solve an important situation with Lennu: The landfill has to disappear by choices that diminish the amount of waste. At the first meeting, the children should think about the landfill issue. Kaarlo tells them about the landfill and asks questions – how it is and why it is there. Ville and Lennu help them to get to know the importance of different things.

They will think a little about how the purchase of things is related to the landfill issue. The material of the first meeting includes general information about landfills and problems related to them. In another text, ways to diminish the amount of waste are described. There is also a description of the increasing greenhouse effect and the climate change that it involves.
Landfills and their many problems

In the year 2000, there were 300 landfills in Finland. By 2005, only 50–80 existed. The laws are getting stricter about waste, and large units are used which aim at minimizing the emissions to the environment. An effort is made also to diminish the amount of waste and to increase the use of waste for some utility purposes.

Small and badly attended landfills are no longer common, but landfills still cause problems. They cover large areas and nobody wants to live close to them. However, landfills are needed where the waste is and transport should not be unreasonably expensive.

The biggest landfill in Finland is the Ämmässuo waste treatment centre in Espoo, which is medium-sized compared to European centres. Its area is 74 hectares and with its 70 hectares of extension area its size equals to 300 football fields. In order to save space, the waste is crushed and compressed with a waste crusher. Compressing means that the waste mass does not have oxygen. Organic waste decomposes slowly in anaerobic circumstances. At old landfills, even old fruits have been found that have remained unchanged for years.

As a result of putrefaction, waste gases are formed in the waste piles. More than half of these gases is methane (CH4) which is a very strong greenhouse gas. Methane warms the atmosphere about 25 times stronger than carbon monoxide (CO2). In Finland, landfills produce about 45 % of all human methane emission. The putrefaction of organic waste also creates odours. Careful planning and good attention may ease the problems of landfills, but what is even more important is avoiding waste and directing existing waste into utility purposes.
Why should we prevent waste?

The amount of waste gets bigger and bigger. Unless we do something about it community waste will grow by 43 \% per year from 1995 to 2020 (OECD estimate). Safe treatment of waste will create considerable costs. Transport and treatment of waste add to traffic emissions among others. The greatest problem, however, is the waste of natural resources which causes abundance of waste. More than 90 \% of the natural resources that people use turn to waste already in production. We use and transfer so much material that some organisms are already dying out. According to the UN, as many as 25 \% of mammals are threatened by extinction.

We draw resources from the nature and process them into consumer goods – unfortunately more and more short-lived. We live in a disposal culture: we throw away enormous amounts of things and buy new ones to replace them, and we ought to make a noticeable decrease in consumption and recycle materials. The cost of material welfare is the contamination of the environment. Abundant energy consumption accelerates the climate warmth. The use of recurrent resources and the preparation of nature have reduced the biological multiplicity. We change the environment with pollutant emissions and at the same time, we make the waste piles even bigger.

European waste politics and Finnish law on waste (1994) aim at sensible use of natural resources and prevention of ill-effects of waste. According to regulations, we are primarily under an obligation to avoid waste and secondarily to make use of waste whenever possible.

The simplest way of reducing the amount of waste and any environmental load is to reduce consumption. If there is no waste, there are no emissions, nor energy demand caused by its production, consumption or maintenance. Waste can be avoided by:

- taking things to second hand markets and by buying them second hand
- reusing packages
- returning return bottles
- repairing things and thus extending their lives
- using services like libraries and common laundries instead of buying new products.

Primary use of waste means recycling the product’s materials (recycling raw material, compost). The second alternative is using the energy of the product (burning the waste). Landfills are the last alternative.

Greenhouse effect and global warming

Some of the gases of the atmosphere work like the glass of a greenhouse: they pass the sunlight but keep some of the warmth from returning to space. This is how the greenhouse effect keeps our planet favourable for living: without it the average temperature would be -18°C, which is 33°C lower than it is now.

The problem is the enormous amount of these gases that we produce that strengthen the natural greenhouse effect. What follows is climate change. The most remarkable gases produced by people are carbon monoxide (CO2), methane (CH4) and dinitric oxide (N2O). The most significant source of emission is the use of organic fuels, i.e. coal, oil and natural gas in energy production and traffic. Greenhouse gases are also created in forest fires, industrial processes, landfills and agriculture.
Human activities have increased the amount of carbon monoxide by a third compared to pre-industrial times, and methane contents have more than doubled. The content of carbon monoxide is higher than it has been probably for 20 million years. The average temperature of the globe has risen by 0.6°C since the 1850’s. According to the United States Meteorological Institute, September 2005 was the hottest September ever reported. The closer we get to modern times, the more people have influenced the climate change.

It has been estimated that climate change will

• raise the sea level and thus drown island states and low coastal areas
• decrease natural polymorphism
• weaken crops in many areas
• increase or strengthen ultimate weather phenomena such as floods, droughts and whirlwinds
• extend the prevalence of tropical disease, such as malaria.

In international politics, climate change has caused action since the 1980’s. According to the United Nations Framework Convention on Climate Change in Rio de Janeiro, 1992, industrialized countries agreed on freezing their carbon monoxide emissions to the 1990 level by the year 2000. The Kyoto Protocol is the first binding treaty concerning climate. In 1997, industrialized countries engaged in decreasing emissions by approximately 5% by the years 2008-2012. Almost all countries in the world have signed the contract – over 170 countries, including all industrialized countries with the exception of the United States and Australia. However, this treaty is not enough to stop the growth of the emissions, but the goals have to be tightened in future meetings.

Source: www.ilmasto.org
Welcome to Lennu the Flying Squirrel’s environment club!

Welcome to Lennu the Flying Squirrel’s environment club!

My name is Kaarlo the Bear. I will be guiding you on your journey to the world of Lennu and his friends. I have lived all my life in a forest far away from your homes. I know that you live close to my friends Kosti, Ville and Erkki. But Lennu the Flying Squirrel lives in the Old Primeval Forest and I don’t know his address exactly. I’m sure you have met some of my friends – or at least seen a glimpse of them. While you listen to the story, think about times and places where you might have seen Lennu, Ville, Erkki, or even me, Kaarlo the Bear.

Play time

Swamp gym

Before the story, you should make your eyes, ears, hands and feet supple. Let’s try Kaarlo’s swamp gym! It is most important that your feet, hands, ears and especially your noses are warm. So, let’s move!

- Touch your feet with your hands 1...2...3...4.
- Touch your hands with your feet 1...2...3...4.
- Touch your ears with your hands 1...2...3...4.
- And now touch your feet and hands and your friend’s ears with your nose 1..2...3...4.

Story

Ville the Crow and Lennu the Flying Squirrel

Now I would like to tell you about my friends. Far, but not too far away from here there is an old, tall pine tree. On top of it there is a nest that is almost impossible to see from the ground. You can only see it if you fly above the tree. In the nest lives Ville the Crow. Nobody knows where Ville comes from, but we do know that Ville is part of this area just like you and your friends. Ville likes it here, his own nest and he thinks this is the best place to live!

- How do you feel about your area?
- What’s nice there?
- And what is unpleasant for you there?

Ville likes all kinds of things. He likes everything shiny and brilliant. All day long he collects new, fancy things and eats of course. He
knows that it’s trendy to get new things. However, Ville cannot buy things from the shops, being a crow. Since it is very difficult for crows to push the trolley at the market, Ville is happy enough to collect things that people throw away.

Ville has a friend, Lennu the Flying Squirrel who lives in the Old Primeval Forest outside this area. Lennu never flies like Ville, but he can glide from tree to tree. He’s using his broad tail and the skin fold between his paws. Lennu is very gentle and amiable by nature.

A strange mountain

Ville has been observing Lennu’s home forest many evenings. Now he can’t see the forest. There is a huge mountain! It seems to be growing all the time. He sees cars driving towards the mountain: trucks and lorries full of garbage. There’s a strange odour coming from the mountain.

- What can that smelly mountain be that gets bigger and bigger?

Lennu also thinks that the mountain stinks and looks ugly. There used to be woods where the mountain is and in the woods Lennu used to fly quickly to his friend Ville. Now there are no trees, just a pile of garbage and rubbish. The mountain is so big that it covers the whole view. Lennu can’t see Ville’s nest, nor the sunrise that he so much enjoys. It’s unfortunate and very sad.

It’s tough, too, because when there is no sunrise, you can’t see the sundial, either. One morning Lennu was late from flying school and he was very annoyed. Another day he was late from tree class and that is most important of all classes.

Does the mountain keep growing?

Now more trees are cut and the pile grows. Soon it will probably reach Lennu’s nest tree! He’s worried. Therefore he decided to follow the trucks and that’s why he’s here now. Ville promised to help his friend. He suggested that Lennu might ask you club members to join them. Lennu has promised to come to your meetings every week. I, Kaarlo, think that the strange mountain is a landfill. Lennu’s issue is an important one, because nobody wants to live next to a pile of garbage! I want to help solve the waste problem, too. We bears have difficulty solving great problems by ourselves, though. Why don’t you help us find out why this mountain keeps growing and how we can help Lennu save his tree – before it’s too late! I’m sure your instructor knows what to do about the landfill. So, listen carefully. For next week, I will write to you more about Ville’s strange hobby. You will see that he’s no ordinary crow.

I hope you have a letter box at the club for important letters!

Did you know this?

- A Finn uses paper over 210 kilos per year.
- An average German uses 190 kilos, an Estonian about 50 kilos, and an Indian only four kilos.
- If everyone used as much paper as Finns do, the production of paper would be four times as great as it is now. All the forests in the world would not be enough.
Exercises

Main task

1 Poster

- Make a poster of the living area of Lennu and Ville and put it on the wall.
- Make Lennu’s home forest to the left side, either by drawing or cutting pictures from papers. Make Ville’s home to the right side which is your area as well.
- Between these two areas, make a landfill. Add pictures of things that have been thrown away.
- At the landfill, there are all kinds of things: bio waste, broken things, cardboard boxes, clothes, glass jars and newspapers.
- You can also place the animal characters in the picture: Ville, Lennu and Kaarlo and Kosti the Compost Worm and city fox Erkki Merkkinen who will all join us later.
- At the following meetings, you will remove things that are this week’s theme.

2 Television news

Since this issue is important, it should be told on TV.

- Make a television out of an old cardboard box. (Instructions on page 29)
- Make plans in small groups about the news on the growing garbage mountain and Lennu’s nest tree.
- Read the news to other club members.
- You can also read the news at the school’s spring or Christmas party or at parents’ evening.
- You can also plan the news for the radio. If you choose this, it is important that the audience keeps their eyes closed.

3 Lennu-bingo

In the bingo, we repeat things that Kaarlo has told us in his stories. This can be used for any other issues as well.

- The children need a piece of paper, or they can use their note books.
- Draw a chart of 4x4.
- Mark the numbers from 1 to 16 and make sure each square has a number. The numbers should not come in order from the smallest to the biggest. It is good to start with 1 and go in numerical order but at random until all squares are filled.
- After this the club members are given an answer sheet (individual or together with a pair) where all the answers to the questions are.
- The answers should be read through to make sure even those who cannot read will not find themselves in trouble.
- Each question has an answer on the paper and the number of the correct answer is ticked on the bingo paper. The answer sheet can be copied from the note book.

Then let’s play bingo!

- The instructor makes the first question from the list and asks for the correct number.
- The game does not continue until everyone has ticked their number.
- The one who is the first to get a row either horizontal or upright shouts: BINGO!
- It is often worthwhile to finish the game and make all the questions. This way all players will get bingo.
The club’s letter to Kaarlo

The club members tell things about themselves and the instructor writes them down, or each member can write his or her own letter.

Kaarlo’s request

Read to the club

At the end of this meeting, I hope that you will tell me something about yourselves. It will be nice to know who I’m dealing with! I would very much like to know what you like. I like honey in the summer and sleeping in the winter! I’d also like to know how you are. Mail your letters and the bear post will deliver them. Remember to write my name: Kaarlo the Bear!

Bingo questions

1. What animal is Lennu?
2. What is Lennu’s club’s name?
3. Where does Ville live?
4. What is Lennu’s home forest called?
5. What is Kaarlo’s last name?
6. What has appeared between Lennu and Ville’s homes?
7. What does Lennu think about the landfill?
8. Ville can fly, but what skill does Lennu have?
9. What is Ville’s hobby?
10. What do the club members need to solve together with Lennu and Ville?

Answers

1. Lennu the Flying Squirrel’s environment club.
2. He can glide.
3. The problem of the strange mountain, i.e. the landfill.
4. He thinks it’s annoying.
5. A flying squirrel.
6. Bear.
7. The Old Primeval Forest.
8. Near the club.
10. Collecting things.

Name bingo

- Everyone makes a chart on a paper with as many squares as there are members in the club.
- Then you collect everyone’s autograph, each to its own square.
- When you write a name, say it aloud at the time.
- When everyone has a full chart, the bingo can start.
- The instructor reads names and you tick the name in your chart.
- The first one who has a full row is the winner.

Note that you should have at least 9 players in order to have a chart of 3x3 boxes. If there are not enough children, you can use Lennu, Ville and Kaarlo, too.

Your own animal name

- You make up an animal name, one that begins with the same letter as your name (Sanna the Squirrel, Maija the Mole).
- It’s a good idea to use an animal that you can find in your country.
- Form a circle and introduce yourself going to the centre when it’s your turn. Tell your name and make a sound or movement that is linked to the animal name.
- After the introduction, the others repeat this.
- Carry on like this until all names have been introduced.
- To refresh your memory, you can repeat this once more without introductions.
Lennu the Flying Squirrel gets to know you

I version
This game requires good memory and concentration.

• Everyone is sitting in a circle and the instructor begins: “Lennu the Flying Squirrel goes out to solve the great mystery and takes with him (your name).”
• The next person continues: “Lennu the Flying Squirrel goes out to solve the great mystery and takes with him (previous name, your name).”
• Carry on like this. The list of names grows with each player.

II version
The game can be made more difficult by giving each player an animal name that begins with their name’s first letter, like Sanna the Squirrel. This game can be combined with game 2 (Your animal name)

Guess whose voice!

• Form a circle.
• One volunteer goes in the middle and his/her eyes are tied.
• The circle goes round and round until the one in the middle says “Stop!”
• The one in the middle points at someone in the circle and says “Make the voice of Kaarlo Bear!” (or tractor, bird, etc...)
• The one from the circle says: “Murr!”
• The one in the middle is trying to guess who it is.
• If he/she is wrong, the game continues
• If he/she is right, the one who answered goes in the middle.
The second week we get to know Lennu and Ville better. Lennu has noticed that Ville is “stuff puffy”. Some people have same symptoms. Some of the things that we want are not at all necessary. This week our theme is unnecessary things and moderate consumption. We all use natural resources and build landfills. Our personal choices could change the way things are. Are all things necessary after all? And how do we take care of things that wear down the natural resources of our globe by their manufacturing and transport?

Let’s explore the world of things. Recognizing unnecessary and important things is not at all difficult. Often it is enough to look into our rooms or school bags. We all have things we could give away. Life without unnecessary things does not mean giving up. Or would we be any less happy if there was no egg boiler? Lennu thinks that Ville wouldn’t be unhappy without his steamer, either. Together with Lennu we will think about things we really need.

- The club collects unnecessary things that the members have, and there will be a voting of the useless things in every home.
- We’ll make up a story about what would happen if Rubbish-Rane decided to quit his job.
- We’ll remove the unnecessary things from the landfill on our poster.

The background material includes the texts Growth or moderation? and Unnecessary consumption. Different ways of avoiding waste is found in the Tips for avoiding waste.

Did you know this?

- The first plastic bags were taken into use in the United States in 1957 to pack bread, sandwiches, fruits and vegetables. In 2002 4000-5000 billion (4 000 000 000 000) plastic bags were manufactured from big refuse sacks to thin vegetable bags.

Growth or moderation?

Why should economy grow? Why should even growth grow? Not many of us understand that. What was wrong in the years 1995 or 1975 when consumption was much smaller than now? It is not easy to say whether life was happier or unhappier then. Those who understand and love life will know that it’s not even relevant. People just lived their lives just as we do now. It would not be the end of the world if we now went back to 1975.

Households use their extra money on a second car, a third television, tabloids and this and that. In any case they always spend the money. All of it. It is not possible to calculate how much better life is with a third TV. It shows in the gross national product, though – as considerable growth. We are dealing with a western culture and the relationships between values and instruments. Are another 2,5 per cent the meaning of life?

From Hannu Raittila’s: “Tyytykö tyytyväinen”. Helsingin Sanomat 9.4.2003

Economic growth is expected to increase welfare. Gross national product, the indicator of economic activity, only measures partially or not at all natural services that are the base for all other services. Many factors that pollute or dry off natural capital, add to the gross national product.

Other indicators of welfare have been suggested. One of them is the Index of Sustainable Economic Welfare (ISEW). It includes public health care, car accidents, contamination of air and water, costs of noise problems and non-renewable natural resources. According to this indicator, the welfare in Great Britain has decreased since the early 1980’s, although the gross national product has grown.¹ A reason for why economic growth has not made rich countries significantly happier lies in the consumption habits and choices. We spend too much time and money on consumer goods whose advantages will eventually wear out. This is short term happiness. We are in a vicious circle: because we get used to everything new very quickly and we expect more from the future, we have to consume even more than before and goods of better quality to stay satisfied.

The reason why money does not bring happiness is based on false expectations. Comparison of financial and non-financial consumer goods is twisted. Instead of spending more time with family and friends, and spending the increased income on health care, we buy more things that quickly lose their advantages.²

Unnecessary consumption

Products that we do not need have been rewarded with the title “Dispensable of the year” since 2000. Winners include such items as leaf blower, nappy concealer, giveaways of hamburger meals and drinkable yoghurt.

Suomen Luonto magazine has chosen imported bottled water as the year’s dispensable in 2002. Bottled water has been used in other European countries and in the United States for years. In Finland, it is a new phenomenon. One of the comments compared the import of water to taking sand to Sahara.

Candidates for dispensable of the years 2003 and 2004

Giveaways of hamburger meals
Drinkable yoghurt in plastic bottles
Egg breaker
Disposable grill
Disposable cleaning cloth
Dog’s perfume bottle
Pop corn machine
Canned eggs
Radio on toilet paper holder
Couch shaker
Artificial bath whisk
Lollipop roller
Individually packed slice of cheese
Individually packed toilet paper

Tips for avoiding waste

It doesn’t have to be something great that you do to make the rubbish bag smaller. Everyone can change their habits to save nature by producing less waste. Just leave out unnecessary things.

Thanks for nothing!

- Only buy what you need. Unnecessary things wear down nature’s resources in vain.
- By putting a sign on your door or mail box that says you don’t want commercial mail you diminish the amount of paper waste considerably.
- You can get rid of junk mail addressed to you almost completely by filling in a card of “Suomen Suoramarkkinointiliitto” at a post office.
- If you watch less commercials, you’ll want less things.

Avoiding hazardous waste

- Using a micro fibre cleaning cloth you get rid of dirt without detergents. Your hands will stay soft as well.
- Products containing hazardous waste can often be substituted by less toxic or non-toxic ones. For example, toxic cleaning chemicals can be replaced by soapy liquids or vinegar.
- Unnecessary batteries can be avoided by using mechanical products or by rechargeable batteries.

You don’t need to own everything

- It makes more sense to borrow or rent things that you don’t use often than buying them. It is a good idea to buy products for common use for example between neighbours. The common use makes the use more efficient and prevents waste and wasteful spending of natural resources.
- If you don’t have enough dishes for a party, there are alternatives for disposable ones. They can be rented even for a large number of people. Dishes are more festive and more comfortable to use.
- Magazines can be subscribed together with someone if you only read them once anyway, or give them to someone after you’ve read them.

Sources:
Hello, children, 
greetings from the blueberry forest!

I am writing to you here in the brushwood since I have a couple of important things to tell you about Ville the Crow and his stuff puffiness. Ville is Lennu’s friend and he has many odd thoughts. He likes to get new fancy things. Ville finds it cool to have things that are at least a little more new and trendy than other crows have. Ville wants to be the emperor of the pile of stuff. However, he does not always like the things he sees in his nest, so he has to cover them with new stuff. He has not come up with other solutions.

- Why does Ville want new things all the time?
- Why do people want new things all the time?

Ville is annoyed by the fact that the more things he has in his nest, the less friends he can have over. His friends are already a bit fed up with Ville presenting his new things. They don’t understand what a crow needs a steamer or razor for. Ville has no time to play because he busies himself with the stuff.

Lennu doesn’t care about things so much. He finds it important to have his own nest that is warm and has enough room for visitors. Lennu doesn’t think he would be any happier had he the finest lash curler or egg slicer! He’d rather use his time gliding than collecting things. Gliding is nice and it does not require equipment, not a thing.

- Lennu needs warmth in his nest. What else do you think he needs?
- What do people need in their homes?
- What can you do without things that is nice?

Lennu thinks things are boring and needless and they only make noise and rubbish. “There’s no harm in things, either” says Ville. Lennu disagrees. Lennu thinks Ville has far too many things and therefore he’s stuff puffy. It can be recognized when a person spends all day collecting new stuff.

Lennu wonders where everything ends up. He hopes there is no stuff puffiness in the landfill. He thinks it should be avoided and instead of buying you could play fly and seek or magpie tag!

- What is the most important thing that you have?
- And what is the least important thing that you have?
- Where do things go that we throw away?
- What causes might unnecessary things have?

Lennu thinks that stuff puffiness should be repelled as soon as the first symptoms turn up. He has written down the symptoms so you can start acting at once if you notice any of them in any of your friends.
Symptoms of stuff puffiness
• Collecting things constantly
• Idealizing shopping
• Staring at commercials
• Forgetting to save
• Dreaming of new things

Treatment of stuff puffiness.
• There are many ways of treating stuff puffiness. First you should find out if the person can be inspired to an activity that doesn’t require stuff.
• Stuff puffiness treats itself when the person realizes that he/she doesn’t need new stuff and that having too many things can also be negative.
• You might invite the patient for a visit and give him/her cake or some other delicacy that you have made.
• You may tell the person that the manufacturing and transport of the things has worn down the world’s natural resources.

In my next letter I will tell you about someone small who lives close to your homes and who might be an answer to the landfill problem!

* Read the following text to the children only if they wrote to Kaarlo the previous week.

By the way, thanks for your letters! I always read them in the evenings and I keep them in a safe place in a hole in my tree.
Exercises

Main task

1  Poster
Think about the things in the landfill of your poster.

- Which has been the most important for its owner?
- Which has been the least important?
- Which one of the things would you like to have? Why?
- What might not have been bought had the owner thought about these questions: What will bring me joy for a long time? How much does the manufacturing, transport and throwing away of the things wear down and change the globe?

Remove one or more unnecessary things from the landfill.

2  Dispensables in every home
- Make a list of unnecessary things at home or in your own room.
- Vote for the most unnecessary one.
- You can also use the dispensable list for the vote (Page 18).
- Each voter has three votes.

3  A story of Rubbish Rane
Rubbish Rane is a careful and cheerful driver of the garbage truck. Let’s make up a story together:

- What will happen if Rane decides to give up his job?
- You can tell a story of the whole area or the life of one family after Rane’s decision.
- You can also make a comic strip.
- Each child or the whole group can draw a picture of the events.

4  Exercise for home: Unnecessary things at home
“I cannot come to your homes but I’d like to hear something about your home nests!”

- Next time, bring an unnecessary or necessary thing from your home. Your instructor can tell me of all the things that you have brought.
- Make an exhibition of the unnecessary or necessary things at the club, at school, library or anywhere you think is suitable.

The instructor can also bring things to start conversation.
1. Ville’s stuff puffiness

- Equipment: As many different things as there are players in the teams.
- Form two teams.
- The teams go in two rows facing each other. The rows should be about ten meters from each other.
- Each player gets a number and in the other team, there is someone with the same number.
- Place an item between the teams that describes one of Ville’s unnecessary things.
- The instructor says a number and those two players who have that number rush to the item.
- The one who takes the item to the team’s nest or who touches the player with the item gets a point.
- When all the items are in the nests, the game is over.
- The winner is the team that has more points.

2. What does Ville not need at home?

Think about unnecessary things that begin with the same letter.

- The players say in their turn something that begins with the letter you’ve chosen: Ville doesn’t need ...
- Anyone who fails to think of a thing has to leave the game.
- You can also go in alphabetical order and see the winner of each letter.
Introduction

Kaarlo introduces a new friend: Kosti the Compost Worm. Kosti lives with his friends in a compost. He likes worm gym and he makes old leftovers into nutritious soil. This week we’ll learn how Kosti helps Lennu and Ville in solving the landfill issue.

The journey of food to our plates is presented on page 19 and you can read it to the children. The main task this time is to make a worm compost together. After this week’s meeting, we will check the compost every week. We’ll test the decomposition and we can observe the biological dissociation of different things whenever the temperature is not too cold.

This week, we might think about where food comes from. A good exercise is exercise 4 The breakfast’s way to our plate.

We have gathered material on food and compost and the first text is about sensible portions of food. The background material includes basic information about compost and its advantages. Compost is good text is about bio waste problems in the landfill. There is also information about worm compost.

Material

Only take on your plate what you can eat

When I filled 7, I had a new exciting life ahead of me. I was to start elementary school in the neighbour village, Lyöttilä. My teacher was Sylvi Teräväinen who was very strict. We believed her when she said she had eyes also at the back of her head, under the grey hair. So when she wrote on the board, she would see us. We ate school lunch in our class room. Everyone picked up a plate in front of the class in their turn. The teacher gave us the food and we had to eat everything and the plates had to be emptied. If you didn’t like something you could say “only little, please” and you got a bit less. I had learned to eat everything at home. I had five siblings and my father’s salary could just cover what we needed. Food was simple but nutritious. It was good, too, when you were hungry. We played outdoors a lot, so we often were hungry.

At school, I saw some foods I had not seen before. Many of us didn’t like black pudding and it was called shoe soles. But I liked it when I put lots of lingonberry jam on it. There was only one dish that I could not stand. Summer soup. Pieces of cauliflower, carrots and green beans floated in hot milk. I always got sick when I saw my bowl and I thought I
would throw up if I had to eat any of it. There was a way to avoid eating the soup. If I took lots of bread and ate very slowly, the whole lunch was over before I had finished and the teacher went out. Anyone who had not finished was allowed to stay in the classroom and eat. I would take my bowl to the kitchen and the cook threw it away. She was kind and she understood that I could not eat it. I was ashamed that I had to throw food away. I had learned at home not to waste food.

When I moved in with my husband, a new adventure began. My husband was an enthusiastic cook and he was creative and designed new dishes. He didn’t get the spices right every time, and the taste was sometimes a little strange, but everything was edible. Today our everyday food is better than the fine food at fancy restaurants. We eat kidneys, tongue, pike, flounder, Jerusalem artichoke, parsnip, lentillas, beans, tofu, polenta, wine leaf rolls, and you name it. Our son has learned to eat everything. He can help himself to food and he always empties his plate. Summer soup has not been served in years.


Did you know this?

- There are about a million people living in the Helsinki metropolitan area, and each one of them produces 300 kilos of household waste per year. A third of this is bio waste. Composting decreases the amount of waste taken to landfills considerably and makes their growth and demand for new space slower.

- The growing waste mountains don’t look nice, but more importantly, they are a threat for the environment. For example, decomposition of bio waste without oxygen produces methane which warms the climate.

- People normally take food for granted, and they do not think how it got on their plates. Behind each dish there is, however, a long production chain which has worn down nature in many ways. Therefore also diminishing bio waste is essential in waste prevention. You shouldn’t take more food on your plate than you can eat.
Berättelsen

Food’s journey to our plates

This can be read aloud at the club.

Jussi the Farmer works hard on his farm. He grows crops which will be used for making bread and other kinds of food. Kaarla sometimes goes to eat before harvest. Before Jussi can do the harvesting, he prepares and fertilizes the soil and treats the growing plants with pesticides. He needs a tractor for all this, and the tractor needs fuel. Jussi buys the fuel, the fertilizers and the pesticides at the shop. Fuel is imported as well as are part of the pesticides. Fertilizers and pesticides are manufactured in factories. The production of fertilizers is particularly energy consuming. The production and transport of pesticides require carefulness, because they are very dangerous.

Jussi’s neighbour Veikko is an organic farmer. It means that he doesn’t use pesticides, nor does he buy fertilizers at the shop. He gets nutrition to the land from composted manure of his cattle. Organic farming is less consuming of natural resources, but it means working harder.

When Jussi and Veikko have done their work, dried crops are transported to be used. Various factories make many products of it which are then transported to shops. Eventually, the food, like porridge, ends up on Kerttu’s plate.

• What if Kerttu throws some of it away?

Then she doesn’t waste just the food but all the effort that has been made to get it:

• fuel for the tractor and of all transport
• fertilizers used in the growing
• pesticides
• the work of Jussi and everyone else in transport, processing and in the shops.
• the energy used in the drying of the crops, in the factory and in the shop, and at home when preparing the food.

That’s why you shouldn’t buy or put on your plate more food than you can eat. Kosti the Compost Worm will take care of skins and peels of fruits and vegetables and other parts that people cannot eat.

Founding a worm compostor

(Earth)worm compostors can be placed indoors, but they are more a curiosity than an effective processors of bio waste. Dung worms thrive in room temperature. They are most efficient in a temperature between 20 and 25 degrees. Under 5 and over 30 degrees they die. Earth worms don’t like light and their home can be in the dark, like in a cupboard. You can make a worm compostor in a wooden box, candy box or old fish tank. First create an atmosphere suitable for earth worms.

• Place to the bottom of the compostor a layer of damp chopped egg boxes or straw, wood chip, turf, or slightly decomposed leaves.
• You can add some sand or clay, because they further the worms’ digestion.
• Use the same mixture to cover the waste.
• Press some of the mixture in your fist – if you get out a drop or two, it is suitably damp.
• The worm compost needs water normally about once a week, depending of the size and shape of the box. The worms breath through their skin, so the soil has to be damp. Only damp skin lets the oxygen through.
• The worms are placed into a new home with food. If there are not many worms, give them only a little food at a time. Feed them once a week.
• It might be a good idea to cover the box with paper, cardboard, plywood or plastic. The “roof” keeps the moist from evaporating.
• It will be easier for the worms to get oxygen if you make little holes to the roof, or leave open spaces on the sides.
Why compost?

• Composting is nature’s way of getting rid of the dead material and returning its nutrients back to plants. Rotting organisms – bacteria, funguses, ray fungus and invertebrates – need oxygen when they decompose organic material into carbon monoxide (CO2), water and nutritious humus. In oxygen free circumstances (such as tight waste piles in landfills) material rots, which produces smelly sulphuric gases and methane (CH4).

• In compost, people help the decomposing organisms by making the circumstances as good as possible for their function. The compostor is a container where decomposition is intensified by collecting the waste into a pile.

• Together with waste prevention, composting is one of the most significant ecological actions. There is a lot of organic waste and they add to the problems of landfills. By composting we can diminish the environmental inconveniences of the landfills. Composts make nutritious soil for flowers in the garden and in the pots indoors. It is also sensible from an economical point of view.

• Composts can in some cases diminish the costs of waste transport – especially when bio waste is not part of waste transport and has been sent to the landfill. Composting makes the expensive waste amounts smaller, and the dustbins can be emptied more seldom.

• This is sensible also from the whole society’s point of view. It follows the principles of waste laws and diminishes the society’s costs – both environmental and economic. Composting plays a major role in decreasing Finland’s greenhouse gases, since it is an efficient and relatively economical way to avoid methane emissions.

How do you take care of worms?

Worms can use almost any organic waste: skins and peels of fruits and vegetables, leftovers and wet kitchen paper. Meat, fish and dairy products are not that good for them – they shouldn’t be put in the compostor. It’s good to chop the waste to make it decompose quicker. Worms can only eat soft food. For this reason, cooked potato peels disappear from the compost quicker than raw ones, which the worms will leave to soften. Cover the waste with a mixture or bury them in the soil. The mixture puts the compostor’s circumstances into balance and makes its structure better as well as gives air and prevents unpleasant odours and flies. The mixture also balances the worms’ diet.

Feed the worms about once a week. Don’t give too much food at once, because it may rot and begin to smell. Worms eat approximately their own weight every day and they reproduce quickly. When the circumstances are right, their number can double in a couple of months. There are not many earthworms in Finnish forest land, and it will be easiest to get them from another worm compost.

For further information
Environmental guidance of the Helsinki Metropolitan Area Reuse Centre Ltd.
www.kierratyskeskus.fi/neuvonta
tel. (09) 310 88717.

Literature
- Näm tunkielerot touhulemaan, matokomposti sisätiloihin.
The Helsinki Metropolitan Area Reuse Centre Ltd., 2005.
Hello, children!

Greetings from the woods! This time we leave Ville to treat his stuff puffiness and we’ll explore the backyard of an old house. The house is close to Ville’s nest tree. You know, next to the old pine. There is a nice box in the yard of the old house. It is full of half-chewed food and soil! Every day, one of the people of the house brings in a bucket more bad food, leftovers and vegetable peels to the compost. After the box was built, the garbage man hasn’t come nearly as often as he used to.

I think small miracles are happening in the box all the time, something that we cannot see. Once I saw something peculiar: the people took black soil out of the box! I thought then that it must be a magic box. I’m glad I’m not in the box. It the box turns food into soil, what would it turn a bear into – a poodle??

- Do you know what that box is at the back of the garden?

Kosti the Compost Worm moved into the box a little while ago. Kosti is a good friend of Lennu’s, a bit quiet and unassuming. Kosti doesn’t look quite like Kaapo the Earthworm but he is every bit as wriggly. His new home is not a post box, but a comPOST box. You don’t have cards and letters in it, but substance. In this box, leftovers from food turn into soil. And soil grows new food for you and me! Again, the leftovers will hopefully end up as food for Kosti and his friends.

Compost is for worms a good place to live; there’s food and warmth. Kosti likes his new home very much. His main duty is to make soil of the leftovers. Kosti and his friends like to use teabags, for example. Worms do not have teatimes and drink tea from mugs, but they eat the teabags as they are. They probably think it’s a waste of water and time to drink from a mug.

Kosti is so bright that he doesn’t need a lamp in his home! Lennu asked me to tell you another funny thing: Kosti and his friends do not have teeth like we do. That is why they wait until the food is soft enough.

When he isn’t eating or making soil, Kosti does exercises too, and his worm gym is fun for all the worms in the compost – why don’t you try it too!

There are other inhabitants in the compost apart from Kosti and his lot. Also a huge family of micro-organisms lives there. That’s a
family where everyone has several hundreds, if not thousands of cousins. You can only imagine how much food they need for a dinner party.

• What does Kosti not want in the compost?
• What happens to leftovers in the compost?

Kosti works very hard to keep the landfill from growing so fast. Kosti is with us in saving Lennu’s home tree. A world without soil is an impossible one: all flowerless and treeless. Kosti would like to remind you that wasting things is always useless and dull. Putting good food in the compost is waste. Kosti prefers vegetable peels to people’s food. “It’s yours”, he says. All food is prepared of some person’s and some worm’s region’s yields and such gifts should not be wasted.

• What would happen if there was no soil or no plants in the world?

Have you heard of a laughing machine? I wonder if Kosti would like one? I will tell you about it next time.
Main task

1. **Poster**

Is there anything at the club’s landfill that you could give to Kosti and his friends to eat? If there is, remove it from the landfill!

2. **Building a worm compost**

Kosti has a lot of relatives who still don’t have a home. Can you build a worm compost to the club for homeless worms? It doesn’t have to be big because a few earth worms can fit in a small container. And during your next meetings you can observe the worms.

- Give the compost some water whenever it seems too dry.
- Remember to give food to the worms.

3. **Decompost test**

Kosti’s relatives and other small creepy-crawlies work in the ground, too. They turn everything into soil that has once been alive. Make a test of what they like:

- Take two cheesecloth bags and put garbage in both of them.
- Fill one bag with decomposting garbage which means organic waste such as leftovers from food and soft paper.
- Fill the other bag with garbage that does not decompose, like plastic or metal.
- It might be a good idea to tie the bags with colourful thread because it will be easier for you to find them later.
- Bury the bags under ground, in the compost or any other place where Kosti and his relatives might live.
- Mark the places where you put the bags.

- Dig up the bags after a few weeks or months and you will see what sort of food Kosti and his friends have enjoyed and what they haven’t.

4. **The breakfast’s journey onto your plate**

If you’re hungry, like Kaarlo almost always is, why not think for a moment about where the food comes from. Kaarlo’s food comes mainly from packages of jam and honey that Aunt Kerttu sends. But where does your food come from?

- At first, think about all the different kinds of food you eat at breakfast, for example.
- Find out where the food comes from. Corn flakes, for example, are corn, but does corn grow in Finland? And where does milk and juice come from?
- Also think about why you shouldn’t leave food on your plates.

5. **Kosti’s soil to useful purposes**

Kosti has sent a bagful of soil to the club, which he and his friends have made. It’s yours! Plant a flower or some herbs.

- Use old milk or yoghurt cartons to plant a sun flower.
- You can choose any other plant you like, according to the season: rye-grass, flowers or wheat.

Further information:
Educational material of Finfood:
http://www.finfood.fi/opetus.
**Games**

1. **The quickest compost worm**
   - Make two or more groups and form queues at the starting line.
   - The first one in the queue will put his or her hands on the ground, and the others will grasp the angles of the person in front of them. Each player will walk on all fours and they form a compost worm.
   - The leader gives a sign and the worms go as quickly as possible to the finish line, about 20-30 metres away without loosing their touch.
   - A worm that splits will be out of the game.
   - The first worm to come to the finish line is the winner.

   - Other players go to the lines.
   - Kosti says: “Who’s afraid of the compost worm?” The players say: “Not me!” and try and run to the other line without Kosti catching them.
   - When Kosti catches someone, that player will stay in the middle with him trying to catch the others.

2. **Compost worm gym**
   - The players form a long queue and grasp each other from the waist.
   - The first ones are the worm’s head, and the last ones are the tail.
   - The head will try and catch the tail and the tail runs away.
   - If you break the worm, stop for a moment, and the person who let go goes to the tail.
   - The game is over when the head catches the tail.

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   - The first ones are the worm’s head, and the last ones are the tail.
   - The head will try and catch the tail and the tail runs away.
   - If you break the worm, stop for a moment, and the person who let go goes to the tail.
   - The game is over when the head catches the tail.

3. **Who’s afraid of the compost worm?**

   **I version**
   - Draw two lines on the ground about 50 metres from each other.
   - Kosti the Compost Worm goes in the middle.

   **II version**
   Those who have been caught, will stay where they are and they can only reach their hands to catch the others.

4. **Come to the compost**
   - Make two lines about 15 metres away from each other.
   - One of the players will be Kosti.
   - Kosti will stay behind one line and the rest of the players will go behind the other.
   - Kosti shouts: “Come to the compost!” The other players ask: “But how?”
   - Kosti thinks of a leftover and shouts for example “Banana skins!” or “Mouldy bread!” or “Wet napkins!”
   - The players move in a way that Kosti has decided.
   - In the end, Kosti can choose the one that he thinks was the best. This player will be new Kosti and the game continues like this.
**Introduction**

The fourth meeting will concentrate on advertising and its ways of influencing the customer. Lennu will gradually find out that advertising is needed in order to get people to buy new things. He does not understand why it should be like this. Advertising might be an explanation for Ville’s stuff puffiness. Kaarlo’s Aunt Kerttu is needed for help.

This week we shall look at the world of advertising. We’ll try and learn to make a difference between advertising and other kinds of communication. We will also think about how advertising is related to consuming, useless things and waste.

When you use humour when talking about advertising, your attitudes about things might change: necessary becomes unnecessary.

The background material includes two texts: Why advertise? and Young people and consumer education. These texts will introduce some basic things about advertising and consumer education.

Further information:

**Material**

I do understand the importance of fashion. Without fashion, consumers would have to find their clothes in their more than full wardrobes, not in the shops. A clever consumer may find fashionable clothes in his or her own closet. An advertisement of Vateva once said that "a brave man can wear trousers that are too short". I’m sure I still have my confirmation suit somewhere.

Fashion is useful also in the sense that second hand shops are full of perfectly good and almost fashionable clothes. I have decided to wear last year’s fashion for another couple of years. I believe in the return of grey in about five years’ time - my ulster will be fashionable again.

Taken from Pauli Välimäki’s text Epämuodikas juttu", 2001. www.paulivalimaki.net.

**Did you know this?**

There’s more to advertisements than the things we buy, namely the waste issue:

- In the newspaper Helsingin Sanomat in 1994, 28 million kilos of paper was used on advertising.
- About 400 million direct mail advertisements are sent to Finnish households every year, and we can only guess how much paper is used on them.
Why are advertisements made?

Advertising is part of marketing communication which aims at increasing sale. It aims at selling, either now or later. People are persuaded to buy. Advertisers want to sell products and they want to try and make people buy even if they don’t need them.

People around the world receive hundreds, if not thousands of advertisements daily. It has been estimated that the number is as high as 5000. A huge amount of advertisements come to us through

- newspapers
- local tabloids
- magazines
- television
- radio
- movies
- street campaigns
- advertisement boards
- the internet.

Advertising aims at informing the customers of their products and their qualities as well as influencing people’s attitudes, values and behaviour in order to create a positive image in the minds of the consumers.

The process of influence of advertising has been evaluated using the AIDA-model (Attention, Interest, Desire, Action). According to this model, advertising must

- attract attention
- attract the consumer’s interest
- make the consumer want the product and
- make the consumer buy the product.

Young people and consumer education

One of the goals of consumer education is to make children and youngsters recognize the purposes of advertising and to be able to analyze and critically observe advertising images and other commercial messages.

- What is advertising, what information, news, entertainment?

Marketing methods develop, and messages get mixed; advertising becomes more and more difficult to recognize.

Children and youngsters spend a considerable portion of the households’ funds. Therefore a lot of advertising of products and services is directed to them. They are induced by positive images about the company and its products. Our adult consuming habits may have been formed already as children or adolescents: children may have created images of experiments which make it difficult if not impossible to change their attitudes afterwards. A product may symbolize success, status, love and happiness. Also magazines, television and music create ideas of goals of human life. The trademarks that Finnish children know best are Nike, Adidas, NHL, Donald Duck, Harry Potter, Pippi Longstocking, Play Station, Game Boy, Coca-Cola, Fanta and McDonalds.

Source
Electronic educational material of Consumer Agency.

Source
Jani Kaaro & Mirja Noland (eds.): Ekokatalogi 2000, Gummerus Oy, Jyväskylä
Hello, you very special children of the Lennu Club!

It is me, Kaarlo the Bear. I have begun to wonder where Ville’s stuff puffiness comes from. Everything comes from somewhere, and it is not necessarily the pond near my home. Lennu has some ideas of where the stuff puffiness might come from. He has noticed that all over the city there are huge pictures of different things. Lennu knows that watching these pictures makes Ville want the things in the picture.

• What are the pictures that Ville has seen?
• Are there similar pictures elsewhere; have you seen them?

Lennu has a hint that these pictures are advertisements. Those pictures always have something what everybody ought to have. “I wonder if all that is necessary”, says Lennu. It’s rather difficult to know from all these things what you really need. Luckily, flying squirrels do know what they need. All Lennu really hopes for is a good windy weather for gliding, and a secret place for goodies. You never see those in advertisements. You should, because they are really needed! Lennu feels that all those things said to be necessary will be taken to the landfill mountain. Perhaps they are necessary to make that mountain bigger and bigger! There wouldn’t be so much waste if people didn’t buy new stuff and throw the old stuff away. Lennu had heard that when in the city, Ville can see thousands of advertisements every day. “There’s something wrong here”, Lennu thinks. Why doesn’t anyone else wonder about the multitude of those things?

• What would happen if everyone bought everything that is advertised?

Lennu had heard that one day, Ville had ordered a laughing machine advertised in the crows’ Caw Catalogue. Ville tried to make the machine work, but it seemed to be out of order. There was no laughter, and Ville almost cried when he received the invoice for the machine. Its price was hundreds of crow crowns. Ville decided to return the apparatus and invite his friend for a visit. They spent the night laughing at the useless thing. “So it did make us laugh after all”, said Ville.

• Is there anything in your club’s landfill that you’ve seen advertisements of?
• Can you think of things that you can have fun with without making litter?
Ville’s stuff puffiness has gotten so bad that I recommend we ask Aunt Kerttu for help. She always knows what to do. Last time she said I should sleep more because I was so tired. You wouldn’t believe what a good advice that was! Kerttu has learned a thing or two in her life; she probably knows about stuff puffiness, too. I don’t want to write to her myself, because she’s always asking me if I have eaten enough blueberries. That’s why I’m asking you children to write the main things. I have started the letter. And remember to mail the letter soon.

Kom nu bara ihåg att posta brevet snabbt. This is her address:

*Kerttu the Bear
Stock Street 2
Paw Hill*

Before I go, I’d like to know if you have seen anything remarkable lately? Next time, I will write to you about cans and the remarkable Mr. Merkkinen.

**Did you know this?**

- Consuming produces waste. All the natural resources that we use end up as waste eventually. The more we use the natural resources, the more environmental problems are caused by their use, such as waste and emissions.
- According to the waste law, prevention of waste is the primary goal of waste politics. Only after that comes reuse and recycling, which are often more familiar to consumers.
Hello Kaarlo’s ___________________________ aunt Kerttu!
We are ___________________________ from the Lennu club. We need your help, because we heard that you are very ___________________________. Kaarlo has a friend, Ville, who has ___________________________ stuff puffiness. Ville keeps buying ___________________________ things and collects ___________________________ stuff. Even Ville’s feathers have become quite ___________________________, and his nest looks like ___________________________. Have you got any ___________________________ advice for stuff puffiness? We would be very grateful and ___________________________

Best regards.

Hello___________________________
Main task

Poster

Remove a few things that you have seen in advertisements. Are these things necessary, or could they be replaced by others, more practical ones?

What is an advertisement?

Let’s find advertisements and announcements in papers and any other possible material. Let’s think together how an advertisement and an announcement are different from each other.

- At first, try and find announcements and advertisements that are clearly different from each other. Group them under “advertisements” and “announcements”.
- Find characteristics and effects from the advertisements.

When you talk about advertisements you might think of the following questions:

- What is it about an advertisement that immediately tells you what the product is that is advertised?
- Which one do you think is the best advertisement and why?
- Who is the advertisement directed at?
- Which products are necessary and which are not?
- Does Lennu or Ville need the product advertised? Do you? Who does absolutely need this product? Does anyone?

The advertisement of the laughing machine

- Think of a product that doesn’t exist yet (such as a laughing machine or friend-robot.)
- Would it be possible to make such a product?
- How would you advertise it?

If there is enough time, you can make the product using recycled material. Make an advertisement for your product. If you like, you can take the adds to school or library or hang them on the walls at your club.

Your own TV-commercial

Make a hole on one side of a box, the size of the TV-screen.

- You can paint the box, and you can add different buttons from waste material.
- The box has to be big enough for the presenter to sit to present the commercials. (Alternative: you can place a smaller box on a stool, when the presenter can sit behind it on the floor and lean to the stool.)
- You can start rehearsing the presentation by telling the others what you’ve got in your pencil case. Then you can present products you have cut of the paper. This will be a lot of fun if you advertise something totally useless.
Games

1. **Guess which advertisement!**
   - The instructor will cut off the texts of the advertisement in advance.
   - The children will try and guess without the text, what is being advertised and who is the add directed to.
   - Do some of the advertisements work without the text? What thoughts do they arise in you then?

2. **Slogans**
   Read some sentences from the advertisements or descriptions of a product. Each group or individual can guess which product it might be.
   - Find slogans in newspapers or magazines.
   - Choose a product that seems unnecessary and make a good, selling slogan for it.

   You may find good examples of products for this exercise in the of dispensable of the year-list, which Suomen Luonto-magazine publishes every year (on page 18).

3. **Advertising mime**
   - The children choose in pairs a commercial that they know and they play it to the others as mime.
   - The instructor can write down on paper commercials that everyone knows and the children will play them either individually or in pairs.
   - If this is too difficult, you can tell the group that the product belongs to (like food, toys, etc.)
   - You can also hum the signature tune of the commercial to make it easier to recognize.

   Last, talk about the necessity, durability and recyclability of the product. If it does not meet the durability criterion, think of a new product to replace it.
Fifth meeting

THEME: The life span of products and recycling

Introduction

On our fifth meeting, we shall meet Erkki Merkkinen. He is wise and he also follows people’s activities. Erkki has noticed that people in his area carry various things to the containers. With the help of the children, Erkki will find out what these contains really are. With the sorting game, we want to teach about sorting of garbage and to make you think about how to reduce the amount of waste. The children will sort litter and think about alternatives that produce less garbage and observe the effect of sorting the garbage on the amount of waste at the landfills.

In the map exercise, you can do the sorting in a more concrete way: take the sorted litter to the containers. You can also draw a cartoon of the life span of a product, like paper.

The background material includes two texts about the life span of a product: The life span of products and

The unbearable burden of litter, which is about the life span of a lid of a sour whole milk can. There is additional information about the sorting of three different materials.

The sorting game 1 includes more exact information about sorting instructions.

Material

The life span of products and recycling

- The life span of a product means all the phases that the product goes through.
- Life span analysis means the environmental impacts that the product’s life span has.

The idea of life span analysis was developed in the 1960’s caused by the need of energy and raw material saving. In the 1970’s, the environmental effects were added. It is important to estimate the environmental impact, because then it is possible to recognize the phases that most seriously damage nature. This is also how we can improve the situation. From the 1990’s, life span thinking has paid more attention to diminishing the amount of waste and to the quality of waste.

The phases of the life span of a product are:
- taking raw materials from the nature
- preparation or processing
- further processing
- distribution and transport
- use and maintenance
- reuse and recycling, and
- waste management.

Each phase of the product’s life span creates different environmental strain, such as
- energy consumption
- transport
- emissions to the ground, water, and air
- noise problems.
Different products cause different kinds of strain to the environment. For example, the greatest environmental strain in the production of paper is caused in the preparation, whereas detergents don’t cause much strain until they are used. There are no completely pro-environmental products; some just cause less strain than others.

Source

The unbearable burden of litter!

- Let’s examine the life of a sour whole milk can and its life span. Where and how does its life begin, and where does it end up?

The sour whole milk can is made of plastic whose raw material is crude oil. Getting oil from the ground is not simple, but requires an awful lot of arrangements. In the sea, there has to be an oil rig for drilling of oil. Making one requires natural resources, such as metals, which also need to be processed after quarrying. From the oil rig, the oil is transported to an oil refinery where raw material for plastic is made. The raw material for plastic is then transported to a factory that makes packages, where the can is finished.

Processing and transport between different phases requires energy and causes emissions.

Preparation of all the machines and equipment used in the processing has worn down natural resources, particularly various ores.

The cans are taken to the dairy where sour whole milk is made. They add lids, made either of plastic or aluminium.

Finally, the cans filled with sour whole milk are transported to a central storehouse and only after that to the markets. Before the consumer can enjoy the sour whole milk, an awful lot of natural resources have been used, only for the production of the can.

The last phase is when after eating the sour whole milk, the can becomes waste. There are so many disposable packages that it’s difficult to reuse them all. Industry doesn’t have resources for recycling plastic. A plastic can will end up in a landfill unless it is burned. Something has to be done earlier, in the early phases of the life span. We could swap the sour whole milk for yoghurt which can be bought in big cartons. These cartons can be recycled for raw material of new cartons. This is a good alternative, but is it enough? Even carton cannot be recycled forever. Its transport also wears down natural resources. The most effective ways of saving natural resources is thinking of ways to prevent waste. So do we have to give up sour whole milk altogether? In fact, there is a way to prevent waste and still enjoy sour whole milk, but creativity is needed.

It’s fun to make viili!

- Buy a can of viili (a kind of soured milk).
- Boil a litre of milk and let it cool.
- Mix the milk with the viili you bought and let it stay in a warm place overnight.
- Put it somewhere cold for a while and when it’s nice and cool, enjoy.
- Save a little bit for the next time you want to make viili.

This way you can save both natural resources and money. You can try making your own yoghurt as well.

Source

Reuse or recycling?

Reuse and recycling are two different things, although they often get mixed.

- Reuse means using the product again for
The journey of a viili or yoghurt can.
its original purpose (like return bottles), or making new uses for it (like using a jam jar as a pen holder).

- Recycling means using the waste material as raw material (like glass, metal, or paper etc.).

Reducing waste and reuse is better than recycling, because recycling also wears down and strains the environment. Normally, the environmental effects of recycling are smaller than the use and processing of a new raw material. If and when waste is produced, which cannot be used again, recycling is the best alternative and it does make sense.

New life for paper

The use of recycled paper saves wood as raw material and energy. It also diminishes the amount of waste taken to landfills. Without paper recycling, wood would be used very quickly and landfills would be full.

Different recycled papers are used for different purposes, such as soft paper, newspaper paper, and carton. Almost half of the raw materials of paper and carton in the world is recycled paper. The better the quality of the recycled paper, the better mass and final products it will make. When papers are well sorted in the beginning, we save time and money in the later processing phases.

Glass can last forever

The most important raw materials of glass are sand, soda and lime. This means that also the preparation of glass wears down natural resources.

When you recycle glass, you don’t save just natural resources, but energy, too: glass that has melted once will melt easier than raw material. Its melting point is lower and thus it needs less energy and creates less smoke gases which are bad for the environment. More and more recycled glass is used for packages, and that’s why we need less imported soda. The glass of packages is recycled into glass wool. Like paper, the less uncleanliness it contains, the easier and cheaper it is to clean.

Metal’s possibilities

All the waste metal that has ended up as raw material diminishes the need to quarry malm. Recycled metal diminishes energy consumption and other strain for the environment. For example, recycling of aluminium saves energy by 91 %, and recycling steel by 75 % compared to pure raw material.

Some of the recycled metal ends up in export, and some will stay in Finland. For example, the steel of an old kettle can be used in the production of a fork. About 50 % of steel cutlery contains recycled steel.

Did you know this?

- Konsumtion ger upphov till avfall. Alla de naturresurser som vi tar i bruk kommer förr eller senare att bli till avfall. Ju mer naturresurser vi använder, desto större miljöproblem uppkommer det genom den här användningen bland annat som avfall och olika utsläpp.
- Enligt vår avfallslag är avfallspolicyens främsta mål att förhindra uppkomsten av onödigt avfall. Först därefter betonar man återvinning och övrig nyttoanvändning av avfallet. De flesta människor känner dock bättre till nyttoanvändningen än hur man kan förhindra uppkomsten av avfall.
Hello, children at the Lennu Club!

I’m writing to you next to my home spruce. Lennu has given me regards from near your homes. Lennu likes to look at you doing things at the club. Lennu thinks the landfill problem can be solved. I heard that also Erkki Merkikinen has wondered the growing, smelly mountain. Erkki is a fox with a thick tail, who lives in the park close to Ville. It’s more difficult to see Erkki than it is Ville. Erkki is not cunning, but he is wise. He knows all kinds of important and wonderful things, like that autumn comes after summer and that rowanberries are sour.

Erkki has a thick tail, and also a lot of thoughts. He is very curious and quite remarkable like his whole family. Erkki spends a lot of time getting to know the lives of other animals in his area. Next to his home nest, there is a place where people bring all kinds of stuff. There are lots of containers. People come and carry milk and juice cartons, cereal boxes, glass jars and newspapers – and they leave with nothing. At times, there are trucks that take all the stuff from the big containers. Erkki has been observing this traffic since Christmas. Although Erkki knows that everything people throw away makes the waste mountain bigger and bigger, he feels that this stuff is not taken to the landfill. “Where do they hide all that stuff”, Erkki wonders.

The uncertainty of milk cartons is bothering Erkki so much that he wants to find out what happens. Luckily, on the side of a huge container there is a picture. Erkki figures out that the milk cartons are recycled. “I think recycling does not mean going round a circle”, Erkki thinks to himself. In the picture, there is the milk carton’s journey. The milk carton travels more than Erkki ever does! First there is just a tree, a tall one, just like the one next to Erkki’s home. “I wonder why there is a picture of a tree”, Erkki thinks. Do milk cartons come from a hole in a tree?

In the pictures, the milk carton travels from the dairy to the market, from the market to someone’s home and finally to the recycling place like the one near Erkki’s home. Then it seems to go to a factory and change into a carton roll. Is it a magic trick? Is it possible
that the milk carton turns into a roll in that circle — or recycling? But where and why? Erkki wonders if all the things in those containers can go round the same circle. What will glass jars turn into?

• Do you know what happens to glass jars in recycling?

Erkki knows that people throw away all kinds of nice and useful things, like metal tins and tires.

• What could be made of tins and bicycle tires?

Ville is having a party. But you have to wait until next time to hear about it.
Main task

1. **Poster**

Remove from your poster’s landfill some things that are reusable (milk and juice cartons, glass jar, newspaper, etc.).

2. **Odd things in Ville’s nest**

The instructor brings things to the club that he or she has got from Ville. Think about where the things have come from. What is the story behind them?

- Why has someone thrown away a certain product?
- How could you reuse it?
- What has the manufacturing of that product required?
- Is there another product that it could be replaced with?

You can think about these things in groups. Each group might have a product whose story and future (i.e. reuse) the group can think about. Or you can choose a product or group of products from the poster’s landfill, or you can think of ideas for reuse together.

3. **A cartoon of the life span of a product**

The idea is to outline the life span of products by drawing a cartoon of the phases of their production and use. While you draw you can discuss the phases of for example paper, plastic, metal or glass.

Include in your cartoons the following phases of the products:
- production
- transport
- use
- disposal, recycling or reuse.

4. **Recycling map**

Erkki has decided to find out where the sorting places are. He draws a map and he shows it to Ville. This is a difficult task for a fox to solve all by himself, so he wants you to help him make the map.

- Before you start looking for the places, you could make a map out of recycled material.
- Mark places like the school and the playground.
- Then off you go with the map to look for sorting places in your neighbourhood! I’m sure you already know some of them.
- You may want to take Lennu and any other mascots you may have with you.
- Mark the sorting places you find in the map with boxes and balls of different colours.
- After the round, you can add your home areas, as well as Ville and Erkki’s.

5. **Recycling guide for the people of the neighbourhood**

Once you have found all the sorting places in the area, you can share your information with others. You can use the map to make a guide, at least for yourselves to take home with you. You can include information on the sorting places of your area, the advantages of recycling, and for example about the life span of products. You can also use drawings. You could ask libraries, schools and shops and other places if you can hang your guide on their wall. This way others too can use your information.
Sorting game

- Before starting the game, make sorting bases that stand for containers.
- The children will have a bagful of litter which they shall sort to the containers (bases).
- Present the containers to everyone, so everybody knows what goes where.
- Try and remember where you have seen similar containers.

Once you have talked about the containers, put the bases on the floor in a row. Make bases for the following kinds of waste:

- Glass
- Bio waste
- Paper
- Cans and bottles (returnable)
- Carton
- Paper
- Metal
- Cardboard
- Hazardous waste
- Mixed waste
- Reuse

Contents of the garbage bag:

- Teabag
- Envelope with a plastic address window
- Newspaper
- Glass jar
- Milk carton
- Juice carton
- Batteries
- Mobile phone battery
- Plastic cup
- Plastic bag
- Yoghurt can
- Pillow case or towel
- Return bottle or can for soft drinks

You can play the sorting game either as a competition or as exercise. In a competition, make two groups and give each group some of the litter. Make sure both groups have more or less the same kinds of things.

- The first group puts the litter above the sorting bases.
- As soon as the first group has finished, the second group puts theirs below the bases.
- After sorting, check if everything is in their right places and talk about it.
- Each correct sorting equals to one point (alternatively a negative point for each incorrect sorting).
- The winner is the team that has more points.
- Note how much less waste goes to the landfill if you sort correctly (only 3 items from the list!)

You can also think about alternatives for the waste in the landfill that make less waste, like

- yoghurt can be bought in a bigger package (which means less waste per one decilitre of yoghurt).
- yoghurt can be bought in a recyclable package.
- a plastic cup can be replaced by a durable cup.

Solution

- Bio waste
  Decomposting waste that can be turned into soil.
- Teabag: worms can use it as it is.
- Paper can be used for new paper.
- Window envelope: can be put in paper waste as such.
- Glass
  Colourful and clear glass are collected separately (in the game you can put them on the same base), and can be used for new glass.
- Glass jar: Remove the lid before putting into glass waste, but you can keep the etiquette. Put the lid to metal waste; it can be used for raw material for new metal.
• Cans and bottles:
  - Soft drink can: You can return all cans to the shop whether return cans or not; they don’t add to the waste in the landfills but can be reused in industry.
• Carton
  Milk and juice cartons and cereal boxes etc. that will be used for making carton.
• Metal
  Tins, metal lids of jars and bottles (a little bit of plastic is all right); are used for raw material in industry.
• Hazardous
  Harmful waste that is made harmless.
  - Battery: All batteries should be taken to the collecting places of hazardous waste or places of battery collection.
  - Battery of a mobile phone: All batteries are hazardous waste.
• Mixed waste
  Waste taken to the landfill, like all plastic or dishes that contain several materials (exception: window envelopes which go to paper waste).
  - Plastic cup, plastic bag: Plastic cannot be recycled.
  - Yoghurt can: Can be used again for example on excursions or hobby crafts. Otherwise mixed waste
• Reuse
  Products that can be reused as such.
  - Pillow case or towel: Usable after washing and by no means waste! A broken one can be used as a cleaning cloth.
  - Return bottle: Bottles returned to shops are taken back to the factory to be washed and used again.

2 Paper recycling gym

The recycling gym is a good exercise when you talk about the life span of products. It can help illustrate all the phases a product goes through and how to recycle or reuse it. Before the gym, explain the life span of paper or some other material. This can be done by asking about the life span backwards: “Does anyone know

  • which raw material paper is made of
  • where it’s made
  • how it’s transported
  • what do trees grow from and what do they need to grow ?”

Before the gym, you can draw a cartoon about the life span of a product. It is important in the gym that the instructor is enthusiastic and does all the moves as an example to the others while he or she tells the story. Make sure everyone has enough space. Talk slowly enough and take breaks every once in a while. You can make the moves without talking, and have some nice music playing in the background.

The following story is an example and you can change it if you like.

3 Recycling game

Earth-sea-boat model

I version
  • Make three lines on the ground and name them after different waste containers, like bio waste, carton, hazardous waste etc.
  • Before you start, go through the different containers and what you can put in each of them.
  • The children will stay in a row behind the same line.
  • The instructor shouts one of the litters and the players have to run to the correct line.
  • Anyone who goes to the wrong line or who clearly just follows others, has to quit the game.
• The last runner is the winner, and he or she can be the leader next time.

**II version**
• Instead of lines on the ground, use things like the flagpole, a big tree, a sand box etc. for the waste containers.
• You can include reuse and recycling of things.

**III version**
• Following the latter’s rules you can play it as tag.
• The instructor shouts a name of a container, and everyone runs to it trying not get caught.
• Anyone who is caught will stay and catch others.
• The game is over when everyone has been caught.

4 **Sculptor**
• One of the children is the sculptor.
• The sculptor takes each player’s hand and whirls him/her a few rounds and lets go.
• The player will stay still to the position that he/she is in.
• When everyone has been whirled, each statue thinks of what they are (like a useless thing, or waste such as banana skin).
• You can also tell where this waste should be placed (bio waste bin, compost, second hand shop, given to a friend, etc.)
The paper sorting gym

Start from a seed.
Curl up as a very small seed. The sun begins to warm the seed. And a refreshing, lovely rain falls down. I feel I’m growing (get up little by little), my branches reach for the light (reach your arms towards the ceiling).

I have grown to be a big tree and I have seen all kinds of weathers. Now the lovely sun is shining and it’s nice to stretch one’s leaves in the warmth (stretch your arms to all directions). But oh, no! The cloud looks furious and the wind is rising! Oh, my branches and my trunk are bending in the wind (stretch yourself to all directions). Oh no, lightning – luckily it didn’t hit me!

Eventually the wind calms down and the sun begins to shine again. But what do I see: strange machines. They are not... oh, yes they are forest machines that other trees have told me about. Oh no, they are coming to the forest and start sawing my trunk! I’ll fall, heeeelllp (go down on the floor). I feel the huge mouth of the machine lifting me to the back of the truck and the journey begins. It’s a very bumpy road (jump and wriggle on the floor). I wonder where we’re going!

(The children may answer, then tell them to the factory.) I think we’re almost there. What a huge factory!

We fall to a big conveyor topsy-turvy (you may stand up for a change and turn to different directions). Oh no, now they’re pouring water on us and some other disgusting liquid (shake yourself).

Heeelllp, look at those blades! Now I think this is it (you may go back down on the floor). Well, we’re alive after all. What now, we’ll flatten out (go flat on the floor). We’ve become paper! And we’ll get pictures and writing and stuff on us (you can look at yourself a bit). Guys, we’re newspapers!

And off we go again! (you can get up and jump). Another bumpy road (jump up and down). Now we’re slowing down. Now I’m going into a mail box (jump again). Who’s clutching me? What a nice little boy. It’s so good to be read (swing back and forth). What now? Where am I? Is this the dust bin I’ve heard about? Not the landfill waste bin, I hope! No, this one’s green. This is the paper waste bin. And there’s that truck. Jump on (jump again) and let’s recycle!

You can stop here, but you can carry on back to the factory, into a newspaper and to be read. Repeat the journey in a slightly different way, like:

What a bumpy road again (jump), but there’s that factory again. Off we go to the conveyor again (jump)...

If you want to demonstrate, you can stop the gym when someone puts the paper into the landfill bin. The gym is over, when the paper lies on the smelly waste mountain and doesn’t go back to be recycled. A happy paper could carry on forever!

Källa
Introduction

In his sixth letter, Kaarlo tells the children about a party that Ville was having. The party was fine until they faced a problem with the waste. All the bins were full of disposable plates, cups and spoons.

Ville is not alone with his problem, because disposable things are part of today's everyday life.

Now is a good moment to think about how to replace disposable dishes. The task this time is to organize a durable picnic for next week, or alternatively a picnic for Ville and his crow friends.

The background material includes two different definitions which can be used to describe the ecological efficacy of products. An ecological backbag tells about the strain to natural resources in the whole life span of a product. The MIPS includes the ecological backbag of the product and the efficacy of its use.

There is also a story about a family's experiences of disposable dishes at their summer cottage.

Material

What does an ecological backbag and MIPS mean?

The ecological backbag illustrates the amount of natural resources that the use of a product or service requires during its life span. Both organic and non-organic materials are included, such as malm, oil, earth masses and cultivated plants.

Every Finn makes an ecological load of 1500 kilograms, which equals to about 300 shopping bagfuls of natural resources. The ecological backbag describes the product's environmental strain on a general level. It is thus an indicator of the use of natural resources. What it does not tell us about is the quality of emissions or the noise problems. It cannot be used for comparison of the poisonous character of effects on nature's polymorphism. The ecological backbag has been calculated for toy cars made of different materials:

<table>
<thead>
<tr>
<th>The weight of the toy</th>
<th>The Backbag</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium car</td>
<td>46 g</td>
</tr>
<tr>
<td>(plastic wheels)</td>
<td></td>
</tr>
<tr>
<td>Plastic car</td>
<td>45 g</td>
</tr>
<tr>
<td>Wooden car</td>
<td>45 g</td>
</tr>
</tbody>
</table>
MIPS (material input per service -unit) is an indicator that compares the ecological backbag with the service. The use of material is compared with the advantages of the product. The MI of the MIPS is the whole material consumption used during the life span of the product beginning with the raw materials and all the way to waste management. The MI is measured in grams, kilos or tons. It is practically the same as the ecological backbag + the product’s weight. The S of the MIPS refers to the service, which means the amount of service of the product, i.e. the benefit of the product, such as kilometres travelled, times of reading, washing, etc.

The benefits of, for example, disposable dishes remain small, since the product will be taken to the landfill after being used once. Durable dishes, on the other hand, are used several times and their efficacy is better.

Although disposable dishes may be more convenient in big events, their problem is the waste issue. 100 000 people create 4500 kg of waste when using disposable dishes. The strain on natural resources is about 56 tons.

The following MIPS values have been estimated to disposable and durable dishes. In the case of durable dishes, an average of 2500 times of use has been estimated, which is the average in restaurants.

<table>
<thead>
<tr>
<th>The weight of the product (g)</th>
<th>MIPS (g/dish)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plate (porcelain) 558</td>
<td>2,232</td>
</tr>
<tr>
<td>Mug (porcelain) 214</td>
<td>0,856</td>
</tr>
<tr>
<td>Spoon (steel) 39</td>
<td>0,1092</td>
</tr>
<tr>
<td>Plate (cardboard) 12,88</td>
<td>236,1</td>
</tr>
<tr>
<td>Mug (cardboard) 4,69</td>
<td>89,4</td>
</tr>
<tr>
<td>Spoon (pe- plastic) 3,23</td>
<td>29,33</td>
</tr>
</tbody>
</table>

By increasing the S of the MIPS (increasing the number of times being used S= 2500) the product or service will be more beneficial and thus its ecological efficacy increases. Disposable products only allow one time of use (S=1), and thus its benefits are moderate.

Source
Disposable dishes

Are disposable dishes so convenient at the summer cottage after all? I remember last midsummer. We were sitting at the grill in our raincoats, and the wind was a whole gale. The cardboard plates were getting wet and they were blown to the bushes by the wind as soon as you let go of them. And what about those cups! They were hardly strong enough for the children’s juice, and the grown-ups’ drinks came through the cup joints. Every time we use disposable dishes, we also argue about the burning of the waste in the fire of the sauna. My father-in-law thinks paper plates are clean enough to burn there, but the younger generation feels differently. Burning salty plates in a bad fire will spread toxic to the kitchen garden. And if you throw them into the dust bin, it will soon be full of smelly garbage, which creates another set of problems.

Disposable dishes make one think at the market, too. Did you run out of small plates, big plates, or soup bowls? The bowls need to be stronger than last time. Our youngest got himself all wet because the edges of the bowl were too soft for a little one. The cardboard cups are also useless. Perhaps the plastic cups will last longer. Although with hot drinks you’ll burn yourself. Grandmother collects the plastic cups and washes them in secret to be used again. The older generation seems to wonder the way we spend money.

Next summer I will not believe the salesmen’s talk about easy life on holiday, but I will take the old porcelain and proper glasses out of the cupboard. They are good and solid, and the children will learn to wash the dishes, which they haven’t done yet, because of the dishwasher. The money we’ll save can be kept for a holiday or spent on ice cream, or perhaps we should buy proper wine glasses to the cottage, too.

Project manager Riitta-Liisa Hahtala, YTV Waste management

Tips for avoiding waste

- Disposable products, like bags, razors, dishes, nappies, napkins and cameras, can be substituted by a durable alternative.
- Prefer durable cloths to kitchen roll for cleaning the table.
- Get a durable filter to your coffee machine.
- In baking and cooking, paper or aluminium disposable dishes can be replaced by durable ones.
- Aluminium dishes are washable and reusable.
Hello again, children!

Now I have something great to tell you. When Ville found out that you have promised to help us in the landfill thing, he decided to throw a party. He sent invitations for all family and friends. Ville gave a speech, too, which you may have heard to your homes. All the guests behaved very well.

Ville’s uncle, Verneri had made berry pies and they were served on paper plates. Ville had heard a commercial that promised easiness with paper plates. And cups, too. He bought cups, although there was nothing to drink. And plastic spoons and forks, which were thrown away, because they were too difficult for the crows to use.

Each guest got a hat and glasses. They were disposable too, which the crows could not understand, since you could wear a hat like this much more than once.

The party was great, but everybody felt bad, because Ville’s nest was soon full of garbage. Luckily, Uncle Vernerì had an idea, namely to bring the issue to your club. So, Ville has left the garbage to your club door hoping that you will tell him what to do with it. It is not such a joy to have a party, when there’s so much trouble about garbage!

Ville cannot come to see you, but could you show him a good example? He can look at you in the trees if you made a picnic to the park or to the woods.

I suggest you show Ville a good example and go on Kaarlo’s durable picnic! We won’t waste nature’s materials and we won’t get a mess, either, but just good ideas and a good mood.

- Durable freezer boxes are better than disposable ones, since they last for years.
- Cloth napkins are more environmental friendly and more festive than paper napkins.
- On a picnic, a juice bottle is better than a tetra pack also because it can be closed and you don’t have to finish it all at once.
Main task

1 Kaarlo’s durable picnic

Let’s plan a durable picnic for next time.

- What kinds of food should we take and how should we pack them?
- Why?

Or, you can plan a new, better party for Ville and his friends. Try and plan a party that does not create litter.

2 Poster

Remove all disposable products from your poster’s landfill.

3 Kim game

You’ll need a table cloth and a disposable table cloth and some alternative products, one being less harmful for the environment (durable) than the other (disposable/ durable cup, wooden toy and plastic toy, juice in a tetra pack and juice in a bottle, etc.). You can choose the products according to a theme, like a birthday or a picnic.

- Form a circle around the disposable table cloth.
- Place all the disposable things on the table cloth and try and memorize them all.
- Ask the children to close their eyes and remove one product.
- Everyone has a turn to say what is missing from the tablecloth.
- When the correct answer is found, think about alternatives to replace the disposable product.
- When you have an alternative, take the durable product and put it on the cloth.
- In the end, there are only the more durable products on the table cloth, and underneath the disposable table cloth.
- Before the game is over, the children ought to note that the table cloth should be replaced with a durable one.

4 When I go shopping, I don’t buy

Form a circle and play a memory game of things you don’t buy.

- The first one says something like this: When I go shopping, I don’t buy a disposable camera. The next one says: When I go shopping, I don’t buy a disposable camera, or a disposable cup. The third one says: When I go shopping, I don’t buy a disposable camera, a disposable cup or a toilet refresher.
- Everyone adds a useless product and has to remember all the things the others have said to stay in the game.
- You can go in an order from one person to the next, or you can throw a ball to anyone in the circle.
Kaarlo takes the club to a durable picnic to the surroundings of the club. The aim of this picnic is to give the children a chance to come up with things and experience their neighbourhood. You will enjoy the picnic without things you don’t need. A park, a forest or an open field are good places for this picnic.

Before you go, advice the children to make their food and drink producing as little waste as possible. Everyone should have a lunch box and a bottle for drinks. Avoid packing in disposable packages of plastic, foil and paper. Prefer a bottle to a disposable cup and tetra pack. A bottle makes no waste, and you can close it. It’s difficult to carry an opened tetra pack in your bag, so you would have to drink it all at once. If there is someone who makes the lunches at the club, tell them about this and any other things you find important in order to make things go smoothly for everyone.

Even in the cities you can enjoy an outdoor picnic. You’ll find plants and animals in the middle of a city and in the suburbs, there is often a park just behind the corner. By exploring the nature, you’ll feel aesthetic, mental and physical pleasure. Only this way will you be able to create an emotional bond to your neighbourhood. This way you might build yourself environmental sensitivity that will last for life.

You don’t have to go far to have a picnic. You can observe the nature on the edge of a forest or a park. The most important thing is that you can enjoy yourself without being in a hurry and without making the picnic physically too hard on any of the children. Outdoor eating is almost magical and you will always remember it. Making handicraft out of natural materials is ecologically beneficial and rewarding. It doesn’t cost you anything, either.

Public right of access

Public right of access means everyone’s possibilities to use nature regardless of who owns the land. Using the public right of access does not require the permissions of the land owner and one doesn’t have to pay for it. However, by using the public right of access one must not cause damage or disturbance. Public right of access is a generally accepted practice and it is defined by laws.

Source
Fiksu Koululainen.-o– educational material about prevention of waste for schools.YTV 2005.
A litterless picnic will leave you good memories and a more beautiful and safe environment for animals. You can take a bag and gloves with you – to collect litter that other people have left.

**One can pick**
- berries
- mushrooms
- herbs that are not under protection
- flowers that are not under protection
- fallen branches, cones and nuts.

**One is not allowed to take from someone else’s land**
- a dry or fallen tree
- twigs
- moss
- lichen.

**Packages**
A package is supposed to protect the product during its long distribution chain. Paper, cardboard, corrugated cardboard, cardboard, plastic, glass and metal are used as package materials. A correctly designed package can lower the product’s costs by enabling an efficient transport and handling.

**The composition of package waste**
- Paper and cardboard 39 %
- Plastic 27 %
- Cardboard 17 %
- Metal 9 %
- Glass 8 %

The amount of package waste diminishes when we cut down unnecessary packing. These days, products are packed into far too many packages, and individually. An over packed product, which is usually more expensive to buy, is more expensive also when it turns into waste. We can reduce the amount of waste by preferring recyclable packages and materials that are easy to reuse.
Examples of reuse of packages are plastic and glass soft drink bottles, which can be used 20 to 30 times. Recycling of materials includes cardboard cartons, glass and some other packages. A typical example of energy recycling is the burning of paper and cardboard packages in heating the sauna. Also some package plastics can be burned, but their relevant benefits are rather weak.

**Tips for reducing the amount of waste**

**Practical examples for reducing package waste and their use:**

- Pack fresh products to your own bags and boxes.
- Favour reusable packages, such as return bottles.
- Favour recyclable packages, such as glass and cartons.
- Make use of packages that you can use for example as freezer boxes or for craft.
- Choose packages made of reused materials (green glass, reused plastic or carton).
- Favour packages that are made of as few materials as possible.
- Favour refill packages and concentrated products.
- Choose packages that are made by environment saving technology (such as unbleached paper).
- Avoid multiple packages (many biscuit packages).
- Avoid small packages (yoghurt can vs. carton).
- Avoid package materials that are not recycled in your city.
- Avoid package materials that are difficult to dispose (like PVC plastic).

**Over packed products**

- Part of the product’s price is caused directly by the package that ends up as waste.
- Pack your lunch into a durable plastic box, not in foils.
- Whenever possible, the purchases of canteens ought to be made in big lots. The bigger the lot, the less package waste is created.
- Butter, sugar, cream and ketchup should be served in large containers, when everyone can have the amount they need.
- Rolls or pita bread do not require disposable plates, but can be served in a napkin or small paper bag. Salad can be served in an edible taco plate.

**Packages that can be reused**

- A glass return bottle is returned to be refilled about 30 times and finally, is still good for raw material. A return can goes straight to new raw material.
- The plastic bags at the market can be swapped into durable bags, and fruit bags can be replaced by durable cheesecloth bags.
- Cosmetics and detergents can be bought into refill packages.

**Did you know this?**

- In the 1990’s, schools used butter packed in aluminium paper. Nowadays, these are for a large part history and bigger cartons of butter are used. This change saves only aluminium 90 000 kilos each year – enough to make 30 000 bicycle frames!

**Source**

YTV 2005.
Hello, children at the durable picnic!

I wish you an excellent meeting! I know the routes and paths in the forest and all the secrets, but so does Lennu.

- Do you know a nice route in your forest?
- Do you know a path or hiding place that no-one else knows about?

I don’t think I’ve told you this before, but Lennu told me a secret a long time ago. Hush, be quiet. Listen to this story in silence – it is about a treasure of Hissus. Lennu knows that there is this treasure in the place you’re going today. I’m sure you want to hear more?

In every forest, park, open field and anywhere you people go on picnics, there is a magic stone hidden, the treasure of Hissus. In the course of time, that stone may have gone into many pieces, and the magic might be in several of them. The stone brings to its holder a good and peaceful mind and leaves a beautiful memory.

The treasure of Hissus is peculiar, because its magic only works if you’re absolutely quiet when you pick it up and when you’re beholding it. When you find the stone, stay quiet a bit more than a short while, a kind of a bear’s quiet steps’ sort of a while. Very, very quiet.

I haven’t been to your picnic place in many years, so I don’t know for sure where the treasure is. I suggest you try, absolutely quietly.

I suggest that each of you will have peace and quiet for finding the treasure. Ville has tried to find it, but he has been cawing all the time. That’s why he hasn’t found it.

If you do find the treasure, you don’t have to tell anybody, not even me, although I am very curious. You can keep the secret to yourself. Remember that the Hissus treasure must be left where you found it.

You have come to celebrate! So give each other gifts when you have finished your lunches. Everyone can think of a gift to the whole club. It must not be something that will end up at the landfill, but something that is not a thing, but brings joy and good mood. That’s the kind of gift I would like to have. And lots of sun and sweet dreams!
Exercises and games

1. Litter excursion

You can include a litter excursion in your picnic. On a litter excursion, collect litter in the area.

- When you find litter, say for example “litter”.
- The instructor collects the litter in a plastic bag or a basket.
- At the end of the litter excursion, examine your findings and think of how and why the litter has got where you found them.
- How could the litter have been prevented?

2. Kosti’s nature test

- Make a circle and put your hands behind your backs.
- The instructor gives every child an item from the nature (like a cone, twig, or piece of bark), or litter (like a sweets bag or disposable cup).
- Each child guesses on his or her turn what they have in their hand.
- Last you show the treasures and everyone says whether the items belong to nature or not.

3. Erkki’s cone competition

I version

- Throw cones into a bucket.
- You’re supposed to get three goals.
- You don’t have to limit the number of cones, but each player can write down how many cones he or she has thrown before getting the three.

II version

- Draw a board to the ground (a bit like a dart board), where you get different amounts of points.
- You can make the board on the rocks by using twigs as lines.
- After each turn you count the points.

4. What does not belong in Lennu’s forest?

- Hide some (about ten) things in the picnic place (secretly from the children) that don’t belong to the nature, like paper roll, thread reel, sweets bag, artificial flower, piece of fabric.
- You can hide the items to the ground, to a tree, to a stump of a tree, into a bush, or on a rock.
- The children will try and find all the things that don’t belong there.
- It would help, if the place wasn’t already full of litter.

5. Lennu’s slide show

Old, a little decomposed leaves look great against the light, when you can see their structure.

- Every child gets a slide frame that is old and out of use.
- Find a beautiful leaf and put it in the frame.
- Stand in a row and quietly start the slide show.
- First everyone looks at their own leaf against the light and after a signal you give it to the next person.
- Repeat until everyone has seen all the leaves.
6 Kaarlo’s patchwork quilt

The children make a patchwork quilt or rug on the floor with squares that build up from the following things from the nature:

- One square can be made of cones, another one of leaves, one of needles of a tree, another one of stones, etc.
- Same material can be used for several squares.
- The quilt can be made all at the same time, or in small groups.

7 A picture or painting for Lennu

Make a picture of the nature in frames:

I version
- Make frames out of cardboard.
- Find an object or view from the surroundings that fit in the frame.

II version
- Draw or make with sticks a frame on the ground and collect beautiful things from the nature in it.

8 Kaarlo’s nest

- Choose one child to be Kaarlo.
- Kaarlo hides, and the others count, with their eyes closed, to 30, for example.
- After counting, everyone goes to look for Kaarlo.
- When someone finds Kaarlo, they stay in the same hiding place.
- In the end, everyone will be in the same nest.

9 Look for signs of animals

- Look for signs that tell you an animal has been there.
- Try and find good holes for different animals, like Lennu’s friends, and a tree that would be good for Ville and his family.
- You can make up a story about what has happened here between animals: maybe there has been a porridge party or Lennu’s flying school.

10 Lennu rap

- During the durable picnic, you can make up a Lennu rap or use the following lyrics for it.
- Each verse is repeated twice. This way it’s longer and easier to remember.
- You can also make your own Lennu song. You can use the melody of a nursery rhyme that everybody knows.
Something new from the old

Eighth meeting

THEME: Creative reuse

Introduction

This time, we'll let our imagination fly. Let's have a crafts class according to the season or occasion like Easter, Valentine’s Day or Christmas. You don't need to buy the materials at the shop, but you can use materials that are not needed for their original purposes. The material includes the text Make crafts out of waste materials. The material also includes the recipe for magic dough.

More ideas

Material

Make crafts of waste materials

Making crafts out of recycled and natural materials is ecologically beneficial and inexpensive. Recycled material is free and its use diminishes the amount of waste taken into the landfills. Making crafts is a great opportunity for acting against waste: only choose materials that would otherwise end up as waste (instead of new materials).

Good material for crafts can be found in everyone's home. Some companies create material that can be used, too. Patches and leaves can be used to create wonderful works of art. Almost any material is valuable for those who do crafts.

Good materials include:
• colourful copies that are not needed
• pictures from newspapers
• egg holders
• clothes pegs
• reels of thread
• moulds
• sticks
• matchboxes
• planing chips
• saw dust
• cases
• toilet paper rolls
• pieces of thread
• patches of fabric and leather
• empty film containers
• pieces of gift wrap
• natural materials
• cardboard boxes
• cans, tins and cups
• strings
• cardboard and carton
• bags
• plastic bottles
• tins
• old clothes and accessories
• old and broken dishes, glass jars and bottles
• all kinds of broken things.

There is no point in buying useless things or packages just because you want to use them for crafts. Nor is it any more noble to buy disposable packages because you can use them in making crafts. The world is full of useless stuff, which can be used and should be used. It is important that whatever we do, it should make sense and be useful. It is absolutely frustrating if children bring home (waste material) crafts that their mother cannot place
on display. Toilet paper rolls can be used for making a cat, or a milk carton for a house, if you have something going on, like a game, play or exhibition where you need a miniature cat or a house. There’s not much point in making a toilet paper roll cat just for the fun of making something out of garbage. This is not about just crafts, but creative reuse. What can you make out of waste material?

- At first, look at the shapes and forms of the things and forget about their original purposes. What does the shape remind you of? How does it feel: is it stretchy, shiny, twisting?
- Use the shape and paint or cover it. A flat bottle makes a good fish; just add the head, tail and the fins of carton, for example.

This time, we’ll let our imagination fly. Let’s have a crafts class according to the season or occasion like Easter, Valentine’s Day or Christmas. You don’t need to buy the materials at the shop, but you can use materials that are not needed for their original purposes. The material includes the text Make crafts out of waste materials. The material also includes the recipe for magic dough.

- Mix – sometimes plenty is beautiful. Tiny details can alone be dull, but by putting them together, you can create something fascinating.
- Pay special attention to details – sometimes a little is beautiful.
- Colour, paint, cover: sometimes a new look can do a lot.
- Cut, glue and combine.
- Twist, braid, sew, knit and crochet.
- Nail and hammer.

Source

Kaarlo’s letter

Hello again!

I have been thinking about the landfill issue. Old things are taken there. You could make new things out of the old. Everyone should follow Lennu’s example. I will now tell you about Lennu’s hobbies. He doesn’t like just gliding, but wood work and repairing as well. He has made lots of useful things out of old things and fabrics, like a hanging swing. He has also made a pocket mirror, which is not very practical, though, since he doesn’t have any pockets, being a flying squirrel. He has noticed that there are lots of things at the landfill that could be repaired or changed into something new.

Ville has learned that most people want things because they just do, and because the things get broken. “I wonder if a new thing is better than a rubbishbagful of old ones?”, he thinks.

“I wonder if a new thing is better than a garbage bagful of old ones?”, Ville thinks.

- Should things be repaired?
- Can all kinds of things be repaired?
- What is the last thing you repaired?
Exercises and games

Main task

1. **Landfill**
   Remove from your poster’s landfill everything that can be repaired and reused.

2. **Magic dough**
   You can use the dough for almost anything: make ornaments for a wreath or Christmas tree, a wreath for your door, food for the doll house, jewellery, etc.

You’ll need
- equal amounts of wheat flours and salt, for example 1 dl of each
- some water (2 dl of flours and salt need about 5 tablespoonfuls of water)
- a bowl for mixing
- oven and baking sheet (greaseproof paper)

Do this
- Put the flours and the salt into the bowl.
- Add water and mix. If you want a colourful dough, add some water colour to the water before mixing.
- Make shapes.
- Before baking, make a hole if you want to hang it later.
- Bake in the oven in 150 degrees for 30–40 minutes.
- Baked ornaments are hard and durable. You can paint them and give them a finished touch with varnish.

3. **The best idea**
   Lennu has had an idea. The landfill would not grow if people repaired things instead of throwing them away. Woodworks and repairing is fun, too!

- Put on display as many different waste products as possible, like bottles, cans, boxes and pieces of fabric.
- Everyone chooses one of the things and tries to find as many different ways to use it again as possible.
- You can think of real possible uses or imaginary ones. The more useful ways you come up with the better.
- Make use of your ideas and make crafts.
Excursion to a repair shop

Ninth meeting

THEME: Repair and reuse

Introduction

We are getting close to the last meeting, and now Kaarlo will take you to visit a repair shop or reuse workshop where old things get a new life or a new owner. Good alternatives include second hand shops, recycling centres, shoe-repairer or upholsterer.

- (Read Kaarlo’s letter before the excursion)

There is no such thing as wasteless consumption, but there are many ways to avoid waste. Natural resources will last longer when we use products that last long. At the same time, the landfills get less waste.

Almost everything needs to be maintained and repaired eventually. Unfortunately, we tend to forget about repair these days. We just buy things, keep them and throw away. We can always get new ones from the shops. Broken or shabby things could be repaired most of the time. Repairing old is one of the most efficient ways of saving natural resources, because we would then save the raw materials needed in the production. When you buy something, you should make sure it can be repaired: some things are not meant to be repaired, and repair can be very expensive as well. Especially with many machines it’s important to choose products that can be repaired and maintained during their use, and that are recyclable after use.

A change in the consumption habits away from disposable and short-lived products back to long-lived, repairable and improvable products is a step towards diminishing waste. You can improve the durability of products by maintenance and repair, and thus prevent their placing in the landfill too soon. Repairing also saves money compared to purchase of a new product. During the last two decades, repairing services have clearly become more rare. Having their clothes, shoes and watches repaired no longer belongs to people’s budgets. This is greatly due to attitudes, i.e. whether we want quality or not. This week, the main tasks are described in Kaarlo’s letter. It’s a kind of a detective exercise.

Source
Fiksu koululainen – Educational material for lower classes at schools. YTV 2005.
Hello!

I hope you could be detectives today with something complicated. We bears like to solve all kinds of riddles and problems, but we cannot go where people are, because so many of them are afraid of us.

Ville is very concerned. Let me tell you. One rainy day a little while ago, Ville found something in a dust bin near his nest that was very useful and valuable. He found a beautiful china cup. The cup was nicely decorated and it was coloured with Ville’s favourite colours.

Ville took the cup home, of course, and put it on display. Our problem now is that the cup mysteriously disappeared. It was last seen in the window of an old lady, but it’s no longer there, either. I heard a rumour that it could be at (tell the children the place you’re going to visit next).

If you happen to see the cup, please tell your instructor and let me know as soon as possible! If we find that treasure, we shall make Ville a very happy crow. I would also like to hear about other things about your excursion to the world of used things.

• What is the nicest thing you see on your excursion?
• How much does it cost?
• If a similar product was to be made, what materials would be needed?

A new product brings me to new questions:

• Is there guarantee for the product? A guarantee means that the product is meant to last.
• Can it be repaired? Something made with screws can be undone and repaired unlike something glued or riveted.
• Has it got spare parts? Spare parts should be available after the estimated time of use.

Have a nice excursion!
Excursion to a shoe-repairer or recycling centre

Main task

Plan an excursion according to Kaarlo’s letter and other exercises. You can visit a shoe-repairer or recycling centre, but also any other place where old things are repaired, or a second hand shop.

If you choose the shoe-repairer, you can take with you shoes that need to be repaired. If you visit a recycling centre, you can bring there something or get something from there to your club.

I alternative: Shoe-repairer

Next to Erkki Merkkinen, lives the family of Makkonen. One night, Erkki found black men’s shoes in the dust bin of the Makkonen family. They were clearly on their way to the landfill. Erkki noticed that one of the shoes was a little broken. They would grow the mountain at the landfill, although they could be repaired. So, Erkki took the shoes to a shoe-repairer. However, Erkki is a little shy, and he hopes that you could check if they are done yet. Erkki will then go and get them later.

• What will you achieve by taking the shoes to the shoe-repairer instead of taking them to the landfill?

II alternative: Landfill

I hope you could be detectives today with something complicated. We bears like to solve all kinds of riddles and problems, but we cannot go where people are, because so many of them are afraid of us. Erkki Merkkinen has thought about saving Lennu’s home forest from the landfill a lot. Now he needs an estimation for his calculations:

• How many truckfuls of waste is taken to the landfill every day?

I hope you’ll find an answer to that question. It will surely be easier for you to find the answer than it is for me or Erkki. I don’t even know how to take a bus from my home forest to the landfill. I don’t know either, if they have discount tickets for bears.

Poster

Remove a few things from your poster’s landfill that could be repaired. Think of ways to repair them, and who could do that.

The story of things

Some things that have lasted long may have had many owners and seen this and that in their lives. If they could, they would tell us interesting stories about their past. For example, a rug that grandmother made might have seen all kinds of cheerful adventures and funny occurrences of one or several generations.

Recycling centres and auctions are full of old things. You can only guess the stories behind those. Every old thing has a story to tell, that much is certain, whether it be true or imagination.

Source: Fiksu koululainen – educational material on waste prevention for lower classes. YTV, 2005.

• The children will make a serial story about an old thing’s “life”. Everyone can tell a few sentences about what is going to happen next.
• Have these things been used for decades?
• Have they been abandoned or repaired?
Introduction

Our last meeting is for a celebration of saving Lennu and his friends’ forest! You have found several ways of preventing waste, and now it is time for you to get diplomas for solving the landfill problem.

By their actions, these children have become qualified for membership of the Society of the Smart. To honour this, they will receive diplomas that the instructor or everyone at the club has made. At the last meeting, you can make a small (puppet) theatre. In the end, write a letter to Kaarlo’s Aunt Kerttu and tell her the good news.

Kaarlo’s letter

Dear children!

This story would not exist without your help. Let me tell you. One morning, Lennu woke up, yawned and looked outside his nest window. If there were no surprises in life Lennu would have seen the high pile of garbage at the landfill and trucks that bring even more garbage. It would have ruined Lennu’s day. Even gliding would have tasted of wood.

Lennu has never been quite as surprised as he was now. He did not see the garbage mountain, but only a little pile of plastic waste. Many of Lennu’s friends were playing, and trees and bushes were growing where the mountain used to be. There was a place for playing where the landfill used to be. Animals were sniffing air which was not stuffy and did not smell bad anymore. Nothing has ever made Lennu happier than this sight of the lovely sunrise in his and his friends’ life.

Lennu has an easy access to Ville’s nest tree. Lennu thought for a while of all the garbage, where it had gone and why there was not so much waste anymore. Then he remembered your club and realized that the waste had become useful raw materials or useful things. With your help they found their way to the compost, carton factory, second hand shops, repair shops or recycling centres. And in some cases, no waste was produced at all!
Hello Aunt Kerttu!

I told you about the problem of Lennu’s home that is rather ____________. We are now finding a _______________ solution for the problem. _______________ the children of Lennu the Flying Squirrel Club have come up with it! _______________ landfill has stopped growing. Lennu can see _______________ the sunrise. Ville has learned a lot _______________ of things, and he has become _______________. Erkki is even more _______________ than before. Things in the city are now _______________. _______________ regards from Kaarlo the Bear and the children from the Lennu Club.

The landfill had been an annoyance and now it was useless!

Luckily, it was easy for Lennu to go to see Ville. Ville needed his help and advise. Ville was going to move to a new home as crows do. The moving was not the problem, but the junk that he had – he was fed up with it, and he had understood, while watching you children, that things cause all kinds of problems. They cut down forests, and they dig holes, in order to get useless things, and then they end up at the landfill to loll and smell.

Together with Lennu, Ville formed the Society of the Smart. The first sensible thing they did was to give away Ville’s stuff to those who needed it. Some of it was taken to the recycling centre and some was sold at a second hand shop.

Lennu, Ville and myself, Kaarlo, decided that you children are clearly qualified as members of our society!

Members of the Society can advise others about landfill issues – about how to prevent their growing. The members can also help when someone else has caught the stuff-puffiness germ. The members know what to do about it and how to treat it. You will be rewarded with honour and diplomas. The members are selected carefully, so give yourselves a storm of applause that can be heard all the way to my nest.

Last, I hope that you could write to Aunt Kerttu and let her know that Lennu’s home is all right now.

Me, Kaarlo, Lennu, Ville, Erkki, Kosti and all our friends thank you, smart children for our journey together! With a bow we leave you to continue to observe your surroundings: you might see Ville cawing somewhere, a glimpse of Erkki’s tail, Kosti peeking from the ground, Lennu gliding, and myself... well, writing a letter or something.

Goodbye!
Exercises

Main task

1 Poster

If there is any litter left on the poster’s landfill, think together how you could get rid of it. Is there a way to prevent waste altogether, or could it be used again? You can draw trees where the landfill used to be, for Lennu and his friends to glide in to see their friend Ville.

2 (Puppet)theatre

Make a puppet theatre or theatre performance about the growing landfill and the lives of Lennu and his friends. You can use any other theme you have discussed in the club as the plot.

- Use puppets made of socks or mittens, or puppets on a stick made of carton.
- You can use plain scenery and do the show from behind a table.
- Think of the plot together.
- Alternatively, you can plan the play in small groups. This way you’ll get an audience.
- If there is not much time, the children can do only short scenes about Lennu and his friends.

Suggestions for plot
- Ville in his stuff puffiness at the market
- Lennu and the treasure of Hissus
- Milk carton’s journey.

Games for the meetings

1 Waste mime

Good themes for mime are sorting of biological waste, rinsing milk cartons, shopping at a recycling centre and so on. The mime shouldn’t be too complicated or too long.

- Choose five people, and four of them go outside. (Maija, Liisa, Heikki and Kalle go out.)
- Pekka stays in and he is told what he should do.
- Maija comes in and watches Pekka’s short mime.
- Liisa comes in and Maija does the mime.
- Heikki comes in and Liisa does the mime.
- Kalle does the mime last and he is asked what he thinks he was doing.

2 Compound words

Choose words that are somehow related to the themes at the club.

- Each pair gets a note with a compound word.
- One will do the first part and the other one the other part.
- The audience tries to guess the word.
3 Which character – which waste?

- The instructor puts a note on everyone’s forehead that has the name of an animal or waste on it.
- The players will try and find out who they are.
- They ask each other yes or no questions.
- For example: Do I have four legs? Am I made of wood?
- The game goes on until everyone knows who they are.

4 Bears and flying squirrels

1 version
- Make a tight circle holding each other arm in arm.
- The instructor whispers to everyone a different animal (or a useless thing) and then begins to say the character names.
- Anyone whose character is said goes down on the floor as soon as possible.
- Players next to him/her will try and stop him not to get down.

II version
- The instructor says the same animal to everybody (like a bear).
- First the instructor says names that are not involved (rabbit, lynx etc.), and no one gets down.
- Finally the instructor says: bear. And everyone goes down at the same time.
- It might be a good idea to use matresses.

5 Memory game
- Everyone draws two similar pictures on recycled paper.
- Use the characters or events of the Lennu Club as themes of the pictures.
- The size of a picture can be for example 5X5 cm.
- Colour the pictures and add backgrounds made of recycled paper board cut to same sizes.
- You can play the memory game in pairs or in a group of a few people.

6 Waste game
- Everyone stands in a circle, and one is in the middle.
- Those in the circle are a litter or waste.
- You can have for example biological waste or paper waste.
- The players can be newspapers, advertisements, tins, banana skins, potato peels, glass jars.
- There is always an even number of each litter.
- The one in the middle is nameless and he/she tries to get a place in the circle.
- If he/she says potato peels, all the potato peels change their places and the nameless tries to get their place.
Looking for pairs

The idea of this game is to give your own pair good ideas and to the others bad ideas regarding the environment.

- Make two groups: Erkki group and Ville group.
- The Erkki group are going to visit Lennu and they want to take their friend Ville with them. Everyone in the Erkki group goes behind the door.
- Meanwhile, the Ville group agrees on which one of the Erkki group is their pair.
- The Ville group makes a semicircle on the floor.
- The Erkki group comes in one by one and they ask one of the Ville’s: “Are you my friend?”
- If the Ville answers: “Yes if you’ll help me hide batteries in the woods”, Erkki says: “Never!” and goes back to the others.
- If the Ville gives an environmentally friendly answer, like “Yes, if you don’t buy anything disposable”, Erkki knows this is his pair.
- When the right Ville is found, they get to go and visit Lennu.
- Each Erkki asks one question. The game isn’t over until everybody has found their pair.

You can make this game easier by thinking of your answers in advance.

The liars’ club

Use recyclable waste for this game. In the end, talk about how you could reuse them. Also talk about the importance of common sense in the use of waste.

- A few children choose a litter or useless thing which they will try and change into a useful thing by praising.
- Each liar praises their own litter’s usefulness – in this game, it’s ok to exaggerate!
- Vote for the most impressive praise.

A story about Lennu

I version
- Sit in a circle or around a table.
- The instructor places the memory game cards (exercise 5, page 60). There has to be at least as many pictures as there are players.
- Everyone takes a picture.
- One player starts by telling about his/her picture. Remember to keep to the picture.
- The story goes on either in order, or at random.

II version
The story is told without pictures:
- Everyone can add a few sentences.
- If you like, the instructor can write the story down and then read it aloud when it’s finished.

III version
- Each pair or small group has some pictures and they make a short story.
- You can shape the story by changing the order of the pictures.
- Tell your stories to the others.
- It is all right to have same pictures in different groups, because you are not likely to get two identical stories.
Tips for crafts

1. Paper mass

Paper mass can be used for modelling. You can put little things in it to make it look nice. You can do almost anything with paper mass – also big works using chicken wire as base. Or small things, like jewellery.

Ingredients

Torn paper
- You can use egg holders, ordinary torn office paper, silk paper from packages, etc.
- Newspapers are fine, but they are a little gloomy with all that ink.
- Glossy papers are not good.

Water

Extra materials according to your taste
- paste powder (makes the mass easier to work)
- glue
- linseed oil (a drop will make the mass easier to work)
- clove oil (the products will last longer)
- powdered gypsum
- saw dust
- caramel (for the colouring).

A kettle big enough and stove and a blender For small amounts, use your hands or a fork.
Do this

1. Tear up a paper and put it in a kettle.
2. Add enough water to cover the chaff.
3. Add some water and grind.
4. Knead the mixture like dough until it becomes firm and it has a slippery surface.

- You can use paper that has gone through a chaff cutter and save yourself the trouble of tearing up.
- Add enough water to cover the chaff.
- Cook for at least 20 minutes at a low temperature.
- Make sure there is enough water not to strain the mixer too much.
- Stir until the paper mass is pulp.
- Remove extra water. You can use a strainer.
- At first, the mass is crumby, but it will become waxy like modelling clay.
- You can colour the mass with fabric colours or caramel.

Remember that the paper mass may easily block the drain. Try and keep all the fibres out of the sink. You could pour the water through a towel or a gauze. Put the fibres back to the mass.

- Add a drop of oil and some wall paper paste powder carefully, a spoonful at a time.
- You can colour the mass with fabric colours or caramel.
- If the paper mass is already coloured, you don't need to paint the objects you make. Add colour into the mass until you get the shade you want. The shade of a dry product is lighter.

Prepare the paper mass:

- When your work has dried for at least 24 hours, it can be painted.
- If you keep your work in a cool, airtight place, it will last for months.
- If you don't use too much glue, the mass can be dried: Make little balls and leave them to dry in a place where there is enough air. Dry mass balls last forever, and turn into modelling mass in a second: just add water.

A tip for big works with a chicken wire as base: Laminate 1 or 2 layers of newspapers on top of the wire and add the paper mass on the laminate.
Patterns of old materials

Do this:

1. Draw a picture either straight to the pattern material or on paper that you place under the transparent pattern material.
   - Remember that the colour may spread and mix with other colours.

2. Cut a hole with a carpet knife or other sharp knife. Some shapes are easier to cut with scissors.
   - Use the pattern to make as many shapes as you like, with the colours that you like.

3. You can use a piece of expanded plastic and stipple the paint through the pattern into the fabric or paper.
   - You can use a paint brush over the pattern’s edges.
   - You can put paint on the sides and wipe it with your fingers towards the centre. You’ll get clear sides but a slightly hazy centre.

Ingredients

• The most common and easiest waste material for patterns is a used transparency.
• Used plastic holders make thicker patterns.
• Construction plastic is good, too. It is strong and it can be cut with an operating knife.
• Old x-rays are also good materials for this.
• Short-lived patterns can be made of bad photographs, carton and envelopes.
• Use fabric colours for fabrics; on paper or cardboard you can use almost any colour.
**Brown Bear**  *Ursus arctos*

- The biggest wild animal in Finland and whole Europe.
- The female can be as heavy as 170 kg and the male 300 kg.
- The colour of the fur alters from almost black to yellowish grey.
- There are at least 1000 endangered bears in Finland.
- The mother bear gives birth to 1–4 cubs in the winter nest.
- Bears reach an age of up to 30 years in the nature.
- Their main food is plants, mushrooms and berries. They also eat insects, caterpillars in trees and ants.
- In the winter, bears sleep for about six months.

Finns have feared bears, but also respected them. The Finnish language has lots of names for the bear: *otso*, *mesikämmen*, *kontio*, *metsän omena*, *metsän kuningas*, *nalle*. The story has it that the bear has come from the sky, from the constellation *Ursa Major*. According to many Northern mythologies, the bear is related to people, and perhaps Finns have thought so, too. The bear is the national animal of Finland.

**Crow**  *Corvus corone*

- Feathers grey apart from the black head, throat, feet, wings, beak and tail.
- Eats waste, carcase, crop among other things.
- The parent bird builds a new nest every year out of dry twigs, earth and clay on top of a conifer (seldom a leaf tree). They use feathers, hairs and pieces of fabric to make the nest soft.
- In April or May 3–6 green eggs with brown spots. The mother broods for about 20 days.

Crows go early in the morning to their meeting place, for example the roof of a building or a tall tree. From there they go to different directions to find food. At noon, the crows rest in the trees, and in the afternoon they are looking for food again. In the evening, they return to their nests.

There are lots of crows there, but they move so quietly that all you hear is a swish of their wings.

**Fox**  *Vulpes vulpes*

- The most widely distributed wild animal that moves on the ground
- A fully-grown fox is about 75 cm long, in addition its tail, about 40 cm.
- Weight about 7 kg.
- Food mainly rodents, but also plants and carcase. They chase mice, rabbits, fowl and fish.
- Their territory is 5–20 kilometres and in the middle of it is the foxes’ nest that people know for its smell. Foxes normally use nests that other animals, often badgers, have made in caves. The same nest is used by many generations of foxes. The fox is often described as a cunning animal. It must be based on truth, since the fox is so widely distributed despite of hunting.
Flying squirrel  *Pteromys volans*

- Comes from Siberia and is found in Europe only in Finland.
- Is one of the most strictly protected species both by Finnish and EU laws.
- Length 13–20 cm, plus tail 9–14 cm long.
- The female’s weight about 150 g, male’s a little less.
- The eyes are big and the fur grey, stomach a little lighter than back. Black streak in the bend of neck and front limb.
- Gliding fold between front and back limbs.
- Eats leaves of leaf trees, seeds, buds, shoots, nuts, berries and occasionally bird eggs and young birds.
- 2–3 cubs.
- Lifetime about five years.

The flying squirrel lives in the old forests, and it’s important to make protection areas for it. It is most active in the evening and during the night. It goes forward in the forest by gliding from tree to tree, using its tail as a rudder. The front and back limbs stretched, it can glide almost a hundred metres. While the cubs are small, the female eats also during the day. It doesn’t sleep the whole winter like the bear, but when the temperature is below 0°C, it may sleep for a couple of days. The female makes the nest in a hole that a great spotted woodpecker or a three-toed woodpecker have made, but also a starling nesting box will do. The best nest material is beard lichen if it’s available. You would most probably find a flying squirrel at the bottom of its nest tree, or following the yellowish droppings on the roof of the nesting box.

Sources: http://fi.wikipedia.org/wiki/

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Earth worms

Earth worms use vegetative material for nourishment. They make long tunnels, as long as several metres, and at the same time, eat the material in front of them. Earth worms and other worms are very useful, because they make the earth loose and improve the cultivated soil. They move the soil from lower layers to the ground and the organic materials of the ground deeper into the ground. They have an important role in the decomposing process of litter deposit, i.e. the needles and leaves as well as dead under vegetation. Other small organisms start to decompose the litter brought into the earth, such as bacteria, funges and various annelids. Because of the tunnels the worms make, air and rain water also get into the ground more easily.

The earth worm does not like high temperatures (over 15 °C), and it dies if brought into a house.

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Dung worm  *Eisenia fetida*

- Very similar to the earth worm, but smaller (5–8 cm), thinner and darker.
- Another difference to the earth worm is that it likes damp and warm places.

Lennu the Flying Squirrel and the Great Mystery
**First meeting**

**Hello, children**

My name is Kaarlo the Bear. I will be guiding you on your journey to the world of Lennu and his friends. I have lived all my life in a forest far away from your homes. I know that you live close to my friends Kosti, Ville and Erkki. But Lennu the Flying Squirrel lives in the Old Primeval Forest and I don’t know his address exactly. I’m sure you have met some of my friends – or at least seen a glimpse of them. While you listen to the story, think about times and places where you might have seen Lennu, Ville, Erkki, or even me, Kaarlo the Bear.

Before the story, you should make your eyes, ears, hands and feet supple. Let’s try Kaarlo’s swamp gym! It is most important that your feet, hands, ears and especially your noses are warm. So, let’s move!

Now I would like to tell you about my friends. Far, but not too far away from here there is an old, tall pine tree. On top of it there is a nest that is almost impossible to see from the ground. You can only see it if you fly above the tree. In the nest lives Ville the Crow. Nobody knows where Ville comes from, but we do know that Ville is part of this area just like you and your friends. Ville likes it here, his own nest and he thinks this is the best place to live!

Ville likes all kinds of things. He likes everything shiny and brilliant. All day long he collects new, fancy things and eats of course. He knows that it’s trendy to get new things. However, Ville cannot buy things from the shops, being a crow. Since it is very difficult for crows to push the trolley at the market, Ville is happy enough to collect things that people throw away.

Ville has a friend, Lennu the Flying Squirrel who lives in the Old Primeval Forest outside this area. Lennu never flies like Ville, but he can glide from tree to tree. He’s using his broad tail and the skin fold between his paws. Lennu is very gentle and amiable by nature.

Ville has been observing Lennu’s home forest many evenings. Now he can’t see the forest. There is a huge mountain! It seems to be growing all the time. He sees cars driving towards the mountain: trucks and lorries full of garbage. There’s a strange odour coming from the mountain.

Lennu also thinks that the mountain stinks and looks ugly. There used to be woods where the mountain is and in the woods Lennu used to fly quickly to his friend Ville. Now there are no trees, just a pile of garbage and rubbish. The mountain is so big that it covers the whole view. Lennu can’t see Ville’s nest, nor the sunrise that he so much enjoys. It’s unfortunate and very sad.

It’s tough, too, because when there is no sunrise, you can’t see the sundial, either. One morning Lennu was late from flying school and he was very annoyed. Another day he was late from tree class and that is most important of all classes.
Now more trees are cut and the pile grows. Soon it will probably reach Lennu’s nest tree! He’s worried. Therefore he decided to follow the trucks and that’s why he’s here now. Ville promised to help his friend. He suggested that Lennu might ask you club members to join them. Lennu has promised to come to your meetings every week. I, Kaarlo, think that the strange mountain is a landfill. Lennu’s issue is an important one, because nobody wants to live next to a pile of garbage! I want to help solve the waste problem, too. We bears have difficulty solving great problems by ourselves, though. Why don’t you help us find out why this mountain keeps growing and how we can help Lennu save his tree – before it’s too late! I’m sure your instructor knows what to do about the landfill. So, listen carefully. For next week, I will write to you more about Ville’s strange hobby. You will see that he’s no ordinary crow.

I hope you have a letter box at the club for important letters!
I am writing to you here in the brushwood since I have a couple of important things to tell you about Ville the Crow and his stuff puffiness. Ville is Lennu’s friend and he has many odd thoughts. He likes to get new fancy things. Ville finds it cool to have things that are at least a little more new and trendy than other crows have. Ville wants to be the emperor of the pile of stuff. However, he does not always like the things he sees in his nest, so he has to cover them with new stuff. He has not come up with other solutions.

- Why does Ville want new things all the time?
- Why do people want new things all the time?

Ville is annoyed by the fact that the more things he has in his nest, the less friends he can have over. His friends are already a bit fed up with Ville presenting his new things. They don’t understand what a crow needs a steamer or razor for. Ville has no time to play because he busies himself with the stuff.

Lennu doesn’t care about things so much. He finds it important to have his own nest that is warm and has enough room for visitors. Lennu doesn’t think he would be any happier had he the finest lash curler or egg slicer! He’d rather use his time gliding than collecting things. Gliding is nice and it does not require equipment, not a thing.

- Lennu needs warmth in his nest.
- What else do you think he needs?
- What do people need in their homes?
- What can you do without things that is nice?

Lennu wonders where everything ends up. He hopes there is no stuff puffiness in the landfill. He thinks it should be avoided and instead of buying you could play fly and seek or magpie tag!

- What is the most important thing that you have?
- And what is the least important thing that you have?
- Where do things go that we throw away?
- What causes might unnecessary things have?

Lennu thinks that stuff puffiness should be repelled as soon as the first symptoms turn up. He has written down the symptoms so you can start acting at once if you notice any of them in any of your friends.
Symptoms of stuff puffiness
• Collecting things constantly
• Idealizing shopping
• Staring at commercials
• Forgetting to save
• Dreaming of new things

Treatment of stuff puffiness.
• There are many ways of treating stuff puffiness. First you should find out if the person can be inspired to an activity that doesn’t require stuff.
• Stuff puffiness treats itself when the person realizes that he/she doesn’t need new stuff and that having too many things can also be negative.
• You might invite the patient for a visit and give him/her cake or some other delicacy that you have made.
• You may tell the person that the manufacturing and transport of the things has worn down the world’s natural resources.

In my next letter I will tell you about someone small who lives close to your homes and who might be an answer to the landfill problem!

* Read the following text to the children only if they wrote to Kaarlo the previous week.

By the way, thanks for your letters! I always read them in the evenings and I keep them in a safe place in a hole in my tree.
Greetings from the woods! This time we leave Ville to treat his stuff puffiness and we’ll explore the backyard of an old house. The house is close to Ville’s nest tree. You know, next to the old pine. There is a nice box in the yard of the old house. It is full of half-chewed food and soil! Every day, one of the people of the house brings in a bucket more bad food, leftovers and vegetable peels to the compost. After the box was built, the garbage man hasn’t come nearly as often as he used to.

I think small miracles are happening in the box all the time, something that we cannot see. Once I saw something peculiar: the people took black soil out of the box! I thought then that it must be a magic box. I’m glad I’m not in the box. If the box turns food into soil, what would it turn a bear into – a poodle??

Kosti the Compost Worm moved into the box a little while ago. Kosti is a good friend of Lennu’s, a bit quiet and unassuming. Kosti doesn’t look quite like Kaapo the Earthworm but he is every bit as wriggly. His new home is not a post box, but a compost box. You don’t have cards and letters in it, but substance. In this box, leftovers from food turn into soil. And soil grows new food for you and me! Again, the leftovers will hopefully end up as food for Kosti and his friends.

Compost is for worms a good place to live; there’s food and warmth. Kosti likes his new home very much. His main duty is to make soil of the leftovers. Kosti and his friends like to use teabags, for example. Worms do not have teatimes and drink tea from mugs, but they eat the teabags as they are. They probably think it’s a waste of water and time to drink from a mug.

Kosti is so bright that he doesn’t need a lamp in his home! Lennu asked me to tell you another funny thing: Kosti and his friends do not have teeth like we do. That is why they wait until the food is soft enough.

When he isn’t eating or making soil, Kosti does exercises too, and his worm gym is fun for all the worms in the compost – why don’t you try it too!

There are other inhabitants in the compost apart from Kosti and his lot. Also a huge family of micro-organisms lives there. That’s a family where everyone has several hundreds, if not thousands of cousins. You can only imagine how much food they need for a dinner party.

Kosti works very hard to keep the landfill from growing so fast. Kosti is with us in saving Lennu’s home tree. A world without soil is an impossible one: all flowerless and treeless. Kosti would like to remind you that wasting things is always useless and dull. Putting good food in the compost is waste. Kosti prefers vegetable peels to people’s food. “It’s yours”, he says. All food is prepared of some person’s and some worm’s region’s yields and such gifts should not be wasted.

Have you heard of a laughing machine? I wonder if Kosti would like one? I will tell you about it next time.
Hello, you very special children of the Lennu Club!

It is me, Kaarlo the Bear. I have begun to wonder where Ville’s stuff puffiness comes from. Everything comes from somewhere, and it is not necessarily the pond near my home. Lennu has some ideas of where the stuff puffiness might come from. He has noticed that all over the city there are huge pictures of different things. Lennu knows that watching these pictures makes Ville want the things in the picture.

- What are the pictures that Ville has seen?
- Are there similar pictures elsewhere; have you seen them?

Lennu has a hint that these pictures are advertisements. Those pictures always have something what everybody ought to have. “I wonder if all that is necessary”, says Lennu. It’s rather difficult to know from all these things what you really need. Fortunately, flying squirrels do know what they need. All Lennu really hopes for is a good windy weather for gliding, and a secret place for goodies. You never see those in advertisements. You should, because they are really needed! Lennu feels that all those things said to be necessary will be taken to the landfill mountain. Perhaps they are necessary to make that mountain bigger and bigger! There wouldn’t be so much waste if people didn’t buy new stuff and throw the old stuff away. Lennu had heard that when in the city, Ville can see thousands of advertisements every day. “There’s something wrong here”, Lennu thinks. Why doesn’t anyone else wonder about the multitude of those things?

- What would happen if everyone bought everything that is advertised?

Ville’s stuff puffiness has gotten so bad that I recommend we ask Aunt Kerttu for help. She always knows what to do. Last time she said I should sleep more because I was so tired. You wouldn’t believe what a good advice that was! Kerttu has learned a thing or two in her life; she probably knows about stuff puffiness, too. I don’t want to write to her myself, because she’s always asking me if I have eaten enough blueberries. That’s why I’m asking you children to write the main things. I have started the letter. And remember to mail the letter soon.

Now remember to mail the letter soon:

Kerttu the Bear
Stock Street 2
Paw Hill

Before I go, I’d like to know if you have seen anything remarkable lately? Next time, I will write to you about cans and the remarkable Mr. Merkkinen.
Hello, children at the Lennu Club!

I’m writing to you next to my home spruce. Lennu has given me regards from near your homes. Lennu likes to look at you doing things at the club. Lennu thinks the landfill problem can be solved. I heard that also Erkki Merkkinen has wondered the growing, smelly mountain. Erkki is a fox with a thick tail, who lives in the park close to Ville. It’s more difficult to see Erkki than it is Ville. Erkki is not cunning, but he is wise. He knows all kinds of important and wonderful things, like that autumn comes after summer and that rowanberries are sour.

Erkki has a thick tail, and also a lot of thoughts. He is very curious and quite remarkable like his whole family. Erkki spends a lot of time getting to know the lives of other animals in his area. Next to his home nest, there is a place where people bring all kinds of stuff. There are lots of containers. People come and carry milk and juice cartons, cereal boxes, glass jars and newspapers – and they leave with nothing. At times, there are trucks that take all the stuff from the big containers. Erkki has been observing this traffic since Christmas. Although Erkki knows that everything people throw away makes the waste mountain bigger and bigger, he feels that this stuff is not taken to the landfill. “Where do they hide all that stuff”, Erkki wonders.

The uncertainty of milk cartons is bothering Erkki so much that he wants to find out what happens. Luckily, on the side of a huge container there is a picture. Erkki figures out that the milk cartons are recycled. “I think recycling does not mean going round a circle”, Erkki thinks to himself. In the picture, there is the milk carton’s journey. The milk carton travels more than Erkki ever does! First there is just a tree, a tall one, just like the one next to Erkki’s home. “I wonder why there is a picture of a tree”, Erkki thinks. Do milk cartons come from a hole in a tree?

In the pictures, the milk carton travels from the dairy to the market, from the market to someone’s home and finally to the recycling place like the one near Erkki’s home. Then it seems to go to a factory and change into a carton roll. Is it a magic trick? Is it possible that the milk carton turns into a roll in that circle – or recycling? But where and why? Erkki wonders if all the things in those containers can go round the same circle. What will glass jars turn into?

Erkki knows that people throw away all kinds of nice and useful things, like metal tins and tires. Ville is having a party. But you have to wait until next time to hear about it.
Hello again, children!

Now I have something great to tell you. When Ville found out that you have promised to help us in the landfill thing, he decided to throw a party. He sent invitations for all family and friends. Ville gave a speech, too, which you may have heard to your homes. All the guests behaved very well.

Ville’s uncle, Verneri had made berry pies and they were served on paper plates. Ville had heard a commercial that promised easiness with paper plates. And cups, too. He bought cups, although there was nothing to drink. And plastic spoons and forks, which were thrown away, because they were too difficult for the crows to use.

Each guest got a hat and glasses. They were disposable too, which the crows could not understand, since you could wear a hat like this much more than once.

The party was great, but everybody felt bad, because Ville’s nest was soon full of garbage. Luckily, Uncle Verneri had an idea, namely to bring the issue to your club. So, Ville has left the garbage to your club door hoping that you will tell him what to do with it. It is not such a joy to have a party, when there’s so much trouble about garbage!

Ville cannot come to see you, but could you show him a good example? He can look at you in the trees if you made a picnic to the park or to the woods. I suggest you show Ville a good example and go on Kaarlo’s durable picnic! We won’t waste nature’s materials and we won’t get a mess, either, but just good ideas and a good mood.

- Durable freezer boxes are better than disposable ones, since they last for years.
- Cloth napkins are more environmental friendly and more festive than paper napkins.
- On a picnic, a juice bottle is better than a tetra pack also because it can be closed and you don’t have to finish it all at once.
Hello, children at the durable picnic!

I wish you an excellent meeting! I know the routes and paths in the forest and all the secrets, but so does Lennu.

I don’t think I’ve told you this before, but Lennu told me a secret a long time ago. Hush, be quiet. Listen to this story in silence – it is about a treasure of Hissus. Lennu knows that there is this treasure in the place you’re going today. I’m sure you want to hear more?

In every forest, park, open field and anywhere you people go on picnics, there is a magic stone hidden, the treasure of Hissus. In the course of time, that stone may have gone into many pieces, and the magic might be in several of them. The stone brings to its holder a good and peaceful mind and leaves a beautiful memory.

The treasure of Hissus is peculiar, because its magic only works if you’re absolutely quiet when you pick it up and when you’re beholding it. When you find the stone, stay quiet a bit more than a short while, a kind of a bear’s quiet steps’ sort of a while. Very, very quiet.

I haven’t been to your picnic place in many years, so I don’t know for sure where the treasure is. I suggest you try, absolutely quietly.

I suggest that each of you will have peace and quiet for finding the treasure. Ville has tried to find it, but he has been cawing all the time. That’s why he hasn’t found it.

If you do find the treasure, you don’t have to tell anybody, not even me, although I am very curious. You can keep the secret to yourself. Remember that the Hissus treasure must be left where you found it.

You have come to celebrate! So give each other gifts when you have finished your lunches. Everyone can think of a gift to the whole club. It must not be something that will end up at the landfill, but something that is not a thing, but brings joy and good mood. That’s the kind of gift I would like to have. And lots of sun and sweet dreams!
Eight meeting

Hello again!

I have been thinking about the landfill issue. Old things are taken there. You could make new things out of the old. Everyone should follow Lennu’s example. I will now tell you about Lennu’s hobbies. He doesn’t like just gliding, but wood work and repairing as well. He has made lots of useful things out of old things and fabrics, like a hanging swing. He has also made a pocket mirror, which is not very practical, though, since he doesn’t have any pockets, being a flying squirrel. He has noticed that there are lots of things at the landfill that could be repaired or changed into something new.

Ville has learned that most people want things because they just do, and because the things get broken. "I wonder if a new thing is better than a rubbishbagful of old ones?", he thinks.

"I wonder if a new thing is better than a garbage bagful of old ones?", Ville thinks.
- Should things be repaired?
- Can all kinds of things be repaired?
- What is the last thing you repaired?

Nineth meeting

Hello!

I hope you could be detectives today with something complicated. We bears like to solve all kinds of riddles and problems, but we cannot go where people are, because so many of them are afraid of us.

Ville is very concerned. Let me tell you. One rainy day a little while ago, Ville found something in a dust bin near his nest that was very useful and valuable. He found a beautiful china cup. The cup was nicely decorated and it was coloured with Ville’s favourite colours.

Ville took the cup home, of course, and put it on display. Our problem now is that the cup mysteriously disappeared. It was last seen in the window of an old lady, but it’s no longer there, either. I heard a rumour that it could be at (tell the children the place you’re going to visit next).

If you happen to see the cup, please tell your instructor and let me know as soon as possible! If we find that treasure, we shall make Ville a very happy crow. I would also like to hear about other things about your excursion to the world of used things.

Have a nice excursion!
Dear children!

This story would not exist without your help. Let me tell you. One morning, Lennu woke up, yawned and looked outside his nest window. If there were no surprises in life Lennu would have seen the high pile of garbage at the landfill and trucks that bring even more garbage. It would have ruined Lennu’s day. Even gliding would have tasted of wood.

Lennu has never been quite as surprised as he was now. He did not see the garbage mountain, but only a little pile of plastic waste. Many of Lennu’s friends were playing, and trees and bushes were growing where the mountain used to be. There was a place for playing where the landfill used to be. Animals were sniffing air which was not stuffy and did not smell bad anymore. Nothing has ever made Lennu happier than this sight of the lovely sunrise in his and his friends’ life.

Lennu has an easy access to Ville’s nest tree. Lennu thought for a while of all the garbage, where it had gone and why there was not so much waste anymore. Then he remembered your club and realized that the waste had become useful raw materials or useful things. With your help they found their way to the compost, carton factory, second hand shops, repair shops or recycling centres. And in some cases, no waste was produced at all!

The landfill had been an annoyance and now it was useless!

Luckily, it was easy for Lennu to go to see Ville. Ville needed his help and advise. Ville was going to move to a new home as crows do. The moving was not the problem, but the junk that he had – he was fed up with it, and he had understood, while watching you children, that things cause all kinds of problems. They cut down forests, and they dig holes, in order to get useless things, and then they end up at the landfill to loll and smell.

Together with Lennu, Ville formed the Society of the Smart. The first sensible thing they did was to give away Ville’s stuff to those who needed it. Some of it was taken to the recycling centre and some was sold at a second hand shop.

Lennu, Ville and myself, Kaarlo, decided that you children are clearly qualified as members of our society!

Members of the Society can advise others about landfill issues – about how to prevent their growing. The members can also help when someone else has caught the stuff-puffiness germ. The members know what to do about it and how to treat it. You will be rewarded with honour and diplomas. The members are selected carefully, so give yourselves a storm of applause that can be heard all the way to my nest.

Last, I hope that you could write to Aunt Kerttu and let her know that Lennu’s home is all right now.

Me, Kaarlo, Lennu, Ville, Erkki, Kosti and all our friends thank you, smart children for our journey together! With a bow we leave you to continue to observe your surroundings: you might see Ville cawing somewhere, a glimpse of Erkki’s tail, Kosti peeping from the ground, Lennu gliding, and myself… well, writing a letter or something.

Goodbye!
Hello Kaarlo's ________________ aunt Kerttu!
We are ______________________ from the Lennu club. We need your help, because we heard that you are very ______________________. Kaarlo has a friend, Ville, who has ________________ stuff puffiness. Ville keeps buying ________________ things and collects ________________ stuff. Even Ville’s feathers have become quite ______________________, and his nest looks like ______________________.

Have you got any ________________ advice for stuff puffiness? We would be very grateful and ______________________

Best regards ______________________
Hello Aunt Kerttu!

I told you about the problem of Lennu’s home that is rather _______________. We are now finding a _______________ solution for the problem. _________________ the children of Lennu the Flying Squirrel Club have come up with it! _________________ landfill has stopped growing. Lennu can see _______________ the sunrise. Ville has learned a lot _______________ of things, and he has become _______________. Erkki is even more _______________ than before. Things in the city are now _______________. _______________ regards from Kaarlo the Bear and the children from the Lennu Club.
Bingo questions

1. What animal is Lennu?
2. What is Lennu’s club’s name?
3. Where does Ville live?
4. What is Lennu’s home forest called?
5. What is Kaarlo’s last name?
6. What has appeared between Lennu and Ville’s homes?
7. What does Lennu think about the landfill?
8. Ville can fly, but what skill does Lennu have?
9. What is Ville’s hobby?
10. What do the club members need to solve together with Lennu and Ville?

Bingo answers

1. Lennu the Flying Squirrel’s environment club.
2. He can glide.
3. The problem of the strange mountain, i.e. the landfill.
4. He thinks it’s annoying.
5. A flying squirrel.
6. Bear.
7. The Old Primeval Forest.
8. Near the club.
10. Collecting things.
Has together with Lennu, Ville, Erkki, Kaarlo, Kosti and other children solved the Great Mystery and helped to make the waste mountain between Lennu and Ville’s homes smaller.

Lennu thus names him/her with great joy

MASTER MEMBER OF THE CLUB!

This diploma qualifies the use of this honorary title.

Time and place ________________________________

Lennu and his friends and the instructors