HEALTH messenger Junior

7

Nutrition Special

december2006

editorial

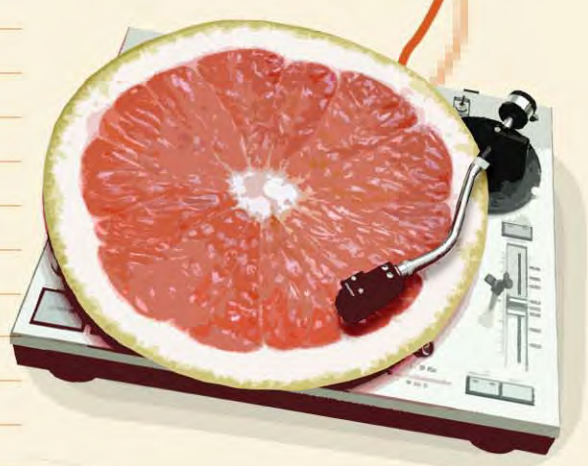
Dear reader,

Did you know that many of our clothes
are made out from petroleum?
You will understand better
with the article on the plastic,
a wonder material of our time.
You will also learn how refrigerators work,
and where does the snow come from.
Together we will visit France,
and its funny national game: the Petanque.
But we will also go in the deep jungle and
search for tiny mysterious frogs.

We would also like to talk about a fundamental
aspect of our daily life: eating.
Let's discover what the different
populations of the world eat,
and let's learn more about
foodborne diseases.

So seat comfortably and
enjoy your reading.

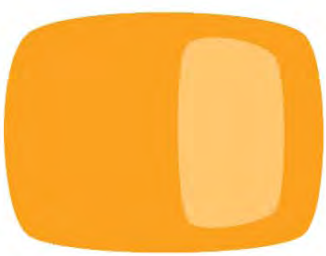
HM team



plastics

Plastic is everywhere: chairs, bottles, clothes, pipes, computers, cars, medical implants. This wonder material, water resistant and lightweight, is quite new to us. It was only about 80 years ago that plastic came into widespread use in our everyday lives.

There are some natural plastics, such as rubber and cellulose, but scientists have also discovered how to synthesize it chemically, and from there have developed a full range of different materials. Nowadays, the raw material used to make plastic is petroleum.



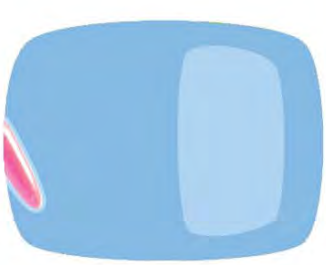
The term of plastic covers a wide range of materials.

Your T-shirts and trousers, when not made of cotton or silk, are generally made with synthetic fibres, which are a kind of plastic. This means that you are dressed with a derivate of petroleum!

Unfortunately, like many inventions, plastic has brought us tremendous advantages, but also many problems. The manufacturing process produces large amounts of chemical pollutants.

Moreover, plastic is durable and degrades very slowly.
Scientists are seeking alternatives for cost-effective plastic recycling methods, but they still haven't found the miracle solution.

So think about it: a plastic bottle that you throw away after drinking some juice, will still be here in 500 years, which is an amazing pollution for just one drink!



Frogs 101

As amphibians, frogs have one webbed foot in each of the two worlds: water and land. The advantages of this double life are clear to see. Are land predators giving you trouble? Hurry, dive into the water. Not enough to eat in the pond? Hop out and see what they're serving on shore.

Frogs can be found in an astounding variety of climates. They live just about anywhere there's fresh water, from the desert to the Arctic. Though they love warm, moist tropical climates, frogs also live in deserts and on high mountaintops (sometimes 15,000 feet tall) The Australian water-holding frog is a desert dweller that can wait up to seven years for rain. It burrows underground and surrounds itself in a transparent cocoon made of its own shed skin.

Like all amphibians, frogs are cold-blooded. This means that their body temperatures change along with the weather and their surroundings. When temperatures drop, some frogs dig holes and hibernate until spring, staying perfectly still and scarcely breathing. Wood frogs can live north of the Arctic Circle, surviving for weeks in a frozen limbo state.

Frogs have a reputation for leaping that is well deserved.

Launched by their long legs, many frogs can leap up to twenty times their body length. (That would be about a 100-foot jump for you or me!) The longest frog jump on record was made by a frog named Santjie, at a frog derby held in South Africa. Santjie won the competition with a jump of 33 feet 5.5 inches (almost 10 meters).

DENDROBAT: A BEAUTIFUL TOXIC FROG

Dendrobat is a small, funky and beautiful frog from the Amazon Forest, with an incredible range of colour: from electric blue to gold, all kind of psychedelic purples, bright yellow and dull orange. Although these frogs are very beautiful, no one should ever try to touch them, as their skin secretes a highly toxic alkaloid substance due to the insects and plants it eats everyday. This ability to produce poison has earned them the name "Poison-Arrow Frog", as the people of the Amazon use those secretions (they cook the frog first!) to coat their arrowheads for hunting and paralyzing their prey.

After his romantic journey to Mogok, our Pigeon Kho Kho is now in Moulmein, the third largest city in Myanmar. It is a port on the Gulf of Martaban near the mouth of the Salween River.

"Hi, Po Kwa Doh,

Here I fly, 300 kilometres southeast of Yangon! Moulmein stretches, L-shaped, along a small ridge of hills crowned by several prominent pagodas. The majority of the inhabitants are Mon, but many Burmese and Karen people also live here.
Mawlamyine is famous for its cuisine and tropical fruits. As the popular Burmese expression says: "Mandalay for the speaking, Yangon for the bragging and Mawlamyine for the eating."

During my stay, I visited some nice places. I could see the Kyaikkami pagoda, which is perched over the water, 900 feet from the shore! It is amazing. You can only reach the pagoda via a two-level causeway over the sea.

As I am on the coast, I went to relax on Setse beach. This is a very wide, brown sand beach, It was a delight to sit on the beach, watching the sunset, and enjoying fresh young coconuts full of juice.

Tomorrow, I will go to Win Sein Taw Ya to see the biggest reclining Buddha.

Unfortunately, I didn't get enough time to tour the Thanbyuzayet Allied War Memorial Cemetery near the famous Death Railway over the River Kwai. Next time, we will go there together.

Write to you soon.

Kho Kho"

Karen New Harvesting Ceremony

ကရင် ကောက်ရိုပ်သိမ်း ပွဲတော်သစ်

The Karen traditional farming system is the one of rotational farming. It consists of burning a plot of land every year to use for rice cultivation. The following year, the farmers move to another place, so that the forest can grow again on the harvested site.

Every step of the cultivation is governed by ceremonies, joining together the cycle of life and the cycle of the cultivation.

In the month of La nau (November), before harvesting the rice, the Karen will perform a ritual called "Aww Boo Thaw Kho" (the new rice ritual). In this ritual, each family will prepare a curry made of two crabs, two fish, two frogs (mating couples) and a variety of vegetables which are available in the rice fields.

Before the meal, the head of the household will symbolically offer new rice and curry to the fireplace, the mortar, the ladle, the tray, the rice pot, and the main beam of the house. This ritual aims to strengthen the heart of the rice so that it will be resistant to rain, heat, cold and disease. By feeding the tools and instruments, the household shows its gratitude for good crops as well as their thanks to these tools and instruments.

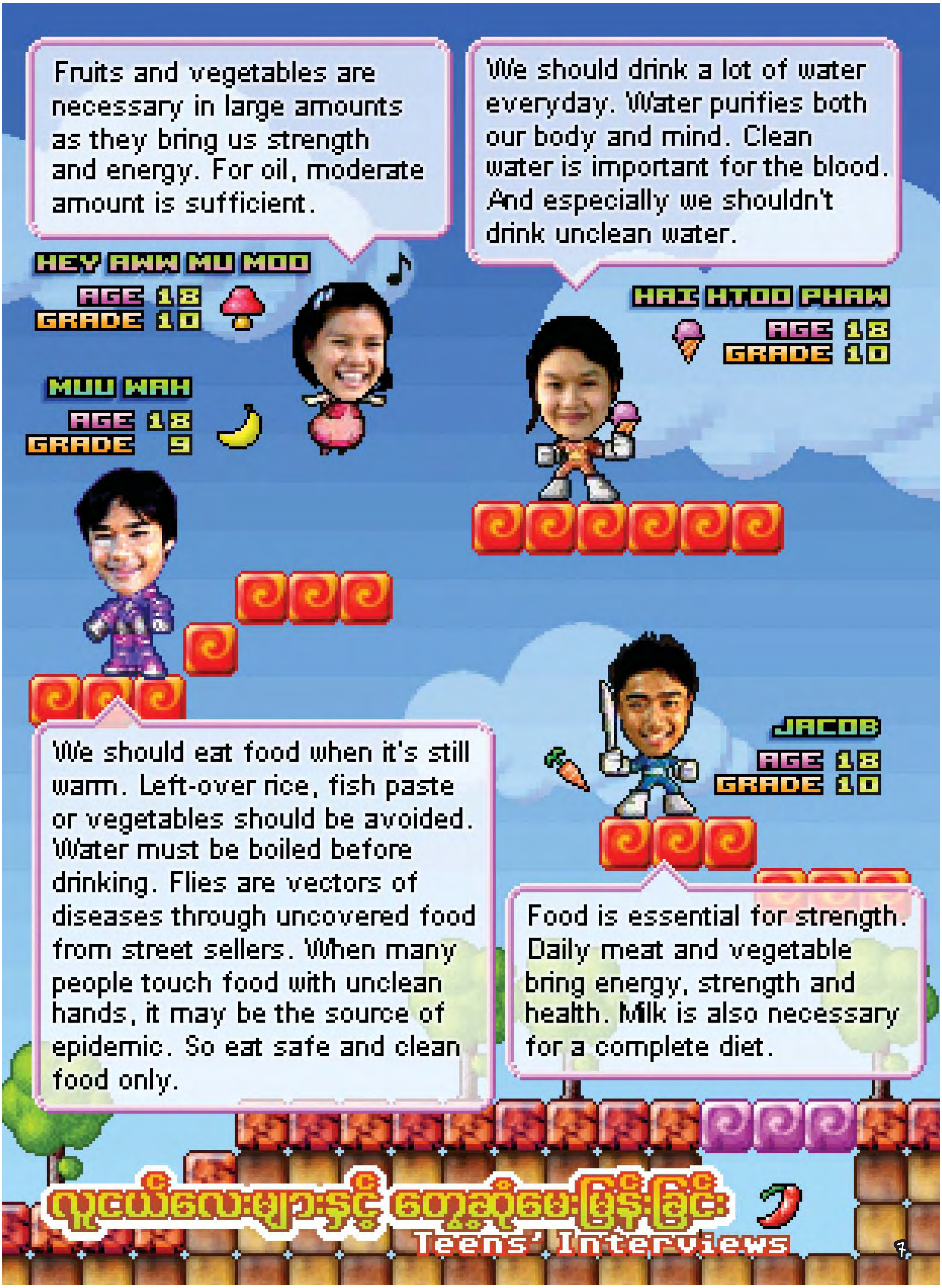
Teens' Drawings

ယူယေလးတို့ ဲပန်း

Saw Ghay Htoo
14, 7th standard
No.5 High school, Maela

Saw Tha Tay
16, 6th standard
No.5 High school, Maela

Way Htoo
16, 7th standard
No.5 High school, Maela



The frog that wanted to get as big as the cow

နွား ကဲ့သို့ ကြီးချင်သော ဖား

A young frog set out on his first adventure. As he came out of the pond he saw a large ox grazing in a field. Having never before seen such a creature, he hopped excitedly to his father, the bullfrog, and said, "I have just seen the biggest frog in the world!"

"Humph!" said the bullfrog, "Was he as big as me?" and he puffed himself up.

"Oh, much bigger than that!" said the little frog.

"Was he THIS big?" said the bullfrog, puffing himself up even larger.

"Much, much bigger than you!" said the little frog.

"Ridiculous!" said the bullfrog, who fancied himself much more important than he was. "He couldn't be bigger than me! I'm the oldest frog in the pond. I was here first! Was he bigger than THIS?"

He puffed and puffed himself up so much...that he finally burst!

Nutrition Scale

Healthy
Low in fat content?

Nutritious
Does it Retain vitamins and minerals?

Tasty
Is it flavourful?

Safe
Minimal risk of injury while cooking?

Fast
Is it an efficient method of cooking?

Attractive
Does it make food look good?

the Winner! ***Steaming***

Cooking Competition !

Why do we eat? Not only to stop hunger.

Food brings you energy, allows you to grow, to repair your body, to resist disease.
Each type of food plays its own important part in the process, and that's why you shouldn't miss one.

EUROPE

- Wheat, barley, potatoes
- Salad, chestnut, pear, peach, melon
- Lamb, rabbit, mussels

NORTH AMERICA

- Maize, wheat
- Lettuce, salad, cauliflower, blueberries, orange, olive
- beef, pork, poultry

SOUTH AMERICA

- Quinoa seeds, maize, sweet potatoes
- Roselle, tomatillos, Yuka, okra, avocado, guava
- Beef, veal, red snapper

food of the World

It's especially important to eat vegetables and fruit several times a week, as they bring you the vitamins necessary to fight disease.

Cereals are fundamental since they provide you the energy for greater endurance.

Meat and fish will build and maintain your muscles, your skin and your blood.

Let's discover how, everywhere in the world, people manage to eat a balanced diet.

ASIA

- Rice, sticky rice
- Chinese cabbage, gingerroot, bamboo shoots, green mango, rambutan
- Pork, catfish, shrimp

AFRICA

- Rice, millet, sorghum
- Manioc, beetroot, pumpkin, spinach, banana, jackfruit
- Barracuda, mutton

AUSTRALIA & NEW ZEALAND

- Oat, sorghum, wheat
- Tea, nuts, kiwi, lilly pilly, strawberry, cherry
- Beef, lamb, kangaroo

Food-borne Diseases
အစားအစာမှတဆင့် ကူးစက်သောရောဂါများ

We have all had diarrhoea before. However, this infection can be easily avoided. Let's learn more about food-borne diseases, to see how we can avoid them.

What is a food-borne disease?

Food-borne diseases are caused by consuming contaminated foods or beverages.

The symptoms of food poisoning commonly include nausea, vomiting, abdominal pain, diarrhoea and fever. There are many different food borne diseases. Typhoid, cholera, hepatitis A, diarrhoea, worms, are some examples.

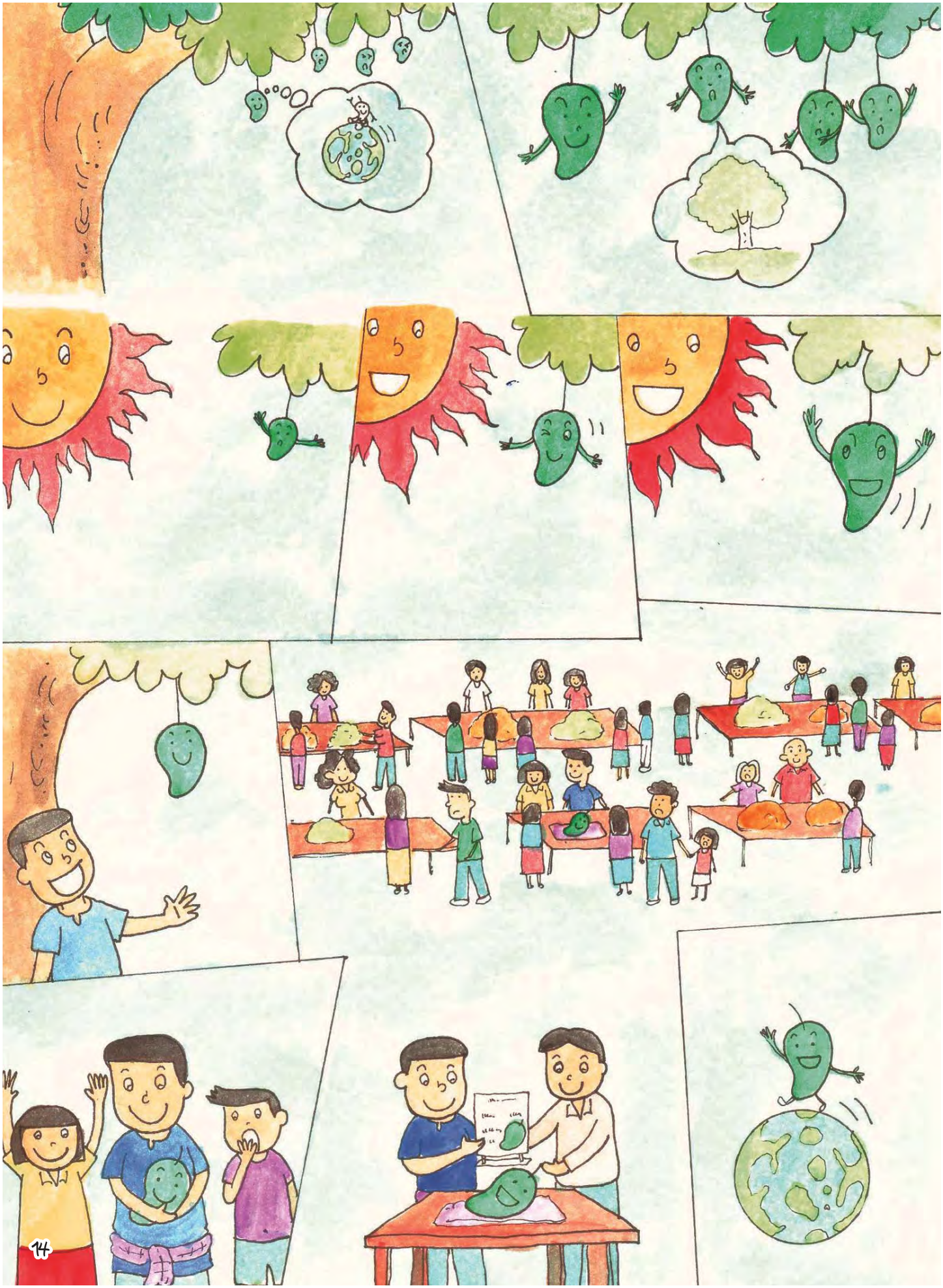
How do the viruses develop inside of our bodies?

After a virus is swallowed, there is a delay, called the incubation period, before the symptoms of illness begin. This delay may range from hours to days, depending on the organism, and on how many of them were swallowed. During the incubation period, the microbes pass through the stomach into the intestine, attach to the cells lining the intestinal walls, and begin to multiply there. Some types of microbes stay in the intestine, some produce a toxin that is absorbed into the blood-stream, and some can directly invade the deeper body tissues.

How to prevent food-borne diseases?

Food-borne diseases are very common and can sometimes be very severe.
But they are quite easy to avoid, and the risks can be greatly reduced if some basic rules are followed:

- Keep food storage areas clean, cool, and dry.
- Do not store food in containers that are used for other purposes.
- Keep food covered while it is being stored.
- Make sure the areas where food is prepared is kept clean, as well as all pots, pans and utensils such as knives, forks and spoons.
- Wash fruits and vegetables in clean water before cooking.
- Make sure the water used for cooking and washing is clean and from a safe source.
- Wash your hands with soap and clean water before preparing or eating food.
- Keep insects, pests, animals, birds, dust and fumes away from food.
- Do not keep food too long. Throw it away if it looks, or smells, bad or spoiled.
- Raw meat, poultry, fish and eggs require special care as they always have bacteria on their surface. Proper cooking will kill these bacteria and make the food safe.
- Never eat sick chicken or duck, and cook them well, as there are risks of birdflu.
- Do not keep already cooked food for a long time; eat it as soon as it is cooked.



When your body gets ready for dinner

ညစာအတွက် ပြင်ဆင်ခြင်း

Have you noticed that you breathe without even thinking about it? Your body is very well made, and takes care of many things without you having to think about it.

Hunger

How does your body know that it is time to eat? People think that it is when your stomach is empty. But it doesn't happen like this. Hunger starts when certain nutrients (the nutritious elements present in the food) are missing in the blood. Our brain contains a "hunger centre," which functions as an accelerator, or as a brake, for our stomachs and intestines. Once necessary nutrients are lacking from the blood, the dinner bell is rung, and the stomach and intestines come rumbling.

Rumbling of Stomach

Your stomach then starts to work for the digestion, but it is still empty. The walls of the stomach squeeze together in an attempt to mix and digest food and there's no food there. Gases and digestive juices slosh around in your empty stomach, and everybody around you can then hear it.

Salivation reflex

And if, at the same time, you suddenly notice a pleasant smell of food, you will probably begin to salivate.

The role of the saliva is to start the process of digestion by making food softer When your body senses the presence of appetizing food, it prepares for eating by releasing saliva.

THE COUNTRY

Situated in Western Europe, bordered by the Atlantic Ocean and the Mediterranean Sea, France is a country that is 1000 km from East to West, as well as from North to South. France's neighbours are Great Britain, Belgium, Germany, Switzerland, Italy and Spain.

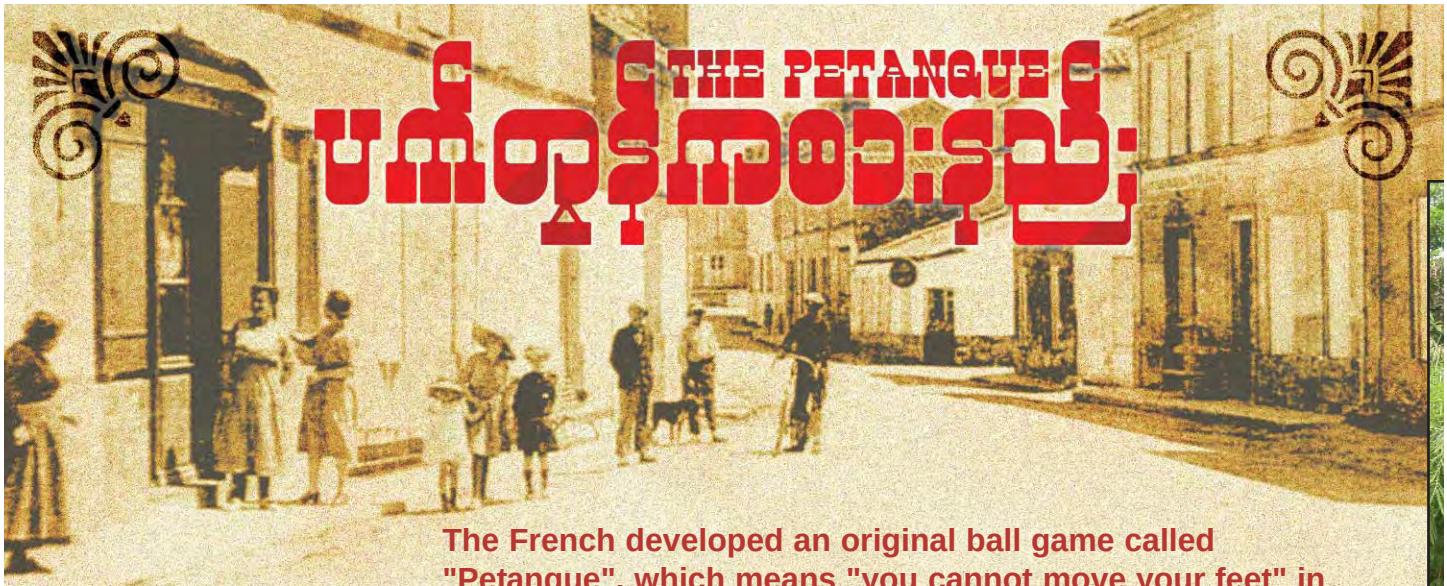
The climate is mild, with 4 (3 month long) seasons: spring, summer, autumn and winter.
This is a country of many contrasts. France has, both big, crowded cities surrounded by large suburbs, and also small villages where life is much quieter.
In the great fertile plains, people cultivate grain (wheat, maize) and grow grapes for making wine. The vineyards produce wines that are famous worldwide. France's many cows allow the production of more than a hundred types of cheese.
Several mountain ranges, covered with snow during the winter, permit people to enjoy skiing and snowboarding.
Once upon a time, France was a monarchy. The cathedrals and beautiful palaces that remain from this period, constitute an important part of France's rich cultural heritage.

For all of these reasons, and more, France is the most visited country in the world, receiving 76 million tourists, this year alone

THE PEOPLE

France is a democracy, with an elected president. The majority of the population is Caucasian, and largely Christian. However, over the years, France has welcomed many immigrants from Africa and Asia, whose cultures and religions have enriched the country. France is well known for its stance on human rights, and its humanitarian influence make it a much listened to voice worldwide. Although all children have access to school and to university, finding a job is not always easy; unemployment is high and often generates demonstrations that voice peoples' discontentment.

Young people aspire to interesting work in which they can invest their time, energy and talents, but which will also leave them free time to devote to their personal lives.
The national sport is football. The French team, "les Bleus", won the world cup in 1998 and reached the final in 2006 with the help of their famous player, Zinedine Zidane.



THE PETANQUE
ပင်တန့်ကစား:နှည်း:

The French developed an original ball game called "Petanque", which means "you cannot move your feet" in local dialect.

Objective:

To get the balls of your team closer than the balls of the opponent's team to a smaller ball called a "jack".

Team and material:

1 Teams can be: 1 against 1 / 2 against 2 / or 3 against 3.

2 Every player has 3 balls the size of a hand. You can make a ball using any kind of material, even if the real game uses metal balls.

3 You will also need a jack, a smaller ball the size of half of your hand, and preferably wooden.

4 You can play in any kind of field.

5 Draw a circle on the ground on which you can stand, which is the place from which every player will send the balls.

Let's play!

Rules:

1 The first team sends one member to throw the jack from the circle with one hand. Then, one player from each team throws his first ball, trying to get it as close as possible to the jack. The best ball gets "the point".

2 The team who hasn't got the point plays and tries to regain it by getting his ball closer to the jack. If it doesn't succeed, it keeps on trying. It is allowed, and very funny, to do this by knocking the ball of your opponent, or the jack, further away.

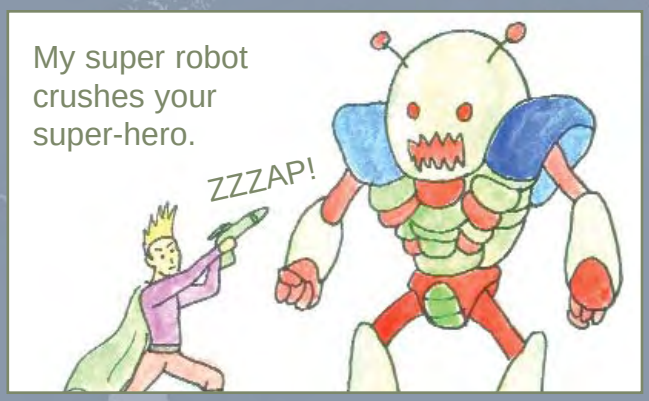
3 When one team has no balls left, the other team plays all of its balls.

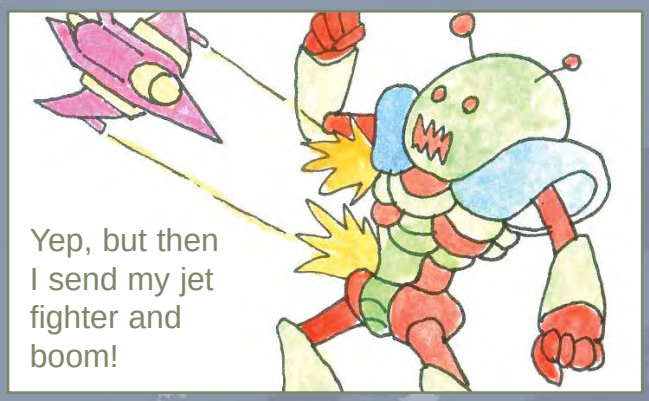
Once all the balls are played, the best team gets one point for each ball that is closer to the Jack than any ball of the other team. Several of these matches are played, until one team reaches 11 points and wins the game

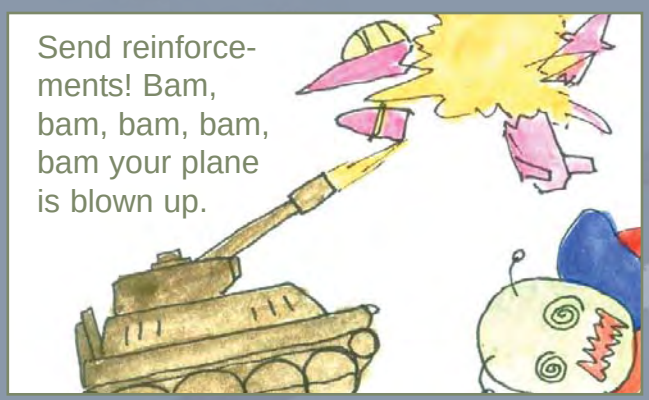
The Magic Candleholder

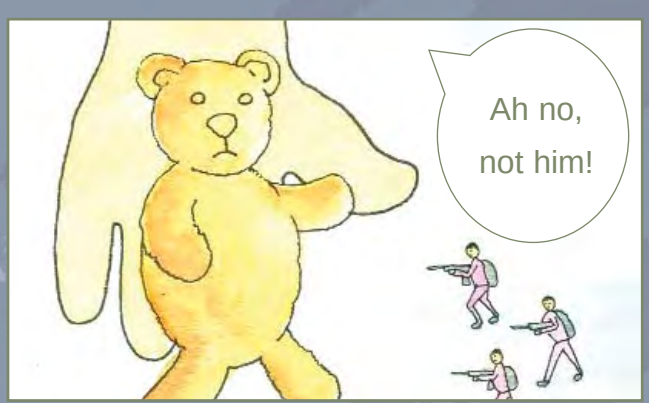
episode 7

CHILDREN'S RIGHTS
ကလေးတို့ရဲ့ဥပဒေများ









Children have the right to be protected in times of armed conflict.

The Refrigerator

The refrigerator (also known as a fridge) is a great modern invention. Its purpose is to keep food fresh longer, by keeping it cold. This slows down the growth of bacteria which causes food to spoil.

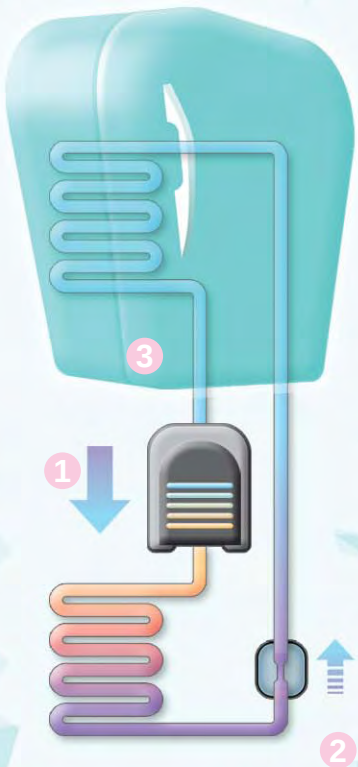
How does it work?

The main idea behind a refrigerator is simple: It uses the evaporation of a liquid to absorb heat. You probably know that when you put water on your skin it makes you feel cool. As the water evaporates, it absorbs your heat, creating a cool feeling. The **coolant** in a refrigerator works in the same way, by absorbing any heat that is inside the refrigerator.

The refrigeration process:

1. The **coolant** begins in the **Compressor**, where it is compressed until it gets very hot from increased pressure and then begins to **evaporate** (turn to **vapour**). In this state it absorbs heat from the air inside the refrigerator
2. Then the coolant is pumped through to the **Condenser** - this is a set of copper coils on the outside of the refrigerator. Here, the coolant **condenses** (turns back to a **liquid** state), releasing its heat to the outside air as it does so.
3. After cooling down again, the coolant returns to the compressor, where again it heats up and absorbs any heat within the refrigerator

So a refrigerator works not by cold air being pumped inside it, but by heat being sucked out of it!



Glossary

Bacteria - a type of microscopic plant that causes food to spoil.
Compress - to force or press together, or to apply pressure.
Condense - to change from vapour to liquid.
Coolant - a chemical fluid used as a cooling agent. E.g., Freon is a type of coolant.
Evaporate - to turn to vapour.
Vapour - a substance in the form of a mist or smoke, esp. one coming from a solid or liquid.

the snow

Where does snow come from?

Water exists in three different forms (liquid, solid or vapour) depending upon its temperature. In the earth's atmosphere, water exists in its gaseous form as water vapour. Water vapour condenses into clouds and falls to the ground as rain or snow.

How is snow made?

When the air temperature is at, or below, the freezing point (0?C), water vapour in the air freezes and forms tiny ice crystals. The crystals join together to form soft, white prisms, often not more than half an inch in width. These crystals are known as snowflakes. Snowflakes can be many different shapes and sizes, but are always hexagonal (6-sided) and symmetrical (a shape balanced on all sides). Snow can be described as the mass of these beautiful crystals of frozen water vapour, which then fall to earth.

If ground temperature is at or below 0?C, then snow settles and creates a cold, thick, white blanket - often several feet deep - over the earth. If the temperature is too warm, then snow melts and transforms to liquid.

Which sports involve snow?
Many winter sports involve racing down the snowy mountainsides. Skiing, Snowboarding, Bobsleigh are some examples. In Speed Skiing, the world record is 156 mph (251 km/h)!

Is snow edible?
Yes, but as it is only made up of frozen water vapour, it isn't very nutritious. In fact, we would use up more energy eating snow than we would gain, so it would not make a satisfying meal! Besides, it is very cold

How many snowflakes need to fall to cover a mountain?
It takes about one million snowflakes to cover a 2 square foot area with 10 inches of snow, so a lot of snow needs to fall to cover a mountain!

Are snowflakes identical in shape?
No. Of the billions of snowflakes that fall in a single snow storm, it is likely that each flake will be different in shape.

games משחקים

Here are some names for different parts of the body.
We have hidden these words in the grid.
Discover where they are, and when you find one, circle it in the grid.

N	H	R	A	O	H	B	I	J	Q
Z	U	E	J	J	L	P	Y	K	O
E	A	F	A	Q	K	N	E	E	B
J	L	F	N	D	R	K	X	K	P
G	T	B	R	Q	H	A	N	D	L
N	C	M	E	R	T	O	E	D	E
S	H	O	U	L	D	E	R	P	G
A	F	E	E	T	A	R	M	K	E
T	V	F	I	N	G	E	R	N	F

This month, we answer some questions of our readers from Maela High School No 5.

READERS' MAIL ★ ဖတ်သူများ၏ စာ

Is eating spicy food dangerous?

No, there is no risk with eating spicy food. Only be careful not to touch your eyes after touching chilies! In fact, chilies are rich in vitamin C and provitamin A.

The "heat" of chilies is measured in Scoville units (SHU), the name of the chemist who first tried to measure the heat of peppers in 1912.
His original test consisted in determining how much the chili extract needed to be diluted before it no longer had a detectable heat sensation.
This testing method was highly subjective and is no longer used. Today, special machines measure a pepper's heat.

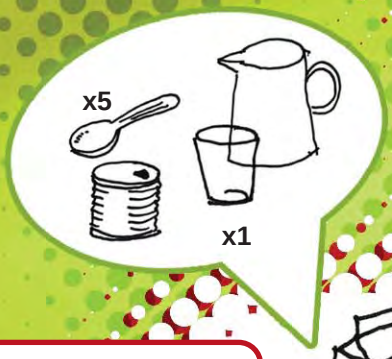
The hottest chili is the Habanero (meaning from Havana), rating around 300 000.
The Thai chili is rated between 50,000 and 100,000 meaning that 50 000 parts of sugar water are required to dilute one part thai chili extract until its heat can no longer be felt.

Where does the salt come from? What are its constituents and should we eat it in big quantities?

Salt is one of the very few rocks commonly eaten by humans. It is contained in sea water and in rock salt.
Salt is essential for the good functioning of our body. It is mainly composed of sodium chloride, and a small amount of Iodine is also added.

Too little salt can lead to muscle cramps, dizziness, and also to goitre (a disease causing a swelling in the neck).
But too much salt also causes health problems, such as hypertension. In general, we should not eat more than 1 teaspoonful of salt a day.

How to make crepes?



1/4 L of milk (5 big spoonfuls condensed milk + 2.5 cups water)

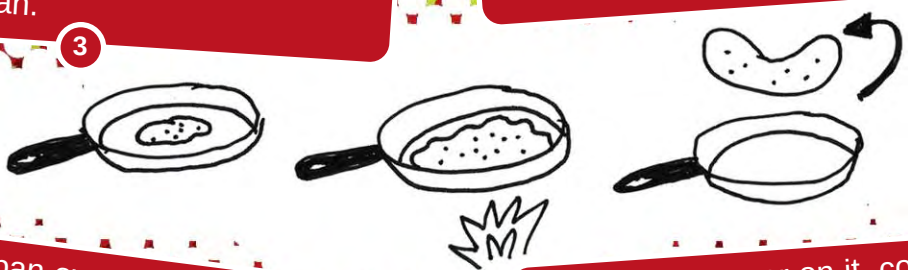
1 Egg

Oil

Sugar

250 g rice flour

1. Break the egg into the bowl; add the flour, milk and 1 spoonful of oil. Mix it until the batter looks smooth and is light yellow.
2. Grease the pan with the oil.
3. When the pan is hot, pour a small cup of the batter in the pan. Turn the pan to spread the batter until it covers the entire bottom of the pan.



4. Heat the pan over a slow heat.
5. Cook gently.
6. When the outer edge of the crepe turns golden and starts to detach from the pan, it is time to turn the crepe upside down (use a spatula or spoon to flip it onto its other side)
7. Cook the crepe one more minute on the other side, and it's ready
8. You can put sugar on it, condensed milk, fruit, or whatever you want!
9. Fold it or roll it up, and enjoy.!

Health Messenger Junior is a quarterly publication of the French NGO Aide Medicale Internationale, realized in collaboration with UNICEF and ECHO. It aims at sensitizing children from school standard 6 to 10 living along the Thai-Myanmar border to major health issues, providing them with lifeskills and opening them up to other perspectives. Health Messenger Junior is developed in collaboration with various agencies involved in the education sector, as well as with teachers and educators working in camps and migrant communities in Thailand.

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