GROW SMART

GROW SMART

An initiative by GROWTHPOINT PROPERTIES

WESTERN CAPE Education Department
Provincial Government of the Western Cape

First Edition 2011

Life's a lunchbox

FUN EXPERIMENT:
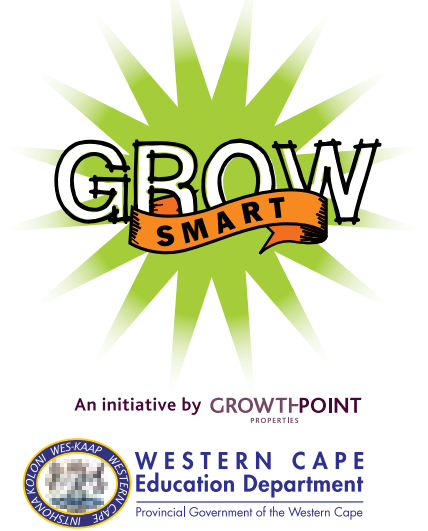Let's grow some mould!

DID YOU KNOW THAT EATING VEGGIES CAN GIVE YOU SUPER POWERS?

Are you the next Mzoli Ngcawuzele?
Start your own business and find out

Take a look at THE WORLD'S GREATEST food inventions

Visit a French restaurant with Vuyo and Gemma

DEAR GROWSMARTER

Welcome to the *Life's a Lunchbox* edition of the Growsmart newspaper! In this edition, you'll learn all about interesting food inventions from around the world, the super powers that vitamins can give you, jobs one can do in the food industry and ideas of how you can make something yummy to eat and sell it to your friends and family.

At Growsmart we believe that maths and science are just as much fun as literacy, that's why you'll find some interesting maths problems to solve plus a cool experiment!
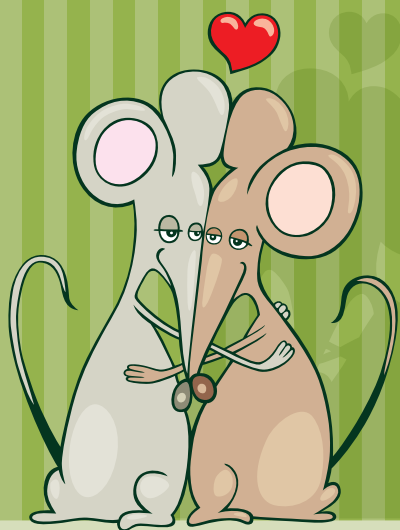
There is also an interesting section about peer pressure. And you can join your favourite mice, Vuyo and Gemma, on a fancy dinner at a French restaurant.

Good luck with preparing for the Growsmart competition. Remember, if you work hard and give your best, you'll do well!

Until next time,
THE GROWSMART TEAM

achieve allow APPLE assembly breathe BICYCLE cabbage catastrophe CATERPILLAR chocolate CREATURE crocodile COLOURFUL CONFUSING continent crochet CRUCIAL cucumber CURVE curfew DAWN disappear discrimination difficult DISSOLVE EDUCATION encyclopaedia enthusiastic experiment favourite FOREST gaze gigantic glue guess GUARDING highway hippopotamus HORIZONTAL interesting ISLAND jealous journey knitting KNIFE knowledge LEGEND LETTUCE language literature liquid machine magnify MANDATORY mathematics message mischief MUSICIAN naughty neighbour noise noticeable obligated OCCASION occupy octopus OPPOSITE parents phobia pillow POPULAR probably QUANTITY queue raincoat rectangle RESTAURANT rooster rope salad SANDWICH science scissors SECRET silver SIMILAR someone successfully spaghetti symbol tarantula teacher teacup television TERRIFIC tired toaster toolbox trouble traitorous TURQUOISE ultimate umbrella UNIVERSE UPSTAIRS upright value venomous vicious visual volcano weekend WINDOW whiskers wonderful wooden xylophone yawn yoghurt zest

Vuyo and Gemma visit a French restaurant

It is Vuyo and Gemma's fifth anniversary and the quadruplets are staying at Aunt Ellie's for the evening. You see, Vuyo has decided to take Gemma to a very special (and expensive!) French restaurant to celebrate.

The Jack Russel Taxi specially wore a bowtie for the occasion. He barked three times to let Vuyo know that he's waiting to take them to Ratatouille, the best French restaurant in town.

Gemma looked beautiful! She wore her prettiest dress with a pair of beautiful high heels, red lipstick and curls in her shiny hair.

Vuyo went all out to make the occasion extra special. As soon as they arrived at the restaurant, a string quartet played Gemma's favourite song, "Pretty mouse girl, walking down the street. Pretty mouse girl, the kind I'd like to meet..."

When the waiter came to take their order for drinks, Gemma said she wanted a bottle of their finest French mousepagne to celebrate. (Mousepagne is a special type of champagne, specially made for mice).

Vuyo felt his fur stand up and his tail shake, there is no way that he could afford a bottle of French mousepagne! After all, he only held a simple job at the quality control department of the cheese factory.

The cheapest bottle of French mousepagne costs R282. Vuyo only brought R500 along to the restaurant. Do you think it's a good idea to buy the bottle of mousepagne?
Answer: _____
Do you think he'll be able to afford starters, main course and dessert for him and Gemma if he buys the mousepagne?
Answer: _____
Can you think of a solution to this problem?
Answer: _____

Vuyo decided to order mousepagne by the glass. This was a very clever idea, because now he only had to pay R45 per glass.

If each of them had only one glass of mousepagne, how much did Vuyo save?
Answer: _____

Gemma and Vuyo shared a plate of snails smothered in garlic butter and a baguette for starters. After that they ordered a very special French delicacy for mains called cuisses de grenouilles (fried frog legs).

They received 15 legs to share between the two of them. Gemma wanted to take 4 of the legs home with them, so the quadruplets could also taste, so she wrapped the legs in a serviette and hid it in her handbag. How many frog legs do they have left? How many legs will each of them get if they share it equally?
Answer: _____

Vuyo and Gemma each had a decadent portion of chocolate mouse mousse for dessert. It was the best mouse mousse that Vuyo had ever tasted and he couldn't wait to visit the French restaurant again. But then the bill arrived...

Vuyo owed the restaurant R90 for the two glasses of champagne, R65 for the snails, R12 for the baguette, R172 for the frog legs and R42 for each of the desserts plus a 10% tip for the waiter. He also has to pay R30 to the string quartet when they leave. Does Vuyo have enough money to pay the bill or will he have to spend the rest of the evening doing restaurant dishes?
Answer: _____

Vuyo completely forgot that he still owed the Jack Russel Taxi some money, so he and Gemma had to walk home. They didn't really mind, because they had a magical evening and with a little imagination they could even see the silhouette of the Eiffel Tower in the distance.

A TIP IS A SUM OF MONEY GIVEN TO SOMEONE AS A REWARD FOR THEIR SERVICES.

LINDA

GENIUS TEST

Are **you** a genius in the making? Take **our** test and find out!

THE CLOSER YOU READ, THE BETTER YOU'LL DO!

LINDA

1 — How many birthdays does the average man have?

2 — Some months have 31 days; how many have 28?

3 — Is it legal for a man in South Africa to marry his widow's sister?

4 — What's the answer when you divide 30 by ½ and add 10?

5 — If there are 3 apples and you take away 2, how many do you have?

6 — If a doctor gives you three pills in a bottle, telling you to take one every half hour, how many minutes until the pill bottle is empty?

7 — A farmer has 17 sheep and all but 9 die. How many are left?

8 — An assistant in a butcher's shop is 1,7 metres tall. What does he weigh?

9 — How many two cents stamps are there in a dozen?

HOW DID YOU SCORE?
9 GENIUS!
8 - 6 Not bad!
6 - 4 Try again
0 - 3 Were you awake?

Answers: 1) One 2) They all do 3) No, he's dead 4) 70 5) 2 6) 60 7) 9 8)Meat 9) 12

VITAMIN HEROES

Is it really a good idea to eat spinach and peas?

Eating vegetables is not just an evil scheme grownups thought of to make life difficult for us. A balanced diet with vitamins and minerals helps us to grow up healthy and strong... And it can give you super powers, like seeing better in the dark and growing super strong bones!

YOU CAN BECOME A VITAMIN HERO!

Here's a list of the vitamins you need to develop super powers.

Vitamins are organic substances. (That means they are made by plants or animals.)

Minerals are inorganic elements. (That means they come from the soil and water and are absorbed by plants or eaten by animals.)

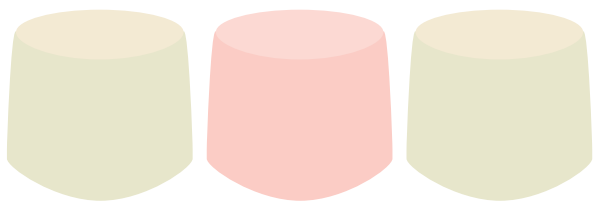| VITAMIN	WHAT SUPER POWERS DOES IT GIVE YOU?	WHERE CAN YOU FIND IT?
A	It keeps your eyes healthy, so you can see better in the dark! It makes your immune system stronger (so you won't get sick easily). It keeps your skin healthy. It helps your body to grow new cells and ultimately, for you to grow big and strong.	
B_1	Vitamin B1 helps your body to change carbohydrates into energy. It also ensures that your heart, muscles, and nervous system function properly.	
B_2	Vitamin B2 gives you super vision, because it keeps your eyes healthy! It also helps your body to turn carbohydrates into energy and produce red blood cells. (Red blood cells are like little red taxis carrying oxygen passengers through your body.)	
B_3	Vitamin B3 keeps your skin and nervous system healthy. It also helps the body turn food into energy. (Superman definitely needs lots of Vitamin B3, because he moves really fast and uses lots of energy!)	
B_6	Vitamin B6 helps your brain and nervous system to work well. It also helps the body break down proteins and make red blood cells.	
B_9	Vitamin B9 is super cool, because it helps your body to make red blood cells and DNA!	
B_{12}	Vitamin B12 helps your body to produce red blood cells. It also helps your nervous system to work well.	
C	Vitamin C is needed to form collagen, a tissue that helps to hold cells together. It's essential for healthy bones, teeth, gums, and blood vessels. It helps the body absorb iron and calcium. It makes your wounds heal super fast. And it helps your brain to work better.	
D	Vitamin D helps to make your bones as strong as steel, because it helps the body absorb bone-building calcium. This vitamin is unique, because your body manufactures it when you get sunlight on your skin!	
E	Vitamin E is an antioxidant; this means that it helps protect cells from damage. It is also important for the health of red blood cells.	

The world's greatest food inventions

Imagine a world without chocolate chip cookies, potato chips, hot dogs and candyfloss. Thanks to some creative inventors, we can enjoy all these nice things. Who knows, you might be the next mastermind behind a delicious snack!
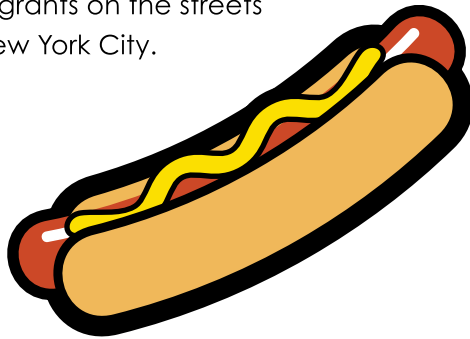
Marshmallows

Marshmallows were invented over three thousand years ago by ancient Egyptians. The Egyptians made soft sweets from the root of the marshmallow plant. Today, gelatine is used instead of the sweet, sticky marshmallow root.

Hot dogs

Hot dogs began as sausages sold in bread rolls. The roll replaced a plate and made the hot dog easier to carry and eat. They were first sold in the 1860s from carts by German immigrants on the streets of New York City.
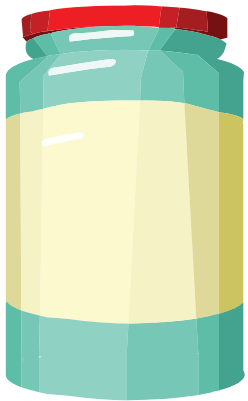
Candyfloss

Candyfloss is made from sugar that is heated and spun into thin threads (almost like that of a spider's web). Two sweet makers from America, William Morrison and John C. Wharton, made this treat in 1897.
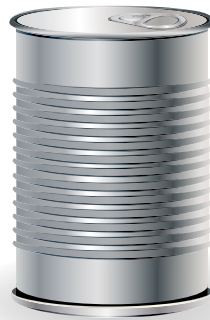
Mayonnaise

Mayonnaise was invented hundreds of years ago in France. It is believed that the first person who made it was a French chef working for the Duke de Richelieu. In 1905, the first ready-made mayonnaise was sold at Richard Hellman's New York deli. In 1912, mayonnaise was mass marketed and called "Hellman's Blue Ribbon Mayonnaise".
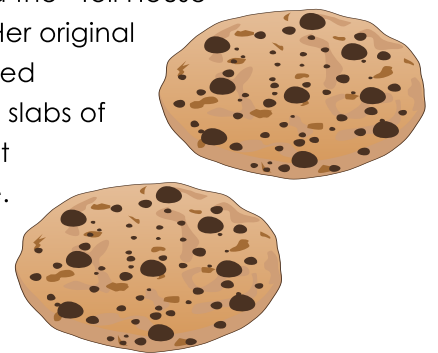
Food tins

Englishman Peter Durand invented the first tin can in 1813. The tins were made to preserve food. At the time, you had to use a hammer and chisel to open it. The tin opener wasn't invented for another 50 years.

Chocolate chips

Ruth Wakefield invented chocolate chips (and chocolate chip cookies) in 1930. Wakefield ran the Toll House Inn in the USA. Her new cookie invention was called the "Toll House Cookie." Her original cookies used broken-up slabs of semi-sweet chocolate.
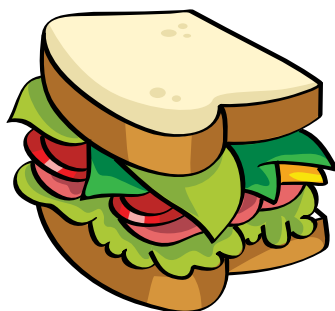
Coca-Cola

Coca-Cola was invented in 1886 by John Pemberton, an American pharmacist. Pemberton concocted the Coca-Cola formula in a three legged brass kettle in his backyard. The name was suggested by John Pemberton's bookkeeper, Frank Robinson.

The sandwich

The first sandwich was invented in about 1762 by John Montagu, the 4th Earl of Sandwich. He was too busy to have a formal meal, and instructed his cook to pack his meat inside the bread to save him time
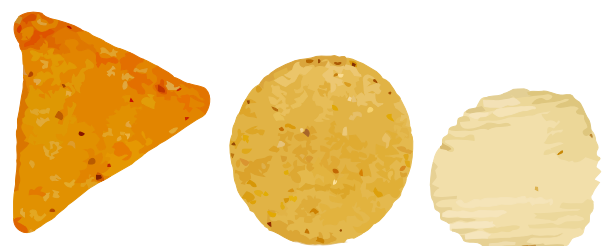
The ice-sucker

The ice-sucker was invented in 1905 by an 11-year old, called Frank Epperson. Epperson had left a fruit drink with a stirrer in it out overnight in snowy weather. It froze, making a new treat.

Potato chips

The crispy potato chip (similar to Simba or Willards) was invented in 1853 by George Crum. Crum was a chef at a restaurant in New York. French fries ("slap chips") were popular at the restaurant. One day a diner complained that the fries were too thick and not crispy enough. Crum made a thinner batch, but the customer was still not satisfied. Crum finally made fries that were sliced and fried too thin to eat with a fork, hoping to annoy the fussy customer. Surprisingly enough, the customer loved it and potato chips were born!

DO YOU HAVE WHAT IT TAKES TO BE AN ENTREPRENEUR?

Are you the next Mark Shuttleworth or Richard Maponya? It's never too soon (or too late!) to start your own business, even if it's small. It's always nice to earn some extra pocket money!

WHAT IS AN ENTREPRENEUR?

An entrepreneur is someone who uses good ideas and hard work to set up and run a business, either alone or with other people, in order to make a profit.

Of course this involves a bit of risk, you might spend money and time and not sell any products, but it might also be a roaring success! The secret is to do your market research thoroughly, so that you are sure that there are people who are interested in your product and willing to buy it. Making a profit is essential if you want to be a successful entrepreneur.

YOU CAN BE AN ENTREPRENEUR!

If you want to become an entrepreneur, it is important to do something that you are interested in. If you like spending time outside, then you can mow the lawns or wash the cars of people in your neighbourhood. I you are creative and good at art, you can make attractive picture frames or greeting cards. If you like spending time in the kitchen, you can make hotdogs, pizzas, cookies or lemonade and sell these on the pavement in front of your house. The possibilities are endless; all you have to do is use a little imagination and a lot of initiative.

SOME IDEAS TO GET YOU STARTED

A good idea is to do little odd jobs that grownups hate to do. Like mowing their lawns, ironing their clothes or washing their cars. Grownups also get tired of cooking all the time, so you can offer tasty and affordable meals to your neighbours. You can even sell homemade sweets to the other kids at school!

WHY NOT TRY SELLING SOME ICE-COLD LEMONADE ON A HOT SUMMER'S DAY?

PREPARATION

MY COSTING AND PRICING
First make a list of all your expenses for making the lemonade. You will have to buy soda water, sugar, lemons, mint sprigs and glasses. That is the cost price of your product.

Now you need to decide on a fair selling price that your customers will pay. Then work out how many glasses of lemonade you will sell. Subtract your cost price from your selling price to see if you will make a profit. You may have other expenses such as the rent for your stand at a market and the cost of your table, tablecloth and poster. These expenses must also be subtracted from your selling price to work out your real profit.

HOMEMADE LEMONADE RECIPE

Serves 6

INGREDIENTS:

1 cup water
1 cup sugar
Juice from 4 to 6 lemons
4 cups cold water
Mint sprigs

METHOD:

Heat 1 cup of water and 1 cup of sugar together in a small saucepan. Stir frequently until the sugar dissolves completely, then bring to the boil. Let cool and refrigerate.
Mix the juice of 4 to 6 lemons with the water and sugar syrup you've made on the stove. Add 4 cups of ice-cold water and stir well. (If you want fizzy lemonade, you can add soda water instead of tap water.) Add some lemon slices and garnish with mint sprigs.
Tip: Make some extra lemonade and freeze it in ice cube trays. If you add the special lemonade ice cubes, your lemonade will never get diluted when the ice melts.
You can increase the amounts of this recipe proportionately, depending on the amount of lemonade you want.

LEMONADE

MAKE A COOL POSTER TO ADVERTISE YOUR BUSINESS. HERE'S AN EXAMPLE OF ONE I MADE!

LuLu's HOMEMADE LEMONADE

Ice-COLD, FRESH AND DELICIOUS!

ONLY R2 PER GLASS

When I grow up, I want to...

make the best pizzas
in the world and bake delicious cookies!

If you love spending time in the kitchen, you can make a career out of it one day. Here are some interesting options:

CHEF

A chef is a professional cook. There are many different types of chefs, specialising in everything from sauces to desserts. In larger restaurants, there are chefs whose only job is to manage other chefs… and even chefs to manage those chefs! In this article, we'll take a look at different kinds of chefs and other careers in the culinary industry.

SOUS-CHEF

Sous-chefs plan menus, order food and kitchen supplies, and prepare special dishes. Sous-chefs are managerial chefs, which means they supervise the work of other chefs, cooks, and kitchen staff. They also demonstrate new cooking techniques, recipes, and equipment to their colleagues.

SAUCIER

Just as the name suggests, the saucier is the chef responsible for making all the sauces. Since sauces are such an important part of most cooking, sauciers must be highly knowledgeable when it comes to mixing different flavours.

PASTRY CHEF

Pastry chefs probably have the yummiest job of all! They create baked goods such as cookies and cakes and wonderful desserts, including chocolates.

What if you don't want to be a chef?

There are many other exciting jobs out there that have to do with food:

A GROCERY STORE MANAGER oversees all grocery store employees, advertising, marketing, and purchases.

A HEALTH INSPECTOR is responsible for inspecting food shops and restaurants.

A FOOD TECHNOLOGIST applies science and engineering to the manufacturing process of food.

A HOME ECONOMICS TEACHER teaches learners about general food preparation and preservation, nutrition and life skills.

A BUTCHER is a person who prepares and sells fresh meat.

A TEST KITCHEN WORKER researches and develops new ingredients and products.

A CATERER provides food for large parties or wedding receptions.

A FOOD DEMONSTRATOR shows us how to prepare a recipe. Some demonstrators have their own TV shows, like Jamie Oliver.

A DIETICIAN educates patients about nutrition and healthy eating.

A HOST greets and then seats individuals as they enter a restaurant.

A DISHWASHER is someone who rinses, loads and operates a dishwasher in a restaurant kitchen.

A WAITER serves food and drinks in a restaurant.

A FOOD PHOTOJOURNALIST writes about food, recipes and cooking techniques using photographs with small captions underneath.

PROFESSOR THANDI'S FUN SCIENCE EXPERIMENT

MAKE MOULD WITH A LEMON

* **PENICILLIN** is an antibiotic that is made by certain blue moulds.
* **ANTIBIOTICS** are medicines that destroy microorganisms or stop them from growing. That is why the doctor gives you antibiotics when you get sick!
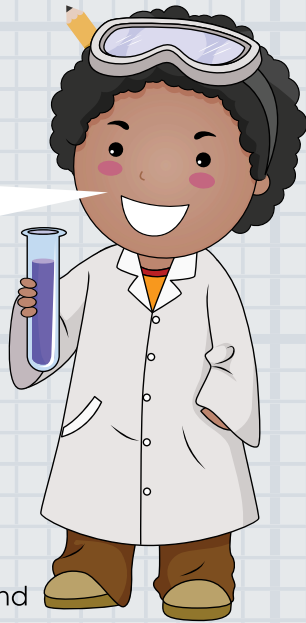
Let's start experimenting!
YOU NEED:
A lemon. Water. A clean, empty container with a lid.
A magnifying glass
HERE'S WHAT TO DO:
• Place the lemon in an empty, clean container.
• Add a few drops of tap water on the lemon and put the lid on tightly.
• Store it for a week or more in a warm, dark place. Inside a kitchen cabinet or behind the refrigerator is perfect.
• After the waiting time, put some gloves on and take the lemon out. Look at it closely with your magnifying glass.

WHEN YOU HAVE FINISHED EXPERIMENTING WITH THE MOULDY LEMON, PUT IT IN A PLASTIC BAG AND THROW IT AWAY. BE SURE TO WASH YOUR HANDS AFTERWARDS, BECAUSE SOME PEOPLE ARE ALLERGIC TO MOULD.

SCIENTIFIC FACTS
ABOUT MOULD

Mould is not a plant, but a fungus like mushrooms and toadstools. It grows on food and other organic matter, breaking it down into slime and extracting nutrients for growth. Alexander Fleming discovered that a common type of mould fungi kills germs. From this he made a medicine called penicillin, which has saved millions of lives over the last 80 years. Many other lifesaving drugs are made from chemicals obtained from mould.
Mould is one of nature's cleaners. It breaks down dead organic material and recycles the nutrients back into the soil. It is found in nearly every ecosystem in the world.
Mould is used to make certain foods, like blue cheese.

UNDER PRESSURE
PART1

"COME ON, HAVE A SIP. NOTHING WILL HAPPEN. EVERYONE'S DOING IT. "

Ashley is one of the coolest kids in your grade 6 class, so when he speaks everyone listens. You really want to be friends with him and he is finally starting to hang out with you at school. There's only one problem; he wants you to drink beer with him during break times, but you know that's not right and you can get into big trouble for it.

So what should you do? You don't want to be a party pooper, but you also don't want to spend the rest of your life in detention!

TIME OUT: Discuss the dilemma with your classmates and teacher. What would you do in a situation like this? Should you do what Ashley asks so that he can accept you as a friend or should you do what you know is right? Is Ashley a true friend? What would a true friend do?

WHAT IS PEER PRESSURE?
People who are your age, like your classmates, are called peers. When they try to influence how you act or put pressure on you to do something, it's called peer pressure. It's something everyone has to deal with – even grownups.

As you grow older, you'll be faced with some challenging decisions. Some don't have clear right or wrong answers – like should you play rugby or soccer? Other decisions involve serious moral questions, like whether to cut class, try cigarettes, drink, or lie to your parents.

Making decisions on your own is hard enough, but when other people get involved and try to pressure you one way or another it can be even harder.

HOW TO DEAL WITH PEER PRESSURE
In order to deal with peer pressure, one needs to distinguish between right and wrong, learn to say no, engage in constructive activities, believe in yourself and develop a good self esteem.

IN THE NEXT EDITION OF THE GROWSMART NEWSPAPER WE'LL LOOK AT SOME MORE POSITIVE WAYS OF HOW YOU CAN DEAL WITH PEER PRESSURE!

LINDA

MARVELLOUS MATHS

A. Can you write these numbers in words?
1. 309 000 =_____
2. 800 800 =_____
3. 4 080 011 =_____
4. 280 006 =_____
5. 124 805 101 =_____

B. Write the following in numbers:
1. Fifteen thousand and seventy-three =_____
2. Seven hundred thousand, two hundred =_____
3. Two million, eight thousand and four =_____
4. Three hundred and thirty thousand =_____
5. One hundred and one thousand and ninety-two =
_____

C. What does the digit represent?
1. In 837 185, the digit 3 stands for _____ thirty thousand _____.
2. In 122 092 379, the digit 0 stands for _____.
3. In 627 786, the digit 2 stands for _____.
4. In 3 254 006, the digit 3 stands for _____.
5. In 290 142 328 the digit 8 stands for _____.

D. Fill in the correct number.
1. 1 110 000 + _____ = 2000 000
2. 800 000 + 30 000 + 200 = _____
3. 5 300 + 200 000 + 1 = _____
4. 3 450 800 = _____ + 50 800
5. 7 000 000 + _____ + 7 000 = 7 607 000

E. Arrange the numbers in descending order.
1. 172 909; 279 000; 160 909; 20 999
2. 620 135; 527 513; 427 315; 727 315
3. 1 250 802; 1 520 802; 999 999; 2 255 000
4. 100 100,6; 100 100,85; 100 110,5; 100 100,99
5. 334 788,3; 334 788,41; 334 788,82; 334 788,15

DESCENDING MEANS FROM HIGHEST TO LOWEST.

LINDA

F. Complete the number patterns.
1. 58 274, 60 274, _____, 64 274
2. 305 472, _____, 405 472, 455 472
3. _____, 1 200 115, 1 600 115, 2 000 115
4. 2 000, 20 000_____, 2 000 000