GROW SMART

Second Edition 2014

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Education

www.growsmart.org.za

PAGE 1

HI THERE!

Welcome to our second edition of the Growsmart newspaper for 2014! Each learner at your school in Grades 4, 5 and 6 will receive their very own copy. Please read your newspaper from cover to cover – it's fun to read and you will learn some really interesting stuff.

Remember, if you want to improve your literacy then you must read, read, read! The more you read, the more… well, I think Dr. Seuss said it better than I can:

"The more that you read,
the more things you will know.
The more that you learn,
the more places you'll go."
From: *I Can Read With My Eyes Shut!* by Dr. Seuss

If you've never heard of Dr. Seuss, then you're in for a treat. You can read all about Dr. Seuss and other wonderful children's book authors in this edition of the Growsmart newspaper.

Always do your best to learn as much as you can. Fill your brain with knowledge and it will reward you in the future.

Until next time,
The Growsmart Team

SOLVE THE PROBLEM

13 + 25 – 8 = _____

11 x 5 = _____

7 x 7 = _____

64 ÷ 8 = _____

Which number is larger: ¾ or 0,5?

Answer: _____

36 ÷ 6 = _____

6 x 9 = _____

22 – 6 + 16 = _____

38 – 18 = _____

7 x 11 = _____

Which numbers are missing in the following sequence?

4, 9, 14, _____ , 24, _____ , 34

9 x 9 = _____

1000 ÷ 10 = _____

8 x 4 = _____

Which numbers are missing in the following sequence?

88, 77, 66, _____ , 44, _____ , 22

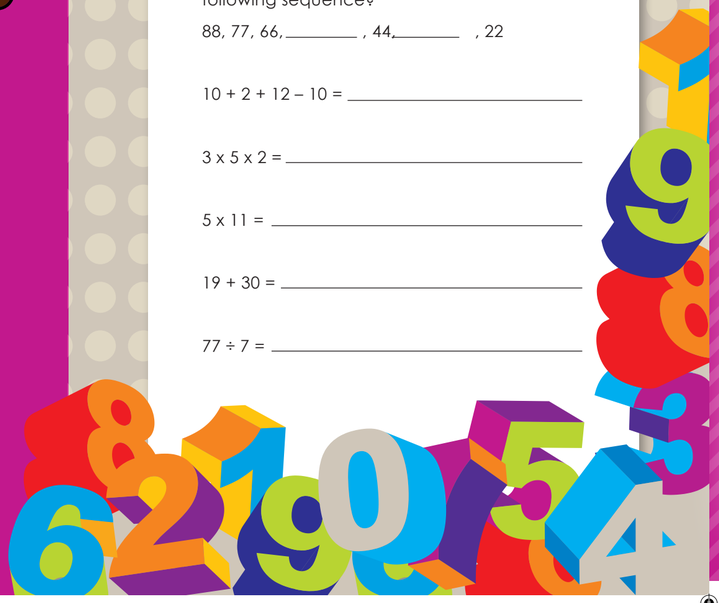
10 + 2 + 12 – 10 = _____

3 x 5 x 2 = _____

5 x 11 = _____

19 + 30 = _____

77 ÷ 7 = _____



DO YOU KNOW THESE WORDS?

symbol
galaxy
length
result
admire
yoghurt
achieve
breathe
crucial
lettuce
vicious
antenna
passage
regular
delight
miracle
attempt
gravity
equator
portion
pretend
immense
attract
satisfy
witness
amateur
visible

collide
precise
conceal
capable
various
perfect
absence
proceed
several
audible
abandon
gradual
extinct
certain
examine
poverty
replace
descend
mansion
display
assembly
probably
venomous
domestic
identity
document
activity

audience
particle
generous
numerous
interior
gorgeous
pregnant
eternity
previous
farewell
accurate
dreadful
location
delicate
property
accident
tortoise
strength
dinosaur
shortage
straight
reliable
abundant
navigate
cautious
persuade
specimen

daughter
colourful
beautiful
guarantee
character
foreigner
vibration
lightning
assistant
discovery
interview
practical
miserable
community
desperate
reluctant
astronomy
telescope
companion
hurricane
Australia
sensitive
curiosity
collector
transform
discipline
proportion

suggestion
millilitre
tournament
technology
impressive
appreciate
extinguish
comprehend
definitely
atmosphere
mysterious
binoculars
sufficient
caterpillar
adventurous
comfortable
microscopic
electricity
personality
spectacular
alternative
spontaneous
intelligence
choreographer
extraordinary
circumference

YOU HAVE THE POWER

Electricity is a form of energy that we use to power all sorts of things. You flick a switch and a light comes on. You press a button on a remote control and the television comes on. Computers, hairdryers, washing machines and kettles are all powered by electricity. Electricity is transported to our homes from power stations (unless you're using batteries!).

FOSSIL FUELS

Most power stations generate electricity from a natural energy source, such as coal, gas or oil, which are called fossil fuels. The fossil fuels are burned to heat water and make steam. The steam is used to spin a big fan called a turbine. The turbine spins a magnet around a piece of wire, and this is what generates the electricity.

NUCLEAR POWER

Nuclear power stations usually use a metal called uranium to create the heat to make the steam. This is done by splitting the atoms in the uranium. Each time an atom is split, it gives off heat.

NATURAL POWER

Some power stations use the natural power of water or wind to drive the turbines. A wind farm uses the wind to turn huge propeller-like blades to generate electricity.
A hydroelectric power plant uses flowing water to spin the turbines. Solar panels directly convert the sun's light energy into electricity.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Source: www.tvakids.com, www.physics4kids.com

DR. SEUSS
Author of

THE CAT IN THE HAT

Theodor Seuss Geisel was born in Massachusetts in the USA in 1904 and died in 1990. He was an imaginative and creative writer, poet and illustrator. Theodor is best known for his children's books written and illustrated as Dr. Seuss, which was one of his pen names. Another one of his pen names was Theo LeSieg (LeSieg is Geisel spelled backwards).

At the age of 32, Theodor wrote his first book, entitled *And to Think I Saw It on Mulberry Street*. According to Theodor, the story was rejected by between 20 and 43 publishers.

One day he was walking home to burn the manuscript, when he bumped into an old college friend. This chance encounter proved to be very lucky, because his friend managed to help him get the book published.

During World War II, Theodor worked as a cartoonist for newspapers and as an illustrator for advertising companies. In later years he returned to children's books and, from the age of 42, began publishing his best-known works, such as *Horton Hears a Who*, *The Cat in the Hat*, *How the Grinch Stole Christmas*, *Green Eggs and Ham* and *The Lorax*.

Here's a lovely tongue-twister from *Oh, Say Can You Say?* by Dr. Seuss. Let's see if you can say it:
"The storm starts, when the drops start dropping.
When the drops stop dropping, then the storm starts stopping."

Source:
www.en.wikipedia.org
"Oh, Say Can You Say" by Dr. Seuss

ROALD DAHL
Author of

CHARLIE AND THE CHOCOLATE FACTORY

Roald Dahl was one of England's best-loved authors of books for children, including *Matilda*, *James and the Giant Peach*, *Charlie and the Chocolate Factory*, *The Witches* and *The BFG*, all of which have been made into films.

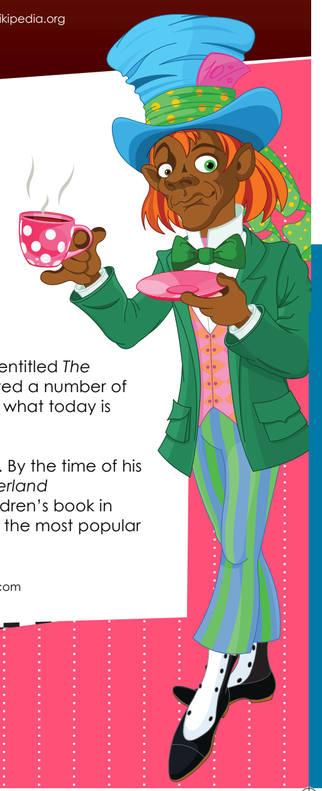
Roald was born in Wales in 1916 to Norwegian parents. He was never seen as a talented writer during his school years, and one of his teachers wrote in a school report, "I have never met anybody who so persistently writes words meaning the exact opposite of what is intended." In 1939, at the start of World War II, Roald became a fighter pilot in the Royal Air Force at the age of 24. He faced many dangers and once had to crash-land his plane in the desert. The crash fractured his skull, smashed his nose and temporarily blinded him.

Roald had a very successful career writing both adult and children's stories, as well as poetry. His collection of poems includes *Revolting Rhymes*, *Dirty Beasts* and *Rhyme Stew*. Roald died in 1990 and is regarded as one of the greatest storytellers for children in the 20th Century. He ranks among the world's best-selling authors and his books have been published in almost 50 languages.

Source: www.en.wikipedia.org

LEWIS CARROLL
Author of

ALICE'S ADVENTURES IN WONDERLAND



Charles Lutwidge Dodgson was born in 1832 in England. He was a writer, mathematician, photographer and even an inventor. His great-grandfather was also named Charles Dodgson, and so was his father.

From a young age, Charles wrote poetry and short stories which were published in various magazines. At the age of 31 he finished the manuscript for *Alice's Adventures in Wonderland*, which was published under his pen name, Lewis Carroll. The book sold so well that his fame soon spread around the world. A few years later he wrote the sequel to *Alice's Adventures in Wonderland*, called *Through The Looking-Glass*. At the age of 44 he wrote his next great work, entitled *The Hunting of the Snark*. He also invented a number of word games, including a version of what today is known as Scrabble.

Charles died in 1898 of pneumonia. By the time of his death, *Alice's Adventures in Wonderland* had become the most popular children's book in England, and by 1932 it was one of the most popular in the world.

Source: www.en.wikipedia.org, www.biography.com

MATHS
WORD PROBLEMS

1. Mary baked 110 cupcakes. She shared them equally among her 32 classmates, so that each person received the same number of cupcakes.

   How many cupcakes did each classmate receive?

   _____

   How many cupcakes were left over?

   _____

2. John's father earns a salary of R6 000 per month. He spends $^1/_2$ of the total salary on rent and $^1/_3$ of the total salary on food.

   How much money does he spend each month on rent?

   _____

   How much money does he spend each month on food?

   _____

   How much money does he have left after paying for the rent and the food?

   _____

3. Mandy has a piece of string that is 25 metres long. She needs to cut the string so that she has four pieces of equal length.

   What will be the length of each of the four pieces of string?

   _____

4. Mrs. Abrahams wants to buy a DVD player. She finds one that normally costs R400, but the store is offering a 20% discount off the normal price.

   How much was the 20% discount in Rands?

   _____

   How much money did Mrs. Abrahams pay after deducting the 20% discount?

   _____

CAUSE AND EFFECT

We all live in the same world, yet we are all different and unique. We don't all look the same, we speak different languages, we follow different cultures and beliefs, and we live in different areas. All these differences could easily lead to problems between people and nations. So, in order to ensure that we live in a world that is fair and just for everyone, we all have certain rights to protect us and responsibilities towards ourselves and other people.

What are Rights?

We all have rights as human beings – they are called Human Rights. Our rights are what every human being deserves, so that we can be treated equally in a world that is fair and just. For example, some of these rights (there are many more) include the right to:

- Safety
- Food
- Shelter
- Basic health care
- Freedom of speech
- Equal opportunities

What are Responsibilities?

Everyone has rights, and each of us has the duty to respect the rights of other people. We have a responsibility to respect that everyone in the world is as unique, special and important as ourselves. Here are some examples of our responsibilities:

- Obey your parents
- Follow the rules at home, at school and in the community
- Take care of yourself
- Be the best you can be
- Respect the rights of others
- Be kind and treat everyone fairly

Source: www.cyh.com

WORD SEARCH

Find the following words hidden in the squares. The words may be found left to right, back to front, upside down or even diagonally across.

Harry Potter
Fantasy
Poetry
Gulliver
Paragraph
Alice
Imagine
Book
Peter Pan
Wonka
Illustrate
Adventure
Author
Heidi
Fiction
Tolkien
Oliver
Character
Narnia
Bambi
Story
Read
Wimpy
Cartoon
Hobbit

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

HAVE YOU GOT THE WRITE STUFF?

If you want to be a successful author or to write stories that people will enjoy reading, then it's important to know how to use sentences properly. These tips will be a great help for those of you writing stories for the Growsmart Story Writing Competition, so listen up!

Check out these websites for more helpful activities and worksheets:

www.eslbee.com

www.pitt.edu/~atteberr/comp/0150/grammar/sentencetypes.html

Simple Sentences

This is the most basic form of sentences and is also known as an independent clause. It contains a subject (what the sentence is about) and a verb, and it can stand by itself as a complete thought. The examples below are all simple sentences.

- **William** ran.
- **My mother** is still at work.
- **Elsa and her sister** are coming to our house for dinner.

Compound Sentences

A compound sentence is a sentence with TWO independent clauses. Both clauses have a subject and a verb, and can stand separately on their own. The word joining the two clauses is called a coordinating conjunction. The examples below show the two independent clauses with the joining words typed in bold:

- [Clarence the Clown is funny], **and** [his shoes are enormous].
- [He is clever], **but** [Joe is smarter than all of us].
- [My mother is still at work], **so** [I will start preparing dinner].

Complex Sentences

A complex sentence has an independent clause and one or more dependent clauses. Dependent clauses do not contain a complete thought, and cannot stand separately on their own. Below are examples with the dependent clause in brackets and the joining word in bold:

- He finally finished his novel [**after** months of research].
- You may play outside [**until** the street lights come on].
- The learners are studying [**because** they have a test tomorrow].

Source: www.eslbee.com, www2.ivcc.edu, www.grammar.about.com

CREATE YOUR OWN STORY BOOK

This article is for all budding authors, and especially helpful for those of you writing stories for the Growsmart Story Writing competition.

What you will need:

- An A4 Nature Study book and a book for scribbling
- A pen, pencil, crayons and eraser
- Plain wrapping paper

Plan your story

The number of words for your story should be 300 words for Grade 4, 400 words for Grade 5 and 500 words for Grade 6.

Use your scribbling book to write down some ideas for your story, your characters and your illustrations. Then write a rough draft. Read your own writing critically and correct any mistakes in grammar, spelling and punctuation. Don't use the same words all the time – use a Thesaurus to find words with similar meanings. Choose any one of the following topics for your story:

1. A memorable experience
2. The most influential person in my life
3. 20 years into democracy
4. "45 minutes ago my cover was blown. I'd been under for..."

Organise your ideas

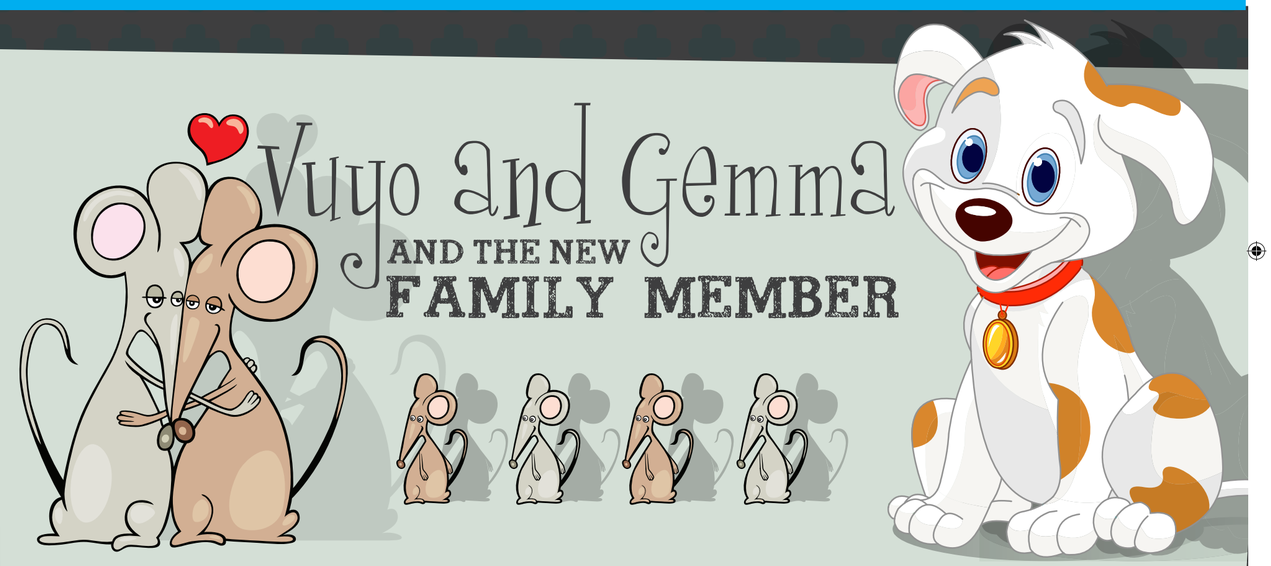
How will your story start? Who are the characters? What are your ideas? When and where does it take place? How will it end?

Write and illustrate your finished story

In the Nature Study book, write your name, school, grade and age on the first lined page. Start your story on the next lined page. Write neatly and clearly. Spread your story over a few pages. Draw your illustrations on the blank pages to match what you've written.

Cover and decorate your book

- Use the wrapping paper to cover your book.
- Write the title of your book and the author's name on the front.
- Write a short summary of the story on the back.



I know you think it's odd that a mouse could own a dog, but that's exactly what this mouse family did – they bought a dog (come on, use your imagination!). It all started when Vuyo, Gemma and the quadruplets visited a pet shop in town where they saw all kinds of pets, such as fish, birds and hamsters. But it was the little puppy in the window that drew their attention. It was white with large brown patches and long floppy ears, and when it saw them it jumped up and down and wagged its tail with excitement. "Oh, please can we take him home?" asked one of the quadruplets, "Please, please, pretty please?"

Vuyo asked the pet shop owner how much it would cost to buy the dog. The owner said Vuyo could have the dog for R400. Vuyo turned to the quadruplets and said, "I'm sorry, kids, but we really can't afford to buy the puppy. We've got lots of expenses this month and we just don't have an extra R400 to spend."

The quadruplets were very disappointed and sad. They so much wanted a puppy of their own. "What if we did some work in the neighbourhood to raise the money?" asked one of the quadruplets. "That's a great idea!" said another. "We could mow lawns and wash cars for our neighbours and they could pay us for it, and we could save that money to buy the puppy!"

Vuyo asked the pet shop owner if he would keep the puppy for them for one month, until they had enough money to buy it. The pet shop owner agreed not to sell the dog until then, and the mouse family left the shop feeling very happy and excited. As soon as they were back at home, the quadruplets went around to all the neighbours offering to mow their lawn for R50 or wash their car for R40. If the quadruplets washed five cars and mowed six lawns, how much money did they make in total?

Answer:

_____

After three weeks they had made enough money to buy the puppy, and Vuyo and the quadruplets returned to the pet shop. The owner had kept his promise and the puppy was still there. Vuyo gave the owner R400 and the owner handed the puppy to Vuyo. He explained to Vuyo that the dog was a Beagle. He said that Beagles are gentle, intelligent dogs with a great sense of smell, and are popular family pets because they are excellent with children. He also gave Vuyo a list of instructions about how to take care of the Beagle, such as what kind of food it should eat and how much to feed it, that it needs regular exercise and should be taken for a walk each day, and that it needs lots of love and attention.

The quadruplets were overcome with joy and the puppy seemed to be just as excited as they were. On the way home they began thinking about what they should name him. Patch? Buster? Rusty? Lucky? In the end, they all agreed that the perfect name for their brand new family member would be Bailey – Bailey the Beagle.

TRY THESE FUN TEAM-BUILDING GAMES

A Knotty Challenge

Everyone stands in a circle. Now walk to the centre and squeeze in until there is no more room. With eyes closed, take the hand of someone on either side of you. Open your eyes and slowly move backwards. You will find that the group is a bit knotted. Your challenge is to undo the knot as best you can, without letting go of the hands you're holding.

Animal Calls

Form groups of 4 to 5 people. Each group agrees on a special animal sound, such as a grunt, a meow, a wolf's howl, a bark, etc. All groups are blindfolded and mixed up throughout the room. The members must now try to find each other and get back into their groups only by making their animal sounds.

Hot Seat

A chair is placed in the front of the room – this is the "hot seat." Person A sits in the chair. Person B then approaches the chair and gets Person A to leave by giving them a zany reason to do so. It could be as silly as calling out, "Watch out, here comes a car!" or imitating the school bell, or pretending to be a charging bull, etc. Person A leaves the chair and Person B now sits in the hot seat. Then Person C approaches the chair with a crazy reason for Person B to leave, and so the game continues until everyone has had a turn in the hot seat.

Recycle That Thing

Split the class into groups of 5 or 6. Now take an everyday object (such as a chair, a ruler, a shoe, a fork or a pencil) and place it in front of the class. The groups must now come up with as many possible uses for the object apart from its actual use. They have 10 minutes to complete the exercise and write down their uses.

Sitting in a Circle

Form a tight circle with everyone facing in the same direction. On the count of three, everyone slowly starts to sit down on the knees of the person standing behind them. In the end, everyone should be sitting on someone else's knees, all supported by each other.

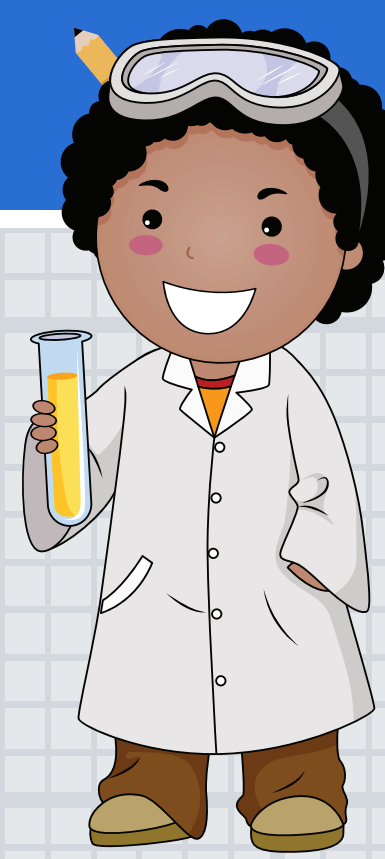
Turn the Blanket

A group sits on a blanket. The blanket should be folded so that there is only enough room for all of the people in the group to sit on it. Now the group must try to turn the blanket over without getting off of it.

Bip Bap Bup

A group sits in a circle. One person starts by looking at another person in the circle and saying "bip." The person who was looked at then looks at a different person and says "bap." Finally, the third person looks at someone else in the circle and says "bup," while at the same time pointing at him or her – this is the only time that someone points a finger at another person. The person who was pointed at then starts the round again by looking at someone and saying "bip." And so it continues until someone says the wrong word or points a finger when they shouldn't.

Source:
www.empoweringparents.com
www.everydaylife.globalpost.com
www.scholastic.com



PROFESSOR THANDI'S FUN SCIENCE EXPERIMENT

SOUND AND VIBRATIONS

Sound is a vibration that travels through molecules (air, liquids and solids are all made of molecules). It is started by some sort of movement, like banging on a door or plucking a guitar string, that causes molecules to shake or vibrate. The vibration causes the surrounding molecules to vibrate as well, and this spreads from molecule to molecule like a wave, or like the ripples that form when you drop a stone into a pond.

When the waves hit your ear drum, your brain interprets the vibrations as sound.

Waves can travel through air, liquids and solids. Sound travels faster through water than air, and even faster through solids. That is because the molecules in water and solids are more tightly packed together than in air. The speed of sound through air is about 1 230 kilometres per hour.

In this experiment, we will first listen to a sound as it travels through the air, and then as sound travels through a solid. You will find that you hear the sound more clearly through solids than through air. The reason is that sound travels more quickly through solids, and therefore sounds clearer.

WHAT YOU NEED

- A wire hanger
- A piece of string about 1,5 metres long

INSTRUCTIONS

1. Tap the hanger against a door or a table and listen to the sound it makes.
2. Now tie the middle of the string to the hook of the hanger.
3. Wrap the ends of the string around the index fingers of each hand (your index finger is your pointing finger, the one next to your thumb). The hanger should hang just below your stomach.
4. Press your hands against your ears.
5. Lean over so that the hanger can swing freely. Now swing the hanger so that it taps against something, such as a door or a table.

WHAT DID YOU HEAR?

When you tapped the hanger without the string, what did you hear? This was sound travelling through air.
Was there a difference in the sound when you used the string? This was sound travelling through a solid (the string).

Source: www.ducksters.com, www.sciencekids.co.nz, www.scienceforkids.kidipede.com