





Third Edition 2020

Dear Growsmarter

Welcome to the final edition of the Growsmart newspaper for 2020. Phew, what a year it's been! We hope our stories and activities keep you learning and entertained. Buckle up for the final stretch!

Start by working your mathematic muscles with more than 50 equations and problems to solve. Try your best to answer each one before you look at the solution.

Did you know that pirates are real and not just characters in a Disney movie? Read about their swashbuckling adventures on page 4. If the stock market sounds as foreign as kummerspeck (German for 'grief bacon'), but you want to make money through smart investments, sink your teeth into Money Matters: Stocks.

In our debating section, you can choose from a list of motions to practise your public speaking techniques in front of your family or the mirror! You'll also find a handy checklist to help you prepare for your next debate. If you love reading as much as we do, you must have a favourite author. Or more! On page 7, we show you how to write a letter to him or her. Writers are always happy to hear from their fans, so get your pen and paper ready! If you prefer the modern route, have a look at the do's and don'ts of email etiquette on page 7.

What's the difference between talk and gossip? If you're not sure, we've got you covered on page 9. Because nobody deserves to be the topic of gossip!

Check out page 11 for freaky weather patterns and a fun science experiment. On the last page, Professor Thandi shows you a cool magic trick with ice cubes. And you'll learn 10 facts about koalas. They're not as cuddly as they seem!

Until next time, The Growsmart Team

Ask your teacher about the inter-class and inter-grade competitions. And remember, you can download all the previous editions of Growsmart from our website: growsmart.org.za

SUDOHU

9	1		7	2	4	3	6	8
			1	3		5		4
3			9	8		1		7
	3	1			2			6
2	5	8	6	1		4	3	
			8		3	2	1	5
1		4	3		9		5	2
6	2	7				9	8	3
	9	3		7		6	4	1

Fill the grid with the numbers 1 to 9 so that each number is only used once in each row across, each column down and every 3 by 3 box. Do not guess the answer. Think logically about which numbers may appear, and especially which numbers may not appear in a block.

Source: mathinenglish.com

MATHS

Calculate the following without written calculations:

1.	29 + 11 =	17.	13 x 3 =	33. 5 % + % =
2.	16 + 10 + 6 =	18. ′	1 000 ÷ 500 =	34. 750 + 150 =
3.	125 – 5 =	19. ′	17 x 20 =	35. 13 + 12 + 15 =
4.	250 + 250 =	20. ′	190 x 2 =	36. 177 = 147 +
5.	119 – 100 =	21. ′	120 x 2 x 2 =	37. 440 = 140 +
6.	110 + 110 =	22. ′	100 x 10 ÷ 100 =	38. 1 091 – = 1 000
7.	299 + 2 – 1 =	23. 4	44 ÷ 11 =	39. 345 + 1 =
8.	300 x 3 =	24. ′	15 000 x 2 =	40. 15 – 13 + 18 =
9.	100 ÷ 100 =	25. 5	500 x 3 =	41. 75 x 100 =
10.	4 500 x 0 =	26. 2	280 ÷ 2 =	42. 1 x 20 000 =
11.	90 x 90 =	27. 6	630 ÷ = 70	43. 15 x 15 =
12.	999 + 2 - 2 =	28. 5	5 000 ÷ 5 =	44. 1 999 x 0 =
13.	3 x 300 =	29. ′	1 000 ÷ 2 x 2 =	45. 100 ÷ 1 000 =
14.	2 000 x 20 =	3 30. ′	1 000 + 1 200 =	46. 0,3 + 0,7 =
15.	Half of 13 =	31.		47. 1,5 + 1,5 - 3,0 =
16.	200 ÷ 4 =	32. (0,1 + 0,01 =	48. 0,4 x 0,8 =



Calculate the following, You may use any strategy, (remember to apply BODMAS)

1. 4250 + 100 + 1

5. 625 ÷ 25 x 2

9. $8222 \div 2 + 29089$

2. $40\,000 \div (0 + 20\,000)$

6. (26 999 + 101) x 100

10. $(50999 - 999) \div 2 + 3000$

3. 99 901 x 100 + 2

- 7. 3 200 + (18 000 12 000)
- 11. $(3 \times 10) + (2 \times 1000) + 7 + (5 \times 100) =$

4. 23 550 x 1 000 x 10

8. $35\,000\times0\div1$

12. $(51999 - 99) \div 2 + 3500 =$

Answers: 1. 4 351; 2. 2; 3. 9 990 102; 4. 235 500 000; 5. 50; 6. 2 710 000; 7. 9 200; 8. 0; 9. 33 200; 10. 28 000; 11. 2 537; 12. 29 450

Solve the following problems. You need to be able to explain your answer mathematically.

- Divide R400 in the ratio 2:3
- 2. A man earns R80 per hour. How much does he earn in 2 3/4 hour?
- 3. John saves 20% of his pocket money. How much does he save if he receives R80 pocket money?
- If 27kg tomatoes cost R135, How much will 20kg tomatoes cost?
- A company donated containers with tennis balls to 52 schools. In each container there are 345 balls. How many balls were donated?
- Peter wants to buy a television that costs R4 500. He has already saved R3 800. How much more money does he need?
- Mrs Manga bought 42 shirts for her workers. Each shirt costs R120. How much did she pay altogether?
- 8. Mrs Jansen uses 2 cups of self-raising flour to bake 24 cupcakes. How much self-raising flour would she use if she wanted to bake 6 cupcakes?
- When Gary gives his small dog 1 biscuit, he gives his big dog 2 biscuits.

- a. If his small dog gets 3 biscuits, how many will his big dog get?
- b. If his big dog gets 12 biscuits, how many biscuits will his small dog get?
- c. Gary gives the dogs 21 biscuits. How many biscuits will his small dog get and how many biscuits will his big dog get.
- 10. What mass is indicated on the scale?



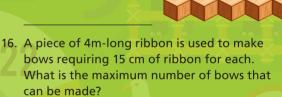
- 11. What will the missing three numbers in this number pattern be? 100; 81; 64; _; _; _; 16; 9; 4; 1
- If 3 apples cost 72c, how much will 12 apples cost?
- 13. A farmer makes a fence around his square garden. When it is completed there are 10 poles on each side. How many poles did he use

14. Thandi builds a pattern of cubes as shown below. How many cubes will there be in Pattern 20?





15. Building blocks are stacked in the corner of a room as seen in the diagram. How many blocks were used to build this structure?



- (A) 24 (B) 25
- (C) 26
- (D) 27

(E) 28

- 17. A sweet and chewing gum cost 90c together. If the gum costs 60c more than the sweet, how much does the sweet cost on its own?
- 18. What is the value of the 8th number in this sequence?
 - 3; 7; 11; 15; 19...
 - (A) 19 (B) 23
- (C) 27
- (D) 31
- 19. Which fraction is halfway between 3/5 and 1?
 - (A) 1 3/5 (B) 4/5
- (C) 3/8
- (D) ²/₅
- (E) 31/5

(E) 35

AHOESWESTESS

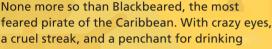
Are you ready for a swashbuckling adventure? Come aboard as we brave the open seas in search of treasures and pirates who'll send a shiver down your spine... Arrr!



From the 1660s to 1730s, sea thieves known as pirates ruled the oceans. They terrorised the merchant ships that sailed between Europe and Asia, and the Caribbean Sea. The Jolly Roger was usually the first sign of trouble. This famous pirate flag with a white skull and crossbones warned the sailors to surrender without a fight. Once onboard the vessel, the robbers

looted exotic goods like spices, wine, silk, jewellery and gold.

Pirate stories are filled with myths and legends. Did every captain of a pirate ship have a colourful talking parrot perched on his shoulder? Were trembling sailors forced to walk the plank? There is no evidence to back up these stories. One thing we do know for sure is that pirates were terrifying!





rum mixed with gunpowder, the

Englishman soon became a legend. His choice of armour was six pistols, two swords and an impressive collection of knives. Blackbeard's brutality only lasted two years. In 1718, he was captured and died in a duel with Lieutenant Maynard.

While women weren't allowed on pirate ships, nothing could curb the adventurous spirit of Mary Read and Anne Bonny. They joined the crew of Jack Rackham by dressing as men. Good thing they did because when their ship was captured in 1720, they were the only pirates brave enough to fight!

Once caught by authorities, pirates met a gruesome end. The convicted robbers were hung from a wooden frame in an iron cage and afterwards their bodies were put on display to warn other pirates.



FAMOUS PIRATES IN LITERATURE AND MOVIES

- Long John Silver in *Treasure Island* by Robert Louis Stevenson
- Captain Hook in Peter Pan and Wendy by JM Barrie
- Jack Sparrow in Pirates of the Caribbean

Source: dkfindout.com

DO YOU HAVE A GOOD WORK ETHIC?

A good work ethic means you are a hard worker who is prepared to do what is needed to get a job done. This is an important skill if you want to be successful, especially as an entrepreneur. When customers see your good work ethic, they will tell their friends, which could boost your personal brand and mean more business. Choose the statements that apply to you.

- **1.** You run a T-shirt business. Tomorrow, you have to submit four designs for printing. You complete one design, but today is your friend's birthday party.
- **A)** You miss the party, work late and submit your designs on time
- **B)** You go to the party, planning to work afterwards, but you're too tired and miss the deadline.
- 2. As a side hustle, you use your artistic skills to paint portraits. Mrs Pillay commissions a painting of her daughter as a birthday gift. You have this weekend to complete it.
- A) You switch off your phone and tell your friends you can't join them

for a game of soccer. Mrs Pillay receives the painting before her daughter's birthday.

- **B)** You paint a bit and play soccer for the rest of the afternoon. You don't pick up your brush again until Mrs Pillay demands her deposit back a week after her daughter's birthday.
- **3.** On Saturday, you have to get up early to show a customer your range of wooden toys.
- **A)** When your alarm goes off at 06:00, you get up and leave the house. You arrive at your destination with time to spare.
- **B)** You ignore your alarm and go back to sleep. Eventually, you get up an hour after your meeting!

Mostly As: Well done! You are reliable, committed to the job and disciplined to push through and exceed all expectations.

Mostly Bs: You can be a better worker. To improve your work ethic, make sure you deliver on your promises, avoid distractions when you have to work, and aim to deliver more than expected.

Source: bankaroo.com

BRAIN BUSTERS

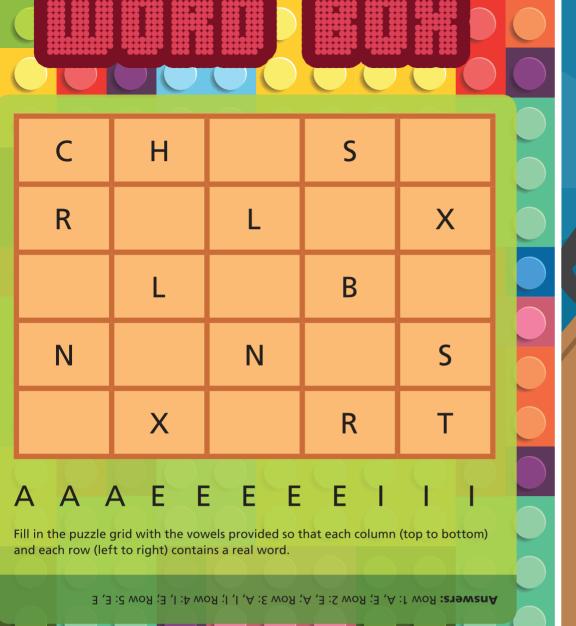
Write down whether these statements about business are true or false.

- 1. A person who creates and runs a business is called an entrepreneur.
- 2. Poor cash flow can lead to the demise of a small business.
- It is unwise to invest all your money in one product or service.
- 4. Money is a finite resource.
- Credit means borrowing money from someone with an additional cost.
- The longer you wait to invest your money, the more money you are likely to earn.
- 7. The four Ps of marketing are Place, Product, Promotion and Penalty.
- 8. A profit is the difference between the amount of money earned and the amount of money spent to operate the business.

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Answers: 1. True; 2. True; 4. True; 5. True; 6. False; 7. False;







Story Book Characters

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

					_															
	Т	Т	Р	Κ	V	W	1	L	L	Υ	W	0	N	Κ	Α	S	Q	Н	Т	Α
	0		R	D	Α	Р	Р	F		D	٧	J	Q	Z	Р	N	С	Α	N	W
	Е	N	0	Z	В	Т	Н	U	G	0	С	Α	В	R	Е	Т	Н	0	R	S
5	Н	Т	F	D	Χ	Р	С	Q		М	В	W			D	Е	М	Р	Е	Н
	Α		Е	S	Q		Α	Т	J	S	J	W		N	Н	Α	D	М	W	Ν
>	R	N	S	K	Κ	Р	F		D	В	С	Q	Α	Т	R	Н	L	S	F	0
	R	U	S	R	В	Р	G	Z			Х	N	N	Н	Υ	0	В	J	Χ	М
7	Υ	Р	0		U	1	K	В	J	Z			Ε	С	Н	Н	Χ	Н	Z	С
/	Р	K	R	G	U	L	S	Q	Α	D	Т	Q	В	Κ	S	В	٧	N	N	Z
П	0	N	D	U	0	0	Q	G	R	Α	Q	N	С	G	Т		G	F	Z	Р
J	Т	L	U	N	S	N	V	Ε	С		Q	0	М	F	S	В	Χ	U	С	М
	Т	В	М	Α	Ε	G	F	Ε	Т	0	L	Т	Р	Ε	N	Н	D	Χ	N	
	Ε	S	В	L	Н	S	Н	D	0	R	U	Р	Ε	R	Т	В	Ε	Α	R	W
۱	R	Н	L	Ε	R	Т	Р	М	Ε	Z	Р	U	Т	٧	F	Ε	L	Н	Ε	Z
V	Q	D	Ε	D	L	0	Ε	Н	F	Ε	Υ	Υ	Α	R	G	S	G	U	С	S
	U	V	D		Χ	С	S	U	Υ		С	Α	F	Р	Α	С	R	G	Т	R
	Υ	Ε	0	D	F	K	С	J	Q	М	Α	Т		L	D	Α	W	J	С	R
	J	F	R	Χ	М		D	М	Z	В	G	В	Н	М	T	D	Z	С	Υ	W
	Α	J	Ε	W	T	N	N		Ε	Т	Н	Ε	Р	0	0	Н	М	F	Х	S
	G		Р	W	F	G	U	В	L	Α	С	S	Α	Р	S	W	L	Н	S	Е

Naledi Harry Potter Sherlock Holmes Rupert Bear The Cat In The Hat Professor Dumbledore Matilda Pippi Longstocking Aslan
Winnie-the-Pooh
Tintin
Ferdinand

Willy Wonka Ramona Hugo Cabret \Diamond

0

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CLASS ACTIVITY: COT'S DEDITE

Divide the class into teams of three learners. Choose one of the following topics for an impromptu debate:

- Schools should be four days a week.
- The legal voting age should be 21.
- All restaurants should only serve healthy food.
- A circus with animals should be banned.
- Tertiary education should be free for every student.
- Shops should be closed on a Sunday.





DO YOU MADW THEEL WORDER

altruism amalgamate ampullaceous aneurysm anthology anticoagulant apocalypse appetiser aqueduct archipelago arrhythmia arteriosclerosis aspersion assonance auspicious centennial cessation aeronautics coalesce commensurate commination communique compatriots conglomerate

conscientious consignment consonance contemptuous contestation convalescent convolvulus couchant culminate curvature emulsify endeavour espionage chicanery adulation eurhythmics euthanasia exacerbate prospicience exuberant fortuitous frenetic infrastructure ingenuity

iniquity innocuous insecticide insidious monogamous intransitive millenium minimalist ministration misapprehension misogynist insurmountable excruciating mnemonic retentive mortgage multiplicity phenomenon phoneme pittance epiglottis epitome pneumatic

poignant

polyunsaturated precipitous premonition preposterous prestigious pretentious procrastinate retrogression ricochet solitaire somnambulism prosthetics residentiary specious diaphanous psychiatry rescind dogmatic succour surreptitious treasurer zeroth youthful

aberration

adumbrate aggrandise capitulate abnegation abscond conflagration ebullient epistolary equanimity fallacious hegemony impecunious largesse maudlin mendacious obfuscate panacea corpulence pernicious preponderance recalcitrant archetypal compunction surreptitious

vicissitude vilify vestige virtuoso vituperate acumen amenable dearth blandishment circumlocution enervate commensurate contusion embezzlement cupidity debacle empirical denigrate equivocal didactic expedient

MATCH SUP!

Can you match the word with its meaning? Draw a line to the answer.

- 1. Expedient
- 2. Fatuous
- 3. Gourmand
- 4. Heterogenous
- 5. Iconoclast
- 6. Laconic
- 7. Maverick
- 19
- 8. Neophyte
- 9. Officious
- 10. Paradigm

- A. Brief and to the point
- B. Someone who is devoted to eating and drinking to excess

- C. Any new participant in an activity
- D. A standard or typical example
- E. Silly and pointless
- F. Intrusive in an offensive manner
- G. Appropriate to a purpose
- H. Someone who attacks cherished ideas or institutions
- I. Consisting of elements that are not of the same kind
- J. Someone who displays independence in thought and action

CAN YOU Y GUESS?

We give you the meaning and you must guess the idiom. The word in **BOLD** is a clue!

- 1. Taking care of **two** tasks at the same time.
- 2. Easier than science.
- 3. To ask someone what they are **thinking** about.
- 4. Pursuing a **wrong** course of action.
- 5. To **think** about a problem in an original way.
- 6. Someone who likes to spend time **alone**.
- 7. Someone that you're pleased to **see**.
- 8. There's more than one way to do something.
- 9. To work late into the **night**.
- 10. Extremely mentally unstable.

Answers: 1. Killing two birds with one stone; 2. It's not rocket science; 3. A penny for your thoughts; 4. Barking up the wrong tree; 5. Think outside the box; 6. A lone wolf; 7. A sight for sore eyes; 8. All roads lead to Rome; 9. Burn the midnight oil; 10. Mad as a box of frogs



Answers: 1. G; 2. E; 3. B; 4. I; 5. H; 6. A; 7. J; 8. C; 9. F; 10. D

A LETTER TO YOUR FAVOURITE AUTHOR

Do you love books as much as we do? We bet the answer is YES. You probably have a favourite author too. Or more!

While you can scour the internet for everything you want to know, and even reach out to the writer on Facebook or Instagram, nothing beats a personalised letter exchange.

In most cases, you'll have to reach the author via his or her publisher. Pick up the writer's latest release (even if it's not your favourite book). Inside you'll find the most recent contact details for the publisher. If you can source a hard copy version, even better! The hard copy is usually printed by the author's main publisher.

Address the envelope as follows:

<<insert author's name>>

<<insert publisher's address>>

Keep the letter personal. You are writing to one specific author, not one of many. Instead of peppering him or her with questions about the plot and characters, rather share information about yourself and what you love most about the book/s.

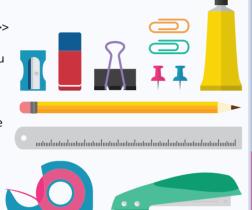


9. It is polite to say

(please/pleas)

(sweet/suite)

10. The hotel



BEFORE YOU CLICK SEND: EMAIL ETIQUETTE

etiquette [noun]: the customary code of polite behaviour in society or among members of a particular profession or group

Good manners are important because they make a good impression on others and they help to make people feel comfortable. For example, how do you think your friends will feel if you're always shouting at them? Or if you don't say 'hello' when you see them? And even worse – if you say nasty things behind their back? Good manners also count when you type an email message. Let's take a closer look at the do's and don'ts of email etiquette.

DO:

- Keep your message short and to the point.
- Start your email with a greeting and the person's name.
- Write in complete sentences.
 Start with a capital letter and end with a full stop, exclamation or question mark.
- Use 'CC' (carbon copy) when you send the email to a group of people.
- End your email with a sign-off and your name.
- Check your spelling and grammar before you click Send.

DON'T:

- Write in ALL CAPS. Otherwise it looks like you're SHOUTING!
- Write a long, wordy message with irrelevant information.
- Use WhatsApp language like LOL, ur and pls.
- Write a message you'll regret if it reaches the wrong person. You can't un-send an email!
- Use sarcasm (without hearing your tone of voice, the recipient might just think you're being rude!)
- Forget to check your spelling and grammar!

Source: pixton.com

SAME SAME, BUT DIFFERENT HOMOPHONES

Words that sound the same, but have a different spelling and meaning are called homophones. Choose the correct word for each of the sentences below:

1.	Thabo's legs felt(weak/week)	after his first long run.
2.	My brother's(sun/son)	is called Jeremy.
3.	Luka prefers his cereal (plane/plain)	without any sugar.
4.	Philan was happy to(meet/meat)	her new teacher.
5.	Spot loves to follow theneighbour's cat. (cent/scent)	of our
6.	We saw ain the distance. (herd/heard)	of buffalo grazing
7.	Napoleon Bonaparte in the 19th century. (lead/led)	France to victory
8.	Dad found a(leek/leak)	in our bathroom.

Answers: 1. weak; 2. son; 3. plain; 4. meet; 5. scent; 6. herd; 7. led; 8. leak; 9. please; 10. suite

and thank you.

is very comfortable.

SAY WHAT?

It's easy to get confused with homonyms, homophones and homographs. Here's a quick guide to help you remember:

Homonyms

homo means same; nym means name Words that SOUND the same, but are different in MEANING

Example: murder can either mean killing someone or a group of

HOMOPHONES

homo means same; phone means sound
Words that SOUND the same, but are different in
MEANING and SPELLING

Example: there (a place); their (indicating possession); they're (contraction of 'they are')

HOMOGRAPHS

homo means same; graph means written
Words that have the same SPELLING, but are different in
SOUND and MEANING

Example: bow (a tied-up ribbon) and bow (bending your body forward)



THE NEX

Do you love stories and music? Then why not combine two of your favourite things and write a song? While there are no set rules to write a song, these tips might just help you create your first Number 1 hit!

Think of your song as a diary entry set to a catchy tune. You want your listeners to feel something when they hear your words, so use the lyrics to express your deepest thoughts and feelings.

You only have a few minutes to tell your story. Keep your listeners in mind when you write your lyrics. Are they young or old? Male or female? Do they love romance or silly jokes? This will help you decide on a theme for your song.

MAP OUT YOUR THEME

Let's say your listeners are young girls who like romantic movies. The theme of your song could be romance. You could write a story about your crush and how you plan on getting the two of you together.

DECIDE ON A SONG STRUCTURE

You can work out your own structure or follow this one:

verse / chorus / verse / chorus / bridge / chorus

This structure is popular because there is enough repetition for the song to feel familiar and enough variety to keep the listener interested.

START WITH THE CHORUS

The chorus should be based on the main theme of your song. This is also usually where the title of the song will come from, for example, a catchy phrase that gets repeated.

Just like a story, your lyrics should build up to a climax and end with a resolution. Build your story around the chorus.

To make sure your song doesn't sound choppy, divide the story you have written into lines with fairly consistent beats for each verse.

The same melody, but different lyrics. Verse:

The verses should tell your story.

Chorus: The same melody and same lyrics.

> Repeat the chorus three times or more. This forms the heart of your song.

Bridge: Completely different melody and lyrics. Use the bridge

to break repetition and reveal something important.

Source: mag.amazing-kids.or



Did you know that plastic straws are not biodegradable? This means they do not break down naturally when thrown away. Instead, they break into smaller plastic particles that spread through water, soil

and air. These tiny pieces of plastic are harmful to all living things, including humans. But you don't have to give up drinking your cool drink with a straw. Rather make your own paper version!

YOU NEED:

- Scissors
- Chopsticks
- Glass jar
- Paper towel
- Parrafin wax
- A large cooking pot

Non-toxic glue

- An adult to help you
- Thick paper (plain or craft paper with a pattern)

INSTRUCTIONS

- 1. Cut the paper into 4 cm strips.
- 2. Glue the edge of the paper (non-pattern side if applicable).
- 3. Place the chopstick at a diagonal angle on the back of the paper.
- 4. Roll the paper around the chopstick until it's completely covered.
- Make sure to glue the paper on top of itself and not the chopstick.
- 6. Wait about 10 minutes for the glue to dry. Remove the chopstick. Cut the ends of the tube to make them even.
- 8. Put the paraffin wax in the glass jar.
- 9. Melt the wax in a pot of warm water on the stove.
- 10. Once melted, dip the straw into the wax one half at a time.
- 11. Wipe the straw with a paper towel to get rid of excess wax.
- 12. Leave the straw to dry for 10 minutes.

Source: natgeokids.com

Loving your straws? Start a business and sell them to your friends! Just remember the four Ps of marketing:

Product: is there a need for your paper straws?

Price: can you sell them at an affordable price and make a profit? Place: where is the best place to sell your straws, eg. at school or the

Promotion: how/where are you going to advertise your straws?

CLASS ACTIVITY: CAUGHT IN THE ACT!

In this fun class activity, you and your team will act out an idiom for the rest of the class to guess. Divide into groups of five or less and choose one of the idioms below.

Idiom: A bull in a China shop

Idiom: Get off your high

Idiom: To stir a hornet's nest

Idiom: A wolf in sheep's clothing

Idiom: Pass with flying

colours

Idiom: To throw someone under the bus

Idiom: A wild goose

chase

Idiom: Turn over a new leaf

Idiom: Like a bat out of hell

Idiom: To get the wrong end

of the stick

Meaning: A very clumsy person

Meaning: Stop thinking you're better than others

Meaning: To cause trouble

Meaning: Someone who pretends to be something they're not

Meaning: To easily succeed at something

Meaning: To betray someone so you can benefit from the situation

Meaning: To waste time looking for something impossible to find

Meaning: To start afresh

Meaning: Moving very fast

Meaning: To misunderstand

something

10 STUDY TIPS FOR A STRESS-FREE EXAM

Does the mere thought of writing a test make your heart race and palms sweat? Take a deep breath and follow these helpful tips to ensure you ace your next assessment. Remember this: the earlier you start, the better!

10

CREATE A STUDY GUIDE

Start by outlining all the points you have to study. This way you won't miss any important information.

ASK YOUR TEACHER

Go through your study guide. Is there any material you don't fully understand? Ask your teacher for help before you start studying.

30

GREATE A STUDY GROUP

If you like to study in a group, ask a few learners to join you for one or two sessions before your assessment.

40

TAKE A BREAK

Give your body and mind time to relax and recharge in between study sessions. Take a walk outside, ride your bike or play a game of soccer with your friends.

50

GET ENOUGH SLEEF

A tired brain is useless in an assessment. This means no all-nighters! Give yourself enough time, so you don't have to cram in everything the night before.

9

CREATE A STUDY GALENDAR

From calculus and the Periodic Table to the difference between homophones and homographs, if you look at all the material you have to master for your assessment, it might seem overwhelming. But broken into smaller pieces, you'll find it very manageable. Plot your subjects in the calendar and stick to your schedule.

7/0

PRIORITISE YOUR SUBJECTS

You know your strengths. Allow more time to study for the subjects you struggle with.

(B) (C)

DO A TEST RUN

Work through old assessment papers if they are available.

FIND A STUDY STYLE THAT WARRS FAR YOU

There are different ways to learn and memorise material. For example, you might be a picture person, so mind maps will be helpful. See what works best for you: www.blog.mindvalley.com/types-of-learning-styles/

10.

REWARD YOURSELF

Once you reach a goal, like working through a chunk of material or getting full marks for a mock test, allow yourself a treat.

Source: fastweb.com

BUT IS IT GOSSIP?

'Did you see Jason sitting outside Principal Mazibuko's office? I wonder what he did.'

'He probably played a prank on Miss Berg.'

'I bet he's going to get a week's detention.'

'Did you hear Jason called Miss Berg a fat pig?'

'And he's been suspended!'

'Jason stole Miss Berg's money!'

'He's going to jail!'

The real story? Jason had a doctor's appointment. He was waiting for his mom to fetch him from school. That's the thing with gossip. One statement can turn into many different half-truths or complete lies and eventually hurt someone's feelings.

If you're not sure whether it's gossip or not, ask yourself this: would you be upset if someone said this about you? If the answer is yes, then it's better left unsaid. Even if you know for a fact something is true, if sharing it with someone else will embarrass the person, rather say nothing. How would you feel if someone you trusted shared your secret?

Sometimes it's okay to talk about other people. Especially when it involves danger. For example, if you know a friend has brought a knife to school, you should tell a responsible adult. If you are the victim of gossip, speak to a trusted friend, sibling or adult.

Source: kidshealth.org

-	TALK	GOSSIP				
	You share a fact about someone that isn't hurtful.	You share a rumour or half-truth about someone that is hurtful or embarrassing.				
	You say something positive about someone, eg. 'I like Sara – she's funny.'	You say something negative about someone, eg. 'Sara talks funny.'				
	You say kind things.	You say mean things.				
	You keep someone's secret safe even when you don't understand why it's meant to stay private.	You share someone's secret.				
	You talk about ideas.	You talk about other people.				



A TRIP AROUND THE WORLD

Identify the flags below. Write your answer in the space provided:

1. The world's most populous country.



2. Donald Trump is the president.



Lionel Messi is one of this country's most famous soccer players.



4. This country is known for its maple syrup.



Our neighbouring country.



Answers: 1. China; 2. United States of America; 3. Argentina; 4. Canada; 5. Zimbabwe

TEST YOUR KNOWLEDGE

- 1. What is the most common type of natural disaster?
- 6. Global warming is only caused by humans. True or False?
- 2. What is the biggest threat to animal populations?
- 7. Which country is responsible for the most greenhouse gases?
- 3. Carbon dioxide, methane and ozone are all examples of greenhouse gases. True or false?
- 8. How long does it take for carbon monoxide in the atmosphere to disperse?
- 4. The Greenhouse Effect results in a decrease in surface temperature on Earth. True or false?
- 9. Which arctic animal is most vulnerable to the effects of global warming?
- 5. When you want to reduce your carbon footprint, is it better to ride a bike or drive
- 10. The reduction of snowfall and ice cover worldwide is accelerating global warming. True or false?
- Answers: 1. Floods; 2. Loss of habitat; 3. True; 4. False; 5. Ride a bike; 6. False; 7. China; 8. 100 years; 9. Narwhals; 10. True



Little brown noses are pressed up against the kitchen window of 10 Gouda Street, while mighty raindrops smash against the glass. The rain has been relentless and it's showing no signs of surrender. A flash of lightning illuminates four furry faces. Bored and expressionless. The quadruplets have been couped up inside for five long days.

The next moment, Emma shrieks. 'Ouch ouch ouch! Michael! I'm going to kill yooooouuuu!' Her brother jumps up on the dinner table and roars with laughter. 'Gotcha!' But Emma's not prepared to let this one go. Michael has been pulling her tail all morning and it's time to get her own back. She leaps on top of him as her paws seek revenge.



Tufts of brown and sandy hair float in the air. Petra and Jonah nod at each other and shout: 'Geronimo!' before pouncing on their siblings to join the fight. Gemma enters the kitchen in the midst of mayhem. Her children are screaming, crying and losing hair at a rapid pace. Gemma pulls them apart with a stern warning to go to their rooms.

With a bruised arm and bald patch on her back, Emma came off second best. 'I hate you! And I wish you weren't my brother!' she shouts vehemently. 'Suits me,' Michael replies with a smirk.

While everyone drudgingly moves to their respective bedrooms, Emma runs to the backdoor and escapes outside. The rain is still pelting down, matching her tears. She doesn't care if she perishes in the storm! She can't stand to be in the house with her siblings anymore. Especially Michael, who always makes fun of her. Surely death by rainwater is better?

Before she could scurry over the hill to her best friend's house, Emma realised she couldn't move. Her paws were stuck in the mud. And more mud was heading in her direction. Fast. 'I'm not going to panic. Take a deep breath. I'm going to be oh... heeeeeeeeeeelp!' Within seconds, Emma disappeared under another mudslide.

Suddenly, the backdoor burst open and Michael ran like a bat out of hell. He noticed his sister slipping away and watched her from his bedroom window, ready to tell on her. But as soon as he realised she was in trouble, he forgot how annoying she could be and he raced to her rescue. Just in time, because poor Emma already had a mouthful of mud and a bruised ego.

FREAKY WEATHER

MUDSLIDES

Whatever you do, do not confront a mudslide! These forces of nature can carry anything from trees to large buildings. They are caused by heavy rainfall and rapid snowmelt. Although not common in South Africa, mudslides killed at least 60 people in KwaZulu-Natal during April 2019.

RAINFALL

During the 2001 rainy season in India, people were surprised by a bloody downpour. It turned out the red rain in Kerala was caused by airborne spores from green algae, not bleeding clouds!

TEMPERATURE

Did you know you could use a cricket as a thermometer? All you have to do is convert the number of cricket chirps to degrees Celcius! The formula is simple:

number of chirps in 25 seconds ÷ 3 + 4 = approximate outside temperature

HEATWAVES

How do you turn grapes into raisins? By exposing them to 40°C! In 2003, a heatwave swept across the Napa Valley in California and turned the

clusters hanging from the vineyards into dried grapes. The winemakers and their customers weren't impressed!

BLIZZARDS

In 1972, a severe snowstorm with heavy winds buried 200 villages in Iran. Lasting for seven days, the blizzard proved to be deadly. Temperatures dropped as low as -25°C and 4 000 villagers didn't survive.

Source: natgeokids.com

LET'S MAKE LIGHTNING

It's best to avoid lightning at all costs, but this experiment is safe to try at home!

YOU WILL NEED

- An aluminium pie pan
- Small piece of wool fabric
- Styrofoam plate
- Pencil with an eraser
- Drawing pin

INSTRUCTIONS

- 1. Place the pie pan upside down.
- 2. Push the drawing pin through the centre of the pie pan.
- 3. Push the eraser end of the pencil into the drawing pin.
- 4. Put the Styrofoam plate upside down on the

table. Using fast movements, rub the wool on the plate for a few minutes.

- 5. Use the pencil as a handle to pick up the pan.
- 6. Place it on top of the Styrofoam plate.
- 7. Touch the pie pan with your finger. Did it shock you? If not, redo Step 5.
- 8. Once you feel the shock, turn the lights off, then touch the pan again.
- 9. Do you see a spark?

RESULTS

The spark is caused by static electricity when the negative charges (electrons) in your finger attract the positive charges (protons) in the aluminium pan. Lightning strikes when the electrons in the bottom of the cloud attract the protons in the ground.

Source: weatherwhizkids.com

SCIENCE DICTIONARY

atom: An atom is the basic unit that makes up all matter. Atoms are also called chemical elements and they come in different types, such as hydrogen and gold.

proton: A proton forms part of an atom. Along with neutrons, they are found in the nucleus of an atom. Protons have a positive charge.

electrons: An electron is a very small piece of matter and energy. It is negatively charged. Electrons move through wires or other conducters to create electricity.

static electricity: When an electric charge on the surface of an object increases, it causes static electricity.

WEATHER-WISE IDIOMS

Fill	in the missing word to complete the idiom:	4.	To shoot the(have a casual conversation)	8.	Throw to the wind (take a great risk)
1.	Come rain or(whatever the situation)	5.	To get of something (hear a rumour about something)		To experience a dry(an unsuccessful period)
2.	To chase (pursue something impossible)	6.	A on the horizon (a problem is approaching)	10.	To wait for a in the draught (to hope for something with little chance of it happening)
3.	To rain on someone's(spoil someone's plans)	7.	To have your head in the(have unrealistic ideas)		

Answers: 1. shine; 2. rainbows; 3. parade; 4. breeze; 5. wind; 6. storm; 7. clouds; 8. caution; 9. spell; 10. raindrop



Learn the science behind ice skating with this simple magic trick.

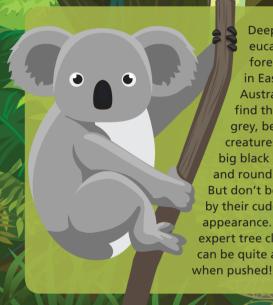
- A piece of fishing line with a weight tied to each end
- A 2-litre ice cream container
- A tray

- Place the ice cream container on the tray upside down.
- Place the ice block on top of the container.

- 3. Put the fishing line in the middle of the ice block with the weights hanging on either side of the container.
- 4. Wait for 5 minutes.

The fishing line cuts the ice block in half because the ice directly under the string melts from the pressure of the weights. In ice skating, the skater's blades melt the ice directly underneath, which allows the skater to skate smoothly on ice.

Source: sciencekids.co.nz



Deep in the eucalyptus forests in Eastern Australia, you'll find these furry grey, bear-like creatures with big black noses and round ears. But don't be fooled by their cuddly appearance. These expert tree climbers can be quite aggressive

A baby koala is called a joey. After birth, the newborn crawls into its mother's pouch where it grows and develops for the next six months. Blind and earless at birth, a joey uses its strong sense of smell and touch to find its way.

Length: Weight:

Family: **Favourite food:**

Favourite activity:

Up to 85 cm long

14 kg

Marsupials (not bears!) **Eucalyptus leaves** (eats up to 1 kg per day)

Snoozing (sleeps about 18 hours every day)

PROF THANDI SAYS

Marsupials are mammals, which means their babies are born alive and they have mammary glands to nurse their

newborn. Most marsupials, like the koala, have pouches where their babies develop.

Source: natgeokids.com

STIOR F

Decide whether the statements are fact or fiction:

- 4. An anthelion is a kind of reptile.
- 8. The mass of a cube is measured by density and volume.

- 1. A hologram shows two dimensions.
- 5. A musical has no words.
- A hydrogen atom is heavier than a carbon

- 2. Mycodiesel is a fuel made of mucus.
- 6. The name Lego means 'play nicely'.
- 10. The hula dance was originally a religious observation.

- 3. The world wide web was invented in 1990.
- 7. Fireworks get their different colours from dyes.

