# PARKHURST PRIMARY SCHOOL LEARNING ACTIVITY PACK COVER PAGE

SUBJECT						
<b>ENGLISH</b>	AFRIKAANS	MATHEMATICS	LIFE SKILLS	PSWB	SS - GEOG	SS - HIST
✓						
NS/TECH	EMS	NS	TECHNOLOGY	CA	LO	

	GRADE						
GRADE R	GRADE 1	<b>GRADE 2</b>	GRADE 3	GRADE 4	GRADE 5	GRADE 6	
GRADE 7	GRADE			PERIOD			
	SV		WEEK/S O	R APPLICABL	E DATES:		
V			29/6	-> 3/-	1		

QUESTION PAPER/ACTIVITY WORKSHEETS	MEMORANDUM (ANSWERS)
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V	

NUMBER OF PAGES EXCLUDING COVER	
PAGE	

INSTRUCTIONS/NOTES FOR PARENTS AND LEARNERS

INSTRUCTIONS/NOTES FOR PARENTS AND LEARNERS				

PART OF THE PART O			
GRADE	7	DATE	29/06/2020
NAME AND SURNAMI	E		
SUBJECT		English	Resource book : English for Success
TITLE OF WORKSHEET		Comprehension.	A description of the second of
Read the	inter	<u>view</u> on Pg- 146 and answer the	questions (Nos. 1,2,3)
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-			
,			
Longuego	۸ ۵۰	vity (Da MZ)	
<u>Language</u> (Complete	ACII	<u>vity</u> (Pg- <b>l</b> 47) .1,2 and 3)	
(Complete	1108	1,2 and 3)	

GRADE	7	DATE	30/06/2020
NAME AND SURNAME	E		
SUBJECT		English	
TITLE OF WORKSHEET		Writing: Dialogue	
	Writing: Write a dialogue discussing "Safety Protocols in our School."		
	-		
<u>Language</u> Read and (nos. 1,2)	<u>Acti</u> und	<u>vity</u> : Relative clauses (Pg- 151) erstand the use of relative clause	es and complete the activity.

GRADE	7	DATE	01/07/2020
NAME AND SURNAME			
SUBJECT		English	
TITLE OF WORKSHEET		Meeting Procedures.	

Visual Literacy: Order, Order!

There are processes to follow before and after a meeting:

Notice- To inform people about the meeting

Agenda – Tells people what time the meetings will begin and end and what items will be discussed. (Example on Pg- 159)

Meeting- People gather to discuss and follow a procedure.

Minutes –Minutes help everyone remember what was said and decided in the meeting. (Example on Pg- 163)

Examine the picture on Pg-154 Answer nos.1,2 and 3.	
Take Notice Read and analyse the notice (Pg-157) and answer the questions that follow (Pg-158)	

GRADE	7	DATE	02/07/2020
NAME AND SURNAME			
SUBJECT		English	
TITLE OF WORKSHEET		Notice and Agenda.	

LE OF	WORKSHEET	Notice and Agenda.
	Writing Activity School"	: Draw up a notice to call a meeting to discuss "Safety Protocols our
	Visual Literacy	ː Analyse an Agenda (Pg-159)
		eatures of an agenda and study the format of an agenda.  Inda format design an agenda for the meeting on "Safety Protocols in
-		

GRADE	7	DATE	03/07/2020		
NAME AND SURNAM	E				
SUBJECT		English	English		
TITLE OF WORKSHEET		Taking Minutes.			
Read the minutes and answer the questions (Pg163)					

GRADE	7	DATE	29/06/2020		
NAME AND SURNAM	E				
SUBJECT English Resource book : English for Success					
TITLE OF WORKSHEET Comprehension.					
Read the	inter	<u>view</u> on Pg- 146 and answer the	questions (Nos. 1,2,3)		
<u>Language</u> (Complete	Acti nos	<u>vity</u> (Pg- 47) .1,2 and 3)			

GRADE	7	DATE	01/07/2020				
NAME AND SURNAM	E						
SUBJECT		English					
TITLE OF WORKSHEET Meeting Procedures.							
<u>Visual Lite</u>	eracy	r: Order, Order!					
Notice- To Agenda — Meeting- Minutes —	Tells be of Peop Minu	discussed. (Example on Pg- 159 ble gather to discuss and follow	s will begin and end and what items will				
Examine to Answer no		icture on Pg-154 2 and 3.					
Take Noti Read and		yse the notice (Pg-157) and an	swer the questions that follow (Pg-158)				
-							

GRADE 7	DATE	03/07/2020
NAME AND SURNAME	, , , , , , , , , , , , , , , , , , ,	05/07/2020
SUBJECT	English	
TITLE OF WORKSHEET	Taking Minutes.	
Read the minu	ites and answer the questions (F	<sup>2</sup> g163)
3		

GRADE	7	DATE	29/06/2020
NAME AND SURNAN	ΛE		
		ME	МО
SUBJECT		English	Resource book: English for Success
TITLE OF WORKSHEE	Т	Comprehension.	

Read the interview on Pg- 146 and answer the questions (Nos. 1,2,3)

- 1. Readers of Edyth Bulbring books the interview is about why and how she writes.
- 2. "striking" strong visual word
  "fan" to describe how much she liked them
  "intriguing" to show amazement
- 3. The interviewer asks open questions that invite an answer full of information

<u>Language Activity</u> (Pg-**4**7) (Complete nos.1,2 and 3)

- 1.a) image; visual; intrigue
  - b)-ery; -ally; -ing
  - c) imagery noun visually adverb intriguing verb
  - d) Learners' answers will vary.
- 2.a) dash; to show an afterthought or additional information
  - b) comma; extra information
  - c) question mark; asking a question
  - d) apostrophe; possession
  - e) colon; to introduce a list
- 3.a) "How do you develop your characters?" asked the interviewer. "Are they based on people you know?" Edyth Bulbring replied, "My characters are always based on people I've met."
  - b) The interviewer asked Edyth Bulbring how she develops her characters. She asked if they were based on people that Edyth knew. Edyth replied that her characters are always based on people that she's met.
  - c) Direct speech

	GRADE 7 DATE 30/06/2020					
GRADE	7	DATE	30/06/2020			
NAME AND SURNAM	E					
		-				
SUBJECT		English				
TITLE OF WORKSHEET		Writing: Dialogue				

Writing: Write a dialogue discussing "Safety Protocols in our School."	
(Learner's Response)	
	,

<u>Language Activity</u>: Relative clauses (Pg- 151) Read and understand the use of relative clauses and complete the activity. (nos. 1,2)

- 1. a) I told you about the waitron who is rude.
  - b) Did you fetch the plate which was clean.
  - c) Do you know the waitron whose table this is?
  - d) I want to be seated where I sat last time.
- 2. a) These prawns that you asked me to try are delicious.
  - b) Sihle, who owns the restaurant, would not be pleased.
  - c) The restaurant which sells the best fish is Fishee Fish.
  - d) The restaurant where I ate the best fish was in Durban.

GRADE	7	DATE	01/07/2020
NAME AND SURNA	ME	4	
SUBJECT		English	-
TITLE OF WORKSHE	ET	Meeting Procedures.	

Visual Literacy: Order, Order!

There are processes to follow before and after a meeting:

Notice- To inform people about the meeting

<u>Agenda</u> – Tells people what time the meetings will begin and end and what items will be discussed. (Example on Pg- 159)

Meeting- People gather to discuss and follow a procedure.

<u>Minutes</u> –Minutes help everyone remember what was said and decided in the meeting. (Example on Pg- 163)

#### Examine the picture on Pg-154. Suggested Answers.

- 1. A meeting is being held however there is no order and it is chaotic.
- 2. General Robert is the figure in the middle of the scene wearing a uniform. He is looking exasperated with his hands in his hair. The advice that learners might give him can range from saying where he should stand to what he should tell everyone to do, e.g. he could stand on a chair and shout the word "Attention" or bang something on a desk or tell everyone to sit down and listen.
- 3. Learners can mention anything, e.g. they should have put chairs in rows for people to sit on, someone should have stood in the front, they should have started on time

#### Take Notice

Read and analyse the notice (Pg-157) and answer the questions that follow (Pg-158).

- 1. The notice is about organising the Grade 7 Farewell. It is aimed at all the Grade 7 learners.
- 2. The notice does not give the time of the meeting.
- 3. The Grade 7 Farewell committee has called the meeting.
- 4. The notice appeared on the library notice board.
- 5. Any suitable ideas should be accepted.
- 6. The notice went up two days before the meeting. This is probably not enough time for everyone to organise things like lift clubs and extra-murals. It should have gone up at least a week before.
- 7. Any suitable suggestions should be accepted.

GRADE	7	DATE	02/07/2020
NAME AND SURNA	ME		-
SUBJECT		English	
TITLE OF WORKSHI	EET	Notice and Agenda	

Writing Activity: Draw up a notice to call a meeting to discuss "Safety Protocols our School"

School
Look at page 157 and use these examples as guide .
Visual Literacy: Analyse an Agenda (Pg-159)
Read the key features of an agenda and study the format of an agenda.  Using the agenda format design an agenda for the meeting on "Safety Protocols in our School."
Use the example on page 159 as a guide to your agenda format.

05.155			
GRADE	7	DATE	03/07/2020
NAME AND SURNA	ME		
SUBJECT		English	
TITLE OF WORKSHE	EET	Taking Minutes.	

Read the minutes and answer the questions (Pg163)

- 1. 85 out of 120 attended the meeting.
- 12 excused themselves.
- 3. 23 did not arrive or send an apology.
- 4. The meeting was held in Room 20.
- 5. The four main items discussed were: a date for the Farewell party, a venue, a theme, the "Leave a Legacy" campaign.
- 6. All the items required a decision.
- 7. According to the agenda format on page 159 of the Learner's Book, there are no items missing in these minutes.
- 8. (Learners should use their own words to explain this vocabulary). a minutes: a summary of the items discussed at a meeting b vote: when people make a decision based on the majority c table: something gets set aside/placed on the next agenda for discussion at the next meeting
- 9. "All that glitters" won the majority vote.
- 10. The matter of the venue was tabled.
- 11. There was a 50/50 vote so they could not reach a decision because there was no majority.
- 12. Blue was chosen for the hoodies.
- 13. Blue took a majority vote of 39% which was 12% more than the next highest vote.
- 14. Maroon was the least popular because it got the lowest vote of 11%.
- 15. Learners should realise that it was an important meeting because every item on the agenda involved all the Grade 7 learners and required a decision and a vote.
- 16. Yes, it was successful because only one of all four items on the agenda that required a decision was "tabled" because they could not reach a decision. Also, most of the Grade 7 learners attended. (Any other reasonable answer that is supported)

# PARKHURST PRIMARY SCHOOL LEARNING ACTIVITY PACK COVER PAGE

SUBJECT						
ENGLISH	AFRIKAANS	MATHEMATICS	LIFE SKILLS	PSWB	SS - GEOG	SS - HIST
NS/TECH	EMS	NS	TECHNOLOGY	CA	LO	

GRADE							
GRADE R	GRADE 1	<b>GRADE 2</b>	GRADE 3	GRADE 4	GRADE 5	GRADE 6	
GRADE 7	GRADE	PERIOD					
	SV	WEEK/S OR APPLICABLE DATES:					
V			29 Jun	- 03 Ji	ul		

QUESTION PAPER/ACTIVITY WORKSHEETS	MEMORANDUM (ANSWERS)

NUMBER OF PAGES EXCLUDING COVER	
PAGE	
INSTRUCTIONS/NOTES F	OR PARENTS AND LEARNERS

GRADE:	7	DATE: 29/06/2020	
NAME AND SURNAME			
9			-
SUBJECT		Afrikaans	
TITLE OF WORKSHE	ET	LEESTYD- LEES EN SKRYF	

#### **Instructions:**

# Lees die storie en beantwoord die vrae wat volg/ Read the story and answer the questions

Hond red seuntjie van beer



'n Troetelhond is 'n held nadat hy 'n vyfjarige seuntjie van 'n wildebeeraanval in die noorde van Japan gered het, het die polisie Dinsdag gesê.

Die hond, 'n sesjarige Shiba Inu, het die beer van sowat 1 m lank aangevat nadat dié die seuntjie aangeval het toe hy langs 'n rivier saam met sy oupagrootjie gaan stap.

Die hond het "buitengewoon hard" geblaf en die dier weggejaag tydens die voorval Saterdagaand in Odate, sowat 550 km noord van Tokio, het 'n plaaslike polisiewoordvoerder gesê. "Die seun het ligte kneusplekke opgedoen en is hospitaal toe geneem, maar dieselfde dag ontslaan."

Die kind se 80-jarige oupagrootjie, wat tydens die voorval net 'n kort entjie weg van hom was, het alarm gemaak. Die plaaslike media het die hond geïdentifiseer as 'n sesjarige wyfie genaamd Mego, wat oulik beteken.

"Mego is gewoonlik baie rustig. Dit was 'n groot verrassing vir ons dat sy 'n beer weggejaag het," het die hond se eienaar aan die koerant Sports Hochi gesê. "Mego was nog altyd sy maat en ons het haar beloon met vleis en ander bederfies.

Hond / dog	Langs / next to	Geblaf / barked
Beer / bear	Rivier / river	Weggejaag / chased
		away
Lank / long	Saam / with	Ligte kneusplekke / light
400		bruises
Nadat / after	Oupagrootjie / great grandfather	Hospitaal / hospital
Seuntjie / boy	Stap / walk	Verrassing / suprise
Aangaval / attacked	Buitengewoon / out of the ordinary	Beloon / reward

#### <u>Vr</u>

ra	ae /	Questions (use the dictionary to help you with the words in the questions)
	1.	Wie (who) het langs 'n rivier gaan stap?
	2.	Op watse dag (on what day) het die voorval plaasgevind?
	3.	Hoe oud (how old) is die oupagrootjie?
	4.	Is die hond 'n mannetjie of 'n wyfie?
	5.	Wat beteken die hond se naam "Mego" (what does the dog's name mean)?
	6.	Wat (what) het die hond gejaag?
	7.	Hou jy (do you like) van honde? JA / NEE Rede:

Instructions:

GRADE:	7	DATE: 30/06/2020				
NAME AND SURNAME						
SUBJECT		Afrikaans				
TITLE OF WORKSHE		Taalstrukture				
		ne following questions				
<u>Taal hersier</u>	ing	/ Language revision				
A. <u>Skryf di</u>	e vo	gende in die ontkennende	vorm			
1. Pa bra	aai le	ekker vleis op Saterdae.				
2. Die ho	nd h	net die seuntjie gered.				
3. My hond speel baie bal.						
4. Die fliek het al in Suid-Afrika begin wys.						
5. Die hond hardloop in die straat.						
6. Hy was in die hospital opgeneem.						
7. Ek hou van honde en katte.						
8. Mego is gewoonlik baie rustig.						

GRADE: 7		DATE: 01/07/2020					
NAME AND SURNA	ME						
SUBJECT Afrikaans							
TITLE OF WORKSHEET Taalstrukture							
Instructions:							
1.	Answer the following questions						
A. Skryf	die	sinne met die voegwoorde					
2. Die m	a is	bly. Haar dogter doen haar huiswerk. <b>(want)</b>					

3. Sy skilder 'n olifant. Sy slurp lyk te lank en te wyd. (maar)

5. Renoster wil 'n resies teen Olifant hardloop. Hy wil die wenner wees. (want)

GRADE:	7	DATE: 02/07/2020
NAME AND SURNA	ME	
SUBJECT		Afrikaans
TITLE OF WORKSHE	ET	Taalstrukture
Instruction	ns:	
1. Skryf 'ı	n op:	stel van drie (3) paragrawe (130 woorde) oor die volgende onderwerpe:
		Dit was die beste dag in my lewe.
1. Skryf die t	itel b	o-aan jou skryfstuk neer.
<ol><li>Skryf eers</li></ol>	'n k	opkaart en dan die finale poging.
		woorde jy het aan die einde van die opstel. e poging in jou boeke
4. Ski yi die e	CISU	e pognig in jou boeke
Titel:		

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# HOMESCHOOLING ACTIVITY WORKSHEETS

PARKHURST PRIMARY SCHOOL

# PARKHURST PRIMARY SCHOOL LEARNING ACTIVITY PACK COVER PAGE

SUBJECT									
ENGLISH	AFRIKAANS	SS - GEOG	SS - HIST						
NS/TECH	EMS	NS	TECHNOLOGY	CA	LO				

	GRADE										
GRADE R	GRADE 1	GRADE 2	GRADE 2 GRADE 3 GRADE 4 GRADE 5 GRADE 6								
GRADE 7	GRADE		PERIOD								
	SV	WEEK/S OR APPLICABLE DATES:									
		29 Jun - 03 Jul									

QUESTION PAPER/ACTIVITY WORKSHEETS	MEMORANDUM (ANSWERS)

NUMBER OF PAGES EXCLUDING COVER	
PAGE	
INSTRUCTIONS/NOTES FO	DR PARENTS AND LEARNERS

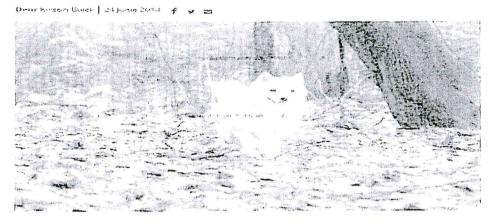
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GRADE:	7	DATE: 29/06/2020	
NAME AND SURNA	ME		
		Memo	
SUBJECT		Afrikaans	
TITLE OF WORKSHE	ET	LEESTYD- LEES EN SKRYF	

#### Instructions:

Lees die storie en beantwoord die vrae wat volg/ Read the story and answer the questions

#### rus / Noos Hond red seuntjie wan "beer



'n Troetelhand is 'n held nadat by in vyfjarige seuntjie van 'n wildebeeraanval in die noorde van Japan gered het, het die polisie Dinsdag gesë.

Die hond, 'n sesjarige Shiba Inu, het die beer van sowat 1 m lank aangevat nadat dié die seuntjie aangeval het toe hy langs 'n rivier saam met sy oupagrootjie gaan stap.

Die hond het "buitengewoon hard" geblaf en die dier weggejaag tydens die voorval Saterdagaand in Odate, sowat 550 km noord van Tokio, het 'n plaaslike polisiewoordvoerder gesê. "Die seun het ligte kneusplekke opgedoen en is hospitaal toe geneem, maar dieselfde dag ontslaan."

Die kind se 80-jarige oupagrootjie, wat tydens die voorval net 'n kort entjie weg van hom was, het alarm gemaak. Die plaaslike media het die hond geïdentifiseer as 'n sesjarige wyfie genaamd Mego, wat oulik beteken.

"Mego is gewoonlik baie rustig. Dit was 'n groot verrassing vir ons dat sy 'n beer weggejaag het," het die hond se eienaar aan die koerant Sports Hochi gesê. "Mego was nog altyd sy maat en ons het haar beloon met vleis en ander bederfies.

Hond / dog	Langs / next to	Geblaf / barked
Beer / bear	Rivier / river	Weggejaag / chased away
Lank / long	Saam / with	Ligte kneusplekke / light bruises
Nadat / after	Oupagrootjie / great grandfather	Hospitaal / hospital
Seuntjie / boy	Stap / walk	Verrassing / suprise
Aangaval / attacked	Buitengewoon / out of the ordinary	Beloon / reward

### <u>Vr</u>

angavai / attacked Buitengewoon / out of the Beloon / reward ordinary
ran / Quantiana (was the distinguists halo you with the words in the guartiana)
rae   Questions (use the dictionary to help you with the words in the questions)
1. Wie (who) het langs 'n rivier gaan stap?  Die seun en sy oupagroot jie
2. Op watse dag (on what day) het die voorval plaasgevind?  Op Saterdag
3. Hoe oud (how old) is die oupagrootjie?
4. Is die hond 'n mannetjie of 'n wyfie?  Wy Fie
5. Wat beteken die hond se naam "Mego" (what does the dog's name mean)?
6. Wat (what) het die hond gejaag?
7 Hou iv (do you like) you bondo? IA / NEE Podo:

7. Hou jy (do you like) van honde? JA/NEE Rede:

Ja/Nee. Leerder se eie antwoord

GRADE:	7	DATE: 30/06/2020	
NAME AND SURNA	ME		
		¥	
SUBJECT		Afrikaans	
TITLE OF WORKSHE	ET	Taalstrukture	
Instructions	:	,	
1. Answ	er tł	ne following questions	
Taal hersien	ing	/ Language revision	
A. Skryf die	e vo	gende in die ontkennende	vorm
1. Pa bra Pg b	iai le	ekker vleis op Saterdae. II nie lekker vlei	s op Saterdae nie.
2. Die ho	nd h	net die seuntjie gered.	seuntjie gered nie:
3. My hond speel baie bal.  My hond speel nie baie bal nie.			
4. Die fliek het al in Suid-Afrika begin wys. Die fliek het nie in S.A begin wys nie.			
		,	
5. Die ho	nd h	nardloop in die straat. Ind hardloop nie	in die straat nie.
6. Hy was	in d	lie hospital opgeneem. 5 nie in die ho	espitaal opgeneem nie.
7. Ek hou	van	honde en katte.	de en Katte nie.
8. Mego i Meg	s ge	woonlik baie rustig.	nie baie rustignie.

7 DATE: 01/07/2020

GRADE:

NAME AND SURNAME	'	
SUBJECT	Afrikaans	
TITLE OF WORKSHEET	Taalstrukture	
Instructions:		
1. Ans	swer the following questions	
A. Skryf die	sinne met die voegwoorde	
2. Die ma is	bly. Haar dogter doen haar huiswerk. (want)	
Die n	na is bly, want haar dagter doen haar werk.	
3. Sy skilder	'n olifant. Sy slurp lyk te lank en te wyd. (maar)	
Sy skild	er'n olifait maar sy slurp lyk te lank en wyd.	
4. Sipho wil '	n akteur word. Hy wil graag eendag in 'n fliek speel. (en)	
Sipho will	n akteur word en hy wil graag eendag 'n fliek sp	3
5. Renoster wil 'n resies teen Olifant hardloop. Hy wil die wenner wees. (want)		
Renoster wil p	resies teen difant hardloop, want hy	
wil die	venner wees.	

GRADE:	7	DATE: 02/07/2020	
NAME AND SURNA	ME		
SUBJECT		Afrikaans	
TITLE OF WORKSHE	ET	Taalstrukture	

#### Instructions:

- 1. Skryf 'n opstel van drie (3) paragrawe (130 woorde) oor die volgende onderwerpe:
  - Dit was die beste dag in my lewe.
- 1. Skryf die titel bo-aan jou skryfstuk neer.
- 2. Skryf eers 'n kopkaart en dan die finale poging.
- 3. Skryf hoeveel woorde jy het aan die einde van die opstel.
- 4. Skryf die eerste poging in jou boeke

Titel:
Skryf eie Storie. Rubriek te volg.
Rubriek te volg.
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# PARKHURST PRIMARY SCHOOL LEARNING ACTIVITY PACK COVER PAGE

LE	ARNIN	IG ACTIV	VITY PA	CK CO	VER PAG	GE -
			SUBJECT		* *************************************	
ENGLISH	AFRIKAANS	MATHEMATICS	LIFE SKILLS	PSWB	SS - GEOG	SS - HIST
	-					
NS/TECH	EMS	NS	TECHNOLOGY	CA	LO	
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			GRADE			
GRADE R	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
GRADE 7	GRADE		1	PERIOD	1	
	SV		WEEK/S OR APPLICABLE DATES:			
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	1					
QUESTION	PAPER/ACTI	VITY WORKSH	EETS	MEMORA	NDUM (ANSV	VERS)
			,			
IUMBER OF	PAGES EXC	LUDING COVER	3	C	7	
		INSTRUCTIONS/N	OTES FOR PAREN	TS AND LEARNE	RS	

GRADE 7		DATE	29 June 2020
NAME AND SURNAME			
	-		
SUBJECT		Natural Science	
TITLE OF WORKSHIE	<b>ET</b>	Acids, bases and neutrals.	

#### 1. Introduction

Materials can be classified according to whether they are:

- Acid
- Base, or
- Neutral (neither acid or base)

An acid is a chemical substance that forms hydrogen ions (protons) in a solution.

A base is a chemical substance that forms hydroxide ions in a solution.

When an acid reacts with a base, the acid produces a positively charged hydrogen atom called a **hydrogen ion** or **proton**. The base produces a negative charged **hydroxyl ion**.

Stronger concentrations of acids and bases release higher concentrations of **hydrogen ions** or **hydroxyl ions**.

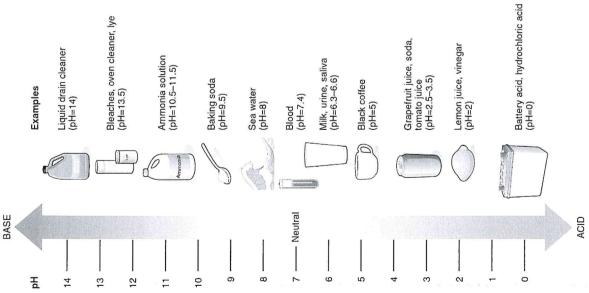
Acids and bases are characterised by what happens when they are mixed. When mixed, they neutralise each other and form a substance known as **salt**. There are many different types of salt, with the most well-known being table salt, which is formed by mixing hydrochloride acid with sodium hydroxide (base). Water is also produces from the chemical reaction.

Acid + Base = Salt and Water.

#### 2. pH Scale

We use the pH scale to measure a material's acidity or base. The scale rates the colour of the indicator when acidity is measured. The scale ranges from pH0 (most acid) to pH14 (most base), with pH7 being neutral. Every value represents the colour produced when a substance is tested. The pH scale was devised by a Danish chemist, Seres Sorensen. pH stands for 'potential of hydrogen'.

#### The table below shows the pH scale with examples.



Each increase in value on the pH scale represents a concentration of hydrogen ions 10 times lower than the previous one. At pH7, the concentration of hydrogen ions is equal to the concentration of hydroxyl ions.

#### 3. Measuring acidity

Red or blue litmus paper is used to test whether the substance is an acid, a base or a neutral. Red litmus paper turns blue if the substance is a base and remains red for an acid and a neutral.

Figure 1 Red and Blue litmus paper.

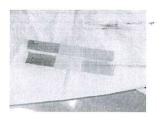




Figure 2 Red Litmus paper - Acid

Blue litmus paper turns red if the substance is an acid, but remains blue for a base and a neutral. Both blue and red litmus papers are always used to test a substance.



Figure 3 Illustration of Litmus Test Strips,

Universal indicator solution can also be used to test a substance. This turns from red (most acid) through orange, yellow, green, blue, to purple (most base).

#### Exercise 1: Acid, Base or Neutral?

Decide whether the substances is acid, base or neutral by ticking the correct box.

Substance	Acid	Neutral	Base
1. pure water			
2. furniture polish			
3. apple			
4. sugar			
5.saliva			
6. tomato sauce			
7. rainwater			
8. blood			
9. pasta			
10. black coffee			
11. salts			
12. coke			
13. mustard			
14. detergent			
15. egg			
16. shampoo			
17. banana			
18. sea water			
19. toothpaste			
20. bleach			

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NAME AND SURNAME				
SUBJECT		Natural Science		
TITLE OF WORKSHEET		Acids, bases and neutrals.		

#### 4. Properties of Acids

Many foods and household chemicals can be classified as acids, bases or neutrals, depending on their properties.

Acids display the following properties:

- They are liquids.
- Acids can be strong or weak. Strong acids are more dangerous than weak acids.
- They have a sour taste.
- They feel rough on the skin.
- Many are dangerous to feel or taste, as they are corrosive.
- They contain hydrogen ions.
- They usually react with metals to form salts.
- They turn blue litmus paper red.
- They turn the universal indicator solution from green to red.
- They have a pH of less than 7.
- They react with metals to form hydrogen gas, water and a salt (neutral). If the base is a carbonate, carbon dioxide will also be produced. This process is called **neutralisation**.
- They react with bases to form a salt and water.
- They conduct electricity.

Acid and Metal Reaction:

Acid + Metal =

a Salt + H2 Hydrogen Gas

#### **Examples of acids:**

Lemon and orange juice	Vinegar	Tartaric acid	Battery acid

#### 5. Properties of Bases

Bases display the following properties:

- They are soluble bases known as alkaline.
- They taste bitter.
- They feel slippery / soapy on the skin.
- Many are dangerous to feel or taste, as they are also corrosive.
- They turn litmus paper blue.
- They turn the universal indicator solution from green to blue or purple.
- They have a pH of more than 7.
- They react with acids to form a salt (neutral) and water, for example, if hydrochloric acid is mixed with the base sodium hydroxide, common table salt (sodium chloride) and water are formed.

**Examples of Bases:** 

Bicarbonate of soda	Soap	Washing powder
Bleach	Household cleaners	Ammonia

#### **6. Properties of Neutrals**

**Neutral** substances display the following properties:

- -They are neither acids nor bases.
- They are not affected by litmus paper.
- They are usually harmless.
- Universal indicator stays green.
- They have a pH of exactly 7.

#### **Examples of Neutral Substances:**

Pure water	Salt solution	Sugar	Cooking oil	
I are water	Sait Solution	Jugui	COOKING ON	

#### Exercise 2: Acids and Bases.

Choose the correct answer to the questions in the table below by underlining the correct answer.

Question	Option 1	Option 2	Option 3
1. Which of the following pHs would be classified as a weak acid?	pH5	pH1	pH12
2. Which acid is found in car batteries?	Vinegar	Sulphuric acid	Hydrochloric acid
3. What is the reaction whereby acidity or alkalinity is removed called?	Sterilisation	Pasteurisation	Neutralisation
4. When an alkali is added to an acid, the pH:	Rises	Falls	Stays the same
5. If universal solvent is used to determine the pH of pure water, the colour will:	Remain green	Turn purple	Turn orange
6. Which of the following is a strong acid?	Urine	Acid rain	Hydrochloric
7. Which of the following is a strong alkali?	Ammonia solution	Baking soda	Liquid drain cleaner
8. Which of the following substances can be corrosive?	Acids and bases	Bases only	Neutrals
9. Which of the following statements are true?	Red litmus paper does not change colour if the substance tested is a base.	Blue litmus paper turns red if the substance is an acid.	Blue litmus paper turns red if the substance tested is a base.
Which of the following statements are true?	A strong acid will produce higher concentrations of hydroxyl ions when reacting with a base.	A strong alkali will produce higher concentrations of hydrogen when reacting with an acid.	A strong acid will produce higher concentrations of hydrogen ions when reacting with an acid.

GRADE	7	DATE	<b>01</b> July 2020
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SUBJECT		Natural Science	
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#### 7. Taste

Taste helps us to detect and enjoy the flavours of food and drinks. It is the weakest of the five senses.

Our tongue is the organ that we use for taste. It is covered with around 10 000 taste buds which can detect substances in food and drink. These taste buds have receptors which send the messages to our brain and tell us if the food or drink tastes nice or not.

Taste helps us to distinguish which foods are OK to eat, for example, a ripe apple will usually taste sweet, but an unripe one can taste sour. There are many substances which are unsafe to taste.

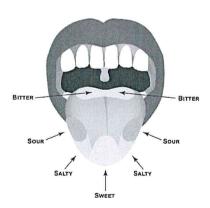
The four main tastes that we can detect are:

- Sweet example cupcakes.
- Sour lemons and limes.
- Salty fish.
- Bitter black coffee.

Salty and sweet taste buds are at the front of the mouth, the sour taste buds are at the sides and the bitter taste buds are at the back of the tongue.

When we are very young, we have taste buds on the sides and roof of our mouth as well as our tongue, so we are very sensitive to taste. These disappear as we get older and our taste buds become less sensitive, which is why our taste for certain foods can change.

#### Basic tastes:



#### Exercise 3: Practical activity: The senses – taste activities. (Homework activity)

1. Identifying the four main tastes

We have seen that we can identify four main tastes, i.e., sweet, sour, salty and bitter. Gather two examples of foods in each of these categories and enter their names in the table below, then taste each one.

Food example 1:			· · · · · · · · · · · · · · · · · · ·
Sweet	Sour	Salty	Bitter
P. 1 . 1 . 2	ā		
Food example 2:	15	I C- W.	2.44
Sweet	Sour	Salty	Bitter
2. Taste buds			
The tongue has differ	rent taste buds on differ	rent parts of the tongue	for each taste. To test this, dip a
toothpick into the fol	llowing:		•
a) Salt taste – salt wa			
b) Sweet taste – suga	50		
c) Sour taste – lemon	-		
d) Bitter taste – tonic	water or onion		
Now put the toothnic	rk on different parts of t	the tongue and see if you	u can identify in which part of the
	s for the taste are locate		a can racinary in which part of the
	ink some water betwee		
In the space below, o	draw a picture of the ar	eas of the tongue that a	re most sensitive to each taste.
		- Wewell	
1. The role of sal	iva		
In order to taste food	the food must dissolve	a in our saliva so that the	e chemicals can be detected by the
		we will not be able to ta	
receptors on the tast	z bads. Without sanva,	we will not be able to ta	ste our rood.
To test this, dry out ye	our tongue with a clean	paper towel and then t	ry to taste the different foods. Dry
your tongue between			
Can you taste the foo	od when the tongue is o	dry, i.e., without any sal	iva?
			<del>_</del>

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TITLE OF WORKSHEET	•	Acids, bases and neutrals.	a company of the second

<b>Exercise</b>	4: A	ids. h	ases.	and	neutrals	

•	Answer the following		the information/words fro	om the box below:
		0 and 7	7 and 14	
		Neutral	pH scale	
	L Acids are found on th	he pH scale betw	veen the numbers of	and
	2 Bases are found on t	he PH scale betw	veen the numbers of	and
	3 A solution that has a	pH of 7 is a		
.4	I A is wh	nat scientists use	to measure how basic or	acidic a liquid is.
	Name three (3) prop	erties of acids.		
				•
	Give two (2) example	es of acid that co	uld be found in a grocery	cupboard.
	Why does it hurt who	en a person is stu	ung by a bee?	
	Name three (3) prop	erties of bases.		

6. Give two (2) examples of bases that could be found in a detergent cupboard.

		7
7.	រីហ៊ីក់នាំ is a neutral substance?	وغنيت
	e version of the contract of t	
8.	Give two (2) examples of neutral substances.	. ·
9.	How can you tell if a substance is an acid or a base?	
( <del></del>		

TITLE OF WORKSHE	हा	Acids, bases and neutrals. Page 206 - 23	31
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#### Complete pages 206-231 in GDE technology workbook.

#### Instructions:

- 1. Read through all the information on page 206 to 231.
- 2. Answer the questions on page 207 (bottom of page), 209, 212, 213, 214, 215, 228, 229, 230, 231
- 3. Write all answers in the book, in the spaces provided.

GRADE	7	DATE	29 June 2020	
NAME AND SURNAME		MEMO		
SUBJECT		Natural Science		
TITLE OF WORKSHI	Ħ	Acids, bases and neutrals.		

#### 1. Introduction

#### Materials can be classified according to whether they are:

- Acid
- Base, or
- Neutral (neither acid or base)

An acid is a chemical substance that forms hydrogen ions (protons) in a solution.

A base is a chemical substance that forms hydroxide ions in a solution.

When an acid reacts with a base, the acid produces a positively charged hydrogen atom called a **hydrogen ion** or **proton**. The base produces a negative charged **hydroxyl ion**.

Stronger concentrations of acids and bases release higher concentrations of hydrogen ions or hydroxyl ions.

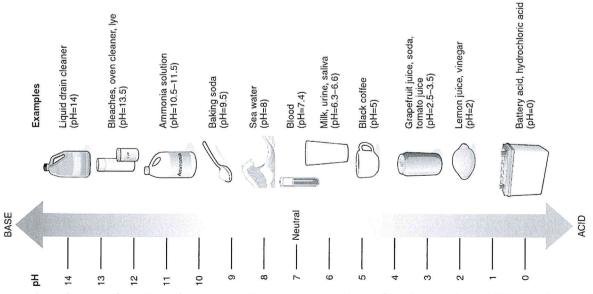
Acids and bases are characterised by what happens when they are mixed. When mixed, they neutralise each other and form a substance known as **salt**. There are many different types of salt, with the most well-known being table salt, which is formed by mixing hydrochloride acid with sodium hydroxide (base). Water is also produces from the chemical reaction.

#### Acid + Base = Salt and Water.

#### 2. pH Scale

We use the pH scale to measure a material's acidity or base. The scale rates the colour of the indicator when acidity is measured. The scale ranges from pH0 (most acid) to pH14 (most base), with pH7 being neutral. Every value represents the colour produced when a substance is tested. The pH scale was devised by a Danish chemist, Seres Sorensen. pH stands for 'potential of hydrogen'.

#### The table below shows the pH scale with examples.



Each increase in value on the pH scale represents a concentration of hydrogen ions 10 times lower than the previous one. At pH7, the concentration of hydrogen ions is equal to the concentration of hydroxyl ions.

#### 3. Measuring acidity

Red or blue litmus paper is used to test whether the substance is an acid, a base or a neutral. Red litmus paper turns blue if the substance is a base and remains red for an acid and a neutral.

Figure 1 Red and Blue litmus paper.





Figure 2 Red Litmus paper - Acid

Blue litmus paper turns red if the substance is an acid, but remains blue for a base and a neutral. Both blue and red litmus papers are always used to test a substance.



Figure 3 Illustration of Litmus Test Strips,

Universal indicator solution can also be used to test a substance. This turns from red (most acid) through orange, yellow, green, blue, to purple (most base).

#### Exercise 1: Acid, Base or Neutral?

Decide whether the substances is acid, base or neutral by ticking the correct box.

Substance	Acid	Neutral	Base
1. pure water		<u>√</u>	
2. furniture polish			⊻
3. apple			<u>√</u>
4. sugar		<u>√</u>	
5.saliva		-	
6. tomato sauce	<u>√</u>		
7. rainwater	<u>√</u>		
8. blood		<u>√</u>	
9. pasta	<u>√</u>		
10. black coffee	<u>√</u>		
11. salts		<u>√</u>	
12. coke	<u>√</u>		
13. mustard	<u>√</u>		
14. detergent			<u>√</u>
15. egg	<u>√</u>		
16. shampoo			_√
17. banana	<u>√</u>		
18. sea water			<u>v</u>
19. toothpaste			⊻
20. bleach			<u>V</u>

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#### 4. Properties of Acids

Many foods and household chemicals can be classified as acids, bases or neutrals, depending on their properties.

Acids display the following properties:

- They are liquids.
- Acids can be strong or weak. Strong acids are more dangerous than weak acids.
- They have a sour taste.
- They feel rough on the skin.
- Many are dangerous to feel or taste, as they are corrosive.
- They contain hydrogen ions.
- They usually react with metals to form salts.
- They turn blue litmus paper red.
- They turn the universal indicator solution from green to red.
- They have a pH of less than 7.
- They react with metals to form hydrogen gas, water and a salt (neutral). If the base is a carbonate, carbon dioxide will also be produced. This process is called **neutralisation**.
- They react with bases to form a salt and water.
- They conduct electricity.

Acid and Metal Reaction:

Acid + Metal =

a Salt + H2 Hydrogen Gas

Acid + Base=

a Salt + H2O Water

#### **Examples of acids:**

Lemon and orange juice	Vinegar	Tartaric acid	Battery acid	
------------------------	---------	---------------	--------------	--

#### 5. Properties of Bases

Bases display the following properties:

- They are soluble bases known as alkaline.
- They taste bitter.
- They feel slippery / soapy on the skin.
- Many are dangerous to feel or taste, as they are also corrosive.
- They turn litmus paper blue.
- They turn the universal indicator solution from green to blue or purple.
- They have a pH of more than 7.
- They react with acids to form a salt (neutral) and water, for example, if hydrochloric acid is mixed with the base sodium hydroxide, common table salt (sodium chloride) and water are formed.

**Examples of Bases:** 

Bicarbonate of soda	Soap	Washing powder
Bleach	Household cleaners	Ammonia

#### 6. Properties of Neutrals

#### **Neutral** substances display the following properties:

- -They are neither acids nor bases.
- They are not affected by litmus paper.
- They are usually harmless.
- Universal indicator stays green.
- They have a pH of exactly 7.

**Examples of Neutral Substances:** 

Pure water Salt solution	Sugar	Cooking oil
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#### Exercise 2: Acids and Bases.

Choose the correct answer to the questions in the table below by underlining the correct answer.

Question	Option 1	Option 2	Option 3
1. Which of the following pHs would be classified as a weak acid?	pH5	pH1	pH12
2. Which acid is found in car batteries?	Vinegar	Sulphuric acid	Hydrochloric acid
3. What is the reaction whereby acidity or alkalinity is removed called?	Sterilisation	Pasteurisation	Neutralisation
4. When an alkali is added to an acid, the pH:	Rises	Falls	Stays the same
5. If universal solvent is used to determine the pH of pure water, the colour will:	Remain green	Turn purple	Turn orange
6. Which of the following is a strong acid?	Urine	Acid rain	Hydrochloric
7. Which of the following is a strong alkali?	Ammonia	Baking soda	Liquid drain
	solution		cleaner
8. Which of the following substances can be	Acids and	Bases only	Neutrals
corrosive?	<u>bases</u>		
9. Which of the following statements are true?	Red litmus	Blue litmus	Blue litmus
	paper does	paper turns	paper turns
	not change	red if the	red if the
	colour if the	substance is	substance
	substance	an acid.	tested is a
	tested is a		base.
	base.		
Which of the following statements are true?	A strong acid	A strong alkali	A strong acid
	will produce	will produce	will produce
	higher	higher	<u>higher</u>
	concentrations	concentrations	concentrations
	of hydroxyl	of hydrogen	of hydrogen
	ions when	when reacting	ions when
	reacting with a	with an acid.	reacting with
	base.		an acid.

GRADE	7	DATE	01 July 2020	
NAME AND SURNAME		MEMO		
SUBJECT		Natural Science		
TITLE OF WORKSHI	ET	Acids, bases and neutrals.		

#### 7. Taste

Taste helps us to detect and enjoy the flavours of food and drinks. It is the weakest of the five senses

Our tongue is the organ that we use for taste. It is covered with around 10 000 taste buds which can detect substances in food and drink. These taste buds have receptors which send the messages to our brain and tell us if the food or drink tastes nice or not.

Taste helps us to distinguish which foods are OK to eat, for example, a ripe apple will usually taste sweet, but an unripe one can taste sour. There are many substances which are unsafe to taste.

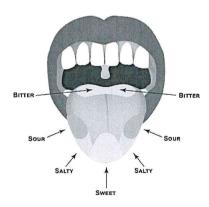
The four main tastes that we can detect are:

- Sweet example cupcakes.
- Sour lemons and limes.
- Salty fish.
- Bitter black coffee.

Salty and sweet taste buds are at the front of the mouth, the sour taste buds are at the sides and the bitter taste buds are at the back of the tongue.

When we are very young, we have taste buds on the sides and roof of our mouth as well as our tongue, so we are very sensitive to taste. These disappear as we get older and our taste buds become less sensitive, which is why our taste for certain foods can change.

#### Basic tastes:



#### Exercise 3: Practical activity: The senses – taste activities. (Homework activity)

1. Identifying the four main tastes

We have seen that we can identify four main tastes, i.e., sweet, sour, salty and bitter. Gather two examples of foods in each of these categories and enter their names in the table below, then taste each one.

#### Food example 1:

Sweet	Sour	Salty	Bitter
Learner's own	Learner's own answer	Learner's own answer	Learner's own answer
<u>answer</u>			

#### Food example 2:

Sweet	Sour	Salty	Bitter
<u>Learner's own</u>	Learner's own answer	Learner's own answer	Learner's own answer
answer			

#### 2. Taste buds

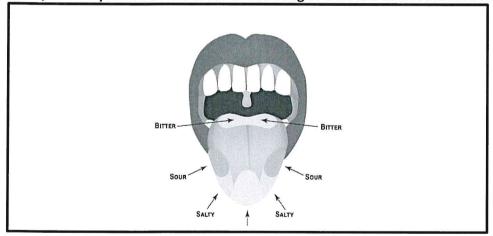
The tongue has different taste buds on different parts of the tongue for each taste. To test this, dip a toothpick into the following:

- a) Salt taste salt water
- b) Sweet taste sugary water
- c) Sour taste lemon juice
- d) Bitter taste tonic water or onion

Now put the toothpick on different parts of the tongue and see if you can identify in which part of the tongue the taste buds for the taste are located.

You might need to drink some water between tastes.

In the space below, draw a picture of the areas of the tongue that are most sensitive to each taste.



#### 1. The role of saliva

In order to taste food, the food must dissolve in our saliva so that the chemicals can be detected by the receptors on the taste buds. Without saliva, we will not be able to taste our food.

To test this, dry out your tongue with a clean paper towel and then try to taste the different foods. Dry your tongue between each food type.

Can you taste the food when the tongue is dry, i.e., without any saliva?  $\ensuremath{\mathbb{NO}}$ .

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SUBJECT	Natural Science			
TITLE OF WORKSHI	ET	Acids, bases and neutrals. Page 76-80 of Textbook		

Refer to page 76-80 of your textbook.

#### Exercise 4: Acids, bases and neutrals

1. Answer the following questions, use the information/words from the box below:

0 and 7	7 and 14
Neutral	pH scale

- 1.1 Acids are found on the pH scale between the numbers of  $\underline{0}$  and  $\underline{7}$ .
- 1.2 Bases are found on the PH scale between the numbers of 7 and 14.
- 1.3 A solution that has a pH of 7 is a neutral.
- 1.4 A pH scale is what scientists use to measure how basic or acidic a liquid is.
- 2. Name three (3) properties of acids.
  - Taste sour
  - · Feel rough on the skin.
  - Many are dangerous to taste or feel because they are corrosive.
- 3. Give two (2) examples of acid that could be found in a grocery cupboard.

Lemon juice, vinegar, fruit juices, fizzy drinks.

4. Why does it hurt when a person is stung by a bee?

Because the insect gives you a little injection of acid that burns.

- 5. Name three (3) properties of bases.
  - Taste bitter
  - Feel slippery or soapy on the skin
  - Many are dangerous to taste or feel because they are corrosive.
- Give two (2) examples of bases that could be found in a detergent cupboard.

Soap, bleach, washing powder, household cleaners.

7. What is a neutral substance?

A substance that is not an acid or a base.

8. Give two (2) examples of neutral substances.

Water, salt, sugar, cooking oil.

9. How can you tell if a substance is an acid or a base?

By using a substance called and INDICATOR, which changes colour when it comes into contact with an acid or a base.

TITLE OF WORKSHEET	OF WORKSHEET Acids, bases and neutrals. Page 206 - 231				
SUBJECT		Natural Science			
NAME AND SURNAM	E		MEMO		
GRADE	7	DATE 03 July 2020			

#### Complete pages <u>266-231</u> in GDE technology workbook.

#### Instructions:

- 1. Read through all the information on page 206 to 231.
- 2. Answer the questions on page 207 (bottom of page), 209, 212, 213, 214, 215, 228, 229, 230, 231
- 3. Write all answers in the book, in the spaces provided.

#### **Answers:**

Page 207: Sweet, sour, bitter and salty.

#### Page 209:

- Vinegar, citric fruits (lemons, oranges, grapefruits)
- The lemon juice contains an acid. The lemon juice is sour.

#### Page 212 - 213: Activity: True or False

- 1. False, we can sense four tastes, namely salty, sweet, sour and bitter.
- 2. True.
- 3. False, not all acids are safe to taste.
- 4. False, there are many household acids which are not dangerous, such as acetic acid and acids in foods.
- 5. True.
- 6. True.
- 7. False. This symbol means that the substance is corrosive, it is a warning.
- 8. False, ascorbic acid is commonly referred to as Vitamin C.
- 9. <u>False, there are many other foods with higher ascorbic acid (Vitamin C), such as strawberries</u> and chillies.

#### Page 214-215: Activity: Acids and bases in our homes.

1.

Product	What is it used for?
Stain remover (vanish)	Removing stains from clothes.
Windowlene	Cleaning windows
Handy Andy	Cleaning surfaces (stove, bathroom, kitchen tops. Etc.)
Baking powder	Ingredient in baked goods.
Bicarbonate of soda	Ingredient in baked goods, also mild disinfectant.
Bleach	Disinfecting and removing stains.
Sunlight liquid	Cleaning dishes, cutlery and crockery.

2. .

Substance How did it feel between the fingers?  Washing powder Slippery		Is it an acid or a base?	
		Base	
Lemon juice Feels slightly rough between the fingers.		Acid	
Handy andy/soap Slippery		Base	
Vinegar	Leaves a rough feeling on the skin.	Acid	
Baking powder Slippery		Base	

- 3. Questions:
- 1. Bases feels slippery.
- 2. Generally, acids feel rough on the skin.
- 3. She/he had to add water to make it slippery. A solution of a base and water is called an alkaline solution.
- 4. Many acids and bases are dangerous to touch or taste they are corrosive.

#### Page 228, 229, 230, 231: Revision:

1. .

Acids	Bases		
Sour taste	Bitter taste		
Tartaric acid	Bicarbonate of soda		
Feels rough on the skin	Soaps		
Vinegar	Feels slippery		
Lemon juice	Bleach		
Citric acid	Turns red litmus blue		
Formic acid	Corrosive		
Turns blue litmus red			
Corrosive			

- 2. a. litmus
  - b. corrosive
  - c. poisonous
  - d. Salty, sweet, bitter and sour.
  - e. indicator
  - f. Neutral
  - g. <u>neutralize</u>
  - h. red cabbage
- 3. Strong acids include hydrochloric acid, sulfuric acid and a strong base is sodium hydroxide.
- 4. Learner's answer should include at least 2 of the following ideas:
  - When an acid reacts with a base, the acid and the base will neutralize each other.
  - That means they will both lose their strength/potency.
  - The acid will not be an acid anymore, and the base will not be a base anymore.
  - They will combine to form a neutral substance.

- 5. Learner's answer should include the following ideas:
  - Laboratory acids should be handled very carefully because they are corrosive.
  - Laboratory acids should never be tested.
  - You should protect yourself by wearing protective clothes, safety goggles and gloves when handling these acids.
- 6. <u>Some household acids can be tested. Some household acids are in our food. Laboratory acids should never be tasted.</u>
- 7. Examples of acids that are safe to taste are: vinegar, lemon juice, ascorbic acid (vitamin C), citric acid.
- 8. We recognize them as acids by their taste; acids have a sour taste.
- 9. Learner's answer should include at least 2 of the following ideas:
  - Most people don't like bitter food; that is because poisonous substances often have a bitter taste.
  - When food tastes sour, it may be a sign that the food is spoiled.
  - When food tastes strange, it may be a warning that the food has spoiled.

10.<u>.</u>

- a) Sulfur dioxide and carbon dioxide.
- b) They come from factories, power stations and car exhausts.
- c) The impacts include:
  - Damage of plant life, both wilderness areas and also crops, depending on where the rain falls.
  - The rain goes into soil, polluting it and making it more acidic.
  - The rain can fall into various water sources and pollutes it.
- 11. Acids are corrosive and so they can corrode surfaces over time.

# PARKHURST PRIMARY SCHOOL LEARNING ACTIVITY PACK COVER PAGE

	SUBJECT					
ENGLISH	AFRIKAANS	MATHEMATICS	LIFE SKILLS	PSWB	SS - GEOG	SS - HIST
NS/TECH	EMS	NS	TECHNOLOGY	CA	LO	
			<b>\</b> /			

			GRADE			
GRADE R	GRADE 1	GRADE 2	GRADE 3	GRADE 4	GRADE 5	GRADE 6
004057	CDADE			252102		
GRADE 7	GRADE			PERIOD		
	SV		WEEK/S O	R APPLICABL	E DATES:	
1		29/06	- 03/0	7		
		/00		Ť		

QUESTION PAPER/ACTIVITY WORKSHEETS	MEMORANDUM (ANSWERS)

NUMBER OF PAGES EXCLUDING COVER	
PAGE	
INSTRUCTIONS/NOTES FOR PARENT	S AND LEARNERS

GRADE	7	DATE	29 June 2020
NAME AND SURNAME			
		*	
SUBJECT Technology			
TITLE OF WORKSHEET Structures Page 119 – 122 in GDE technology workbook.		nology workbook.	

Complete pages 119-122 in GDE technology workbook. (8.2 Man-made and natural structures)

#### Instructions:

- 1. Read through all the information on page 119 to 121.
- 2. Answer the questions on page 122.
- 3. Write all answers in the book, in the spaces provided.

GRADE	7	DATE	30 June 2020
NAME AND SURNAME			
SUBJECT Technology			
TITLE OF WORKSHEET Structures Page 123 – 128 in GDE technology workbook.			

Complete pages 123 -128 in GDE technology workbook. (8.3 Types of structures)

#### Instructions:

- 1. Read through all the information on page 123 to 128.
- 2. Answer the questions on page 126, 127 and 128.
- 3. Write all answers in the book, in the spaces provided.

GRADE	7	DATE	01 July 2020
NAME AND SURNAME			
SUBJECT		Technology	
TITLE OF WORKSHEET Structures Page 129 – 136 in GDE technology workbook.			

Complete pages 129-136 in GDE technology workbook. (9.1 Strong frame structures)

#### Instructions:

- 1. Read through all the information on page 129 to 136.
- 2. Answer the questions on page 133, 136.

Write all answers in the book, in the spaces provided

GRADE	7	DATE	02 July 2020
NAME AND SURNA	ME		
SUBJECT		Technology	
TITLE OF WORKSHI			

Complete pages 137-138 in GDE technology workbook. (9.2 Communication systems)

#### Instructions:

- 1. Read through all the information on page 137 to 138.
- 2. Answer the questions on page 137 and 138.

Write all answers in the book, in the spaces provided

GRADE	7	DATE	03 July 2020
NAME AND SURNAME			
SUBJECT Technology		Technology	
TITLE OF WORKSHEET Structures Page		Structures Page 139 – 144 in GDE technology	ogy workbook.

Complete pages 139 -144 in GDE technology workbook. (9.3 Action research: strengthening structures)

#### Instructions:

- 1. Read through all the information on page 139 to 144.
- 2. Answer the questions on page 139, 140 and 143.

Write all answers in the book, in the spaces provided

GRADE	7	DATE	29 June 2020
NAME AND SURNAME		MEMO	
SUBJECT		Technology	
TITLE OF WORKSHEET Structures Page 119 – 122 in GDE technology workbook.		chnology workbook.	

Complete pages 119-122 in GDE technology workbook. (8.2 Man-made and natural structures)

#### Instructions:

- 1. Read through all the information on page 119 to 121.
- 2. Answer the questions on page 122.
- 3. Write all answers in the book, in the spaces provided.

#### **Answers:**

1.

Man-made structures	Natural Structures	
House	Skull	
Pylon	Egg	
Chair	Tortoise shell	
Cellphone	Rocks	(a)
Cellphone or radio tower	Plant	
Oven	Spider web	
Woodpile	Beehive	
Brick		

- 2. Examples: beehives, cocoons, caves, waterfalls.
- 3. Examples: houses, tents, bus stop, shelters.
- 4. Examples: electricity pylons, bridges, chairs.
- 5. Examples: cupboards, cardboard boxes, bottles.

GRADE	7	DATE	30 June 2020
NAME AND SURNAME		3	
SUBJECT Tech		Technology	
TITLE OF WORKSHEET Structures Page 123 – 128 in GDE technology workbook.		echnology workbook.	

Complete pages 123 -128 in GDE technology workbook. (8.3 Types of structures)

#### Instructions:

- 1. Read through all the information on page 123 to 128.
- 2. Answer the questions on page 126, 127 and 128.
- 3. Write all answers in the book, in the spaces provided.

#### **Answers:**

1. Classify the following structures: (Page 126)

2.

Shell structures	Frame structures	Solid structures
Human skull	House	Brick
Chicken eggs	Electricity pylon	Wooden logs
Bath tubs	Cellphone tower	Rocks
Cups	Garden chair	Concrete pillars
Bowls	Spider web	Iron beams

Vases	Dog kennel	Foundations for buildings
Bike helmets	Chairs	Roof tiles
Basins	Tables	Cutlery
Rubber tyre	<u>Bridges</u>	Gold bars
Coffee mugs	Cranes	Steel railway line.

#### Answers: (Page 127 - 128)

1. Figure 22: a water tank is a shell structure to contain water. A solid brick stand is a solid structure to support the weight of the water tank. Pipes are shell structures to let water in and out of the tank.

Figure 23: the same as Figure 22, except that the weight of the water tank is here supported by a metal frame structure.

2. (a) Figure 22 solid; Figure 23 Frame

(b) The solid structure gives more support, because of how it is built: it is wider and lower. Another advantage of the solid is that it won't rust.

3.



GRADE	7	DATE	01 July 2020
NAME AND SURNAM	E	90/20	
SUBJECT		Technology	
TITLE OF WORKSHEET	•	Structures Page 129 – 136 in GDE technology workbook.	

Complete pages <u>129 -136</u> in GDE technology workbook. <u>(9.1 Strong frame structures)</u> Instructions:

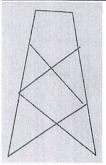
- 1. Read through all the information on page 129 to 136.
- 2. Answer the questions on page 133, 136.

Write all answers in the book, in the spaces provided

#### **Answers:**

#### Page 133:

1. The learners should draw triangular struts as illustrated below:



2. So that the tower on the left will be firm, remain standing and not fall over.

#### Page 136:

- 1. Design A
- No triangles on design B. 10 Triangles on design A.
   Bottom centre is not a triangle unless you take the ground level into account.
   Top centre is a pentagon, 5-sided shape.
- 3. Triangles makes the tower stiff and strong (rigid) to hold its shape.

GRADE	7	DATE	02 July 2020
NAME AND SURNAME			
SUBJECT		Technology	
TITLE OF WORKSHE	ET	Structures Page 137 – 138 in GDE technology workbook.	

Complete pages 137 -138 in GDE technology workbook. (9.2 Communication systems)

#### Instructions:

- 1. Read through all the information on page 137 to 138.
- 2. Answer the questions on page 137 and 138.

Write all answers in the book, in the spaces provided

#### **Answers:**

#### Page 137:

- 1. Because her phone cannot pick up the signal from the cellphone tower. The mountain is blocking the signal from Mavis' cellphone to Thomas' cellphone.
- 2. The landline carries the signal across all the barriers without being blocked.
- 3. Advantages and disadvantages.

Device	Advantages	Disadvantages
Landline phones	Cheaper for local calls.	Can check time update on 1026
	Can call directory services on 1023	but it costs.
	for free.	Cannot be used away from
	Most businesses have landline	home.
	phones.	No text messages.
	Good connection even in bad	No internet connection.
27	weather or where there are	No radio or camera.
	overhead electricity cables.	Expensive (more than cell
**		phones) for long distance calls.
2.		Can only be used on
		home/business premises.
Cellphones	Cheaper than landline over long	Expensive for local calls
	distances, pay for length of call	depending on length of call; pay
	(duration) not distance.	for duration.
	Can be used anywhere where	No directory service.
7.	there is a signal not necessarily	Poor connection in bad weather
	from home.	or close to overhead electricity
	Can send text messages.	cables.
	Built in clock	
	Has a radio connection.	÷

Most have cameras.	No cell tower
Many can connect to the internet.	receiver/transmitter, no
	connection.

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SUBJECT		Technology	
TITLE OF WORKSHEE	ΞT	Structures Page 139 – 144 in GDE technology workbook.	

Complete pages 139 -144 in GDE technology workbook. (9.3 Action research: strengthening structures)

#### Instructions:

- 1. Read through all the information on page 139 to 144.
- 2. Answer the questions on page 139, 141 and 143 (number 5,6,7).

Write all answers in the book, in the spaces provided

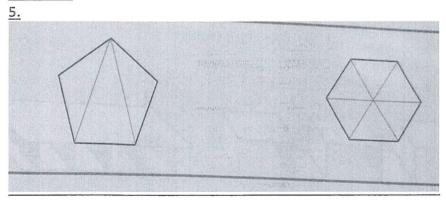
#### **Answers:**

Page 139: the tube with the bigger centre.

#### Page 141:

- 1. The flat unfolded piece.
- 2. The flat strip.

#### Page 143:



- 6. Two
- 7. Three