

Educator Workbook

CAPS-aligned

Grade 4

Educating future
leaders through
fostering good
nutritional habits

Life Skills

Mathematics



Proudly brought to you by

Pick n Pay

Pick n Pay 
School Club

Use and share

Pick n Pay School Club material is developed for the enrichment of all. You are welcome to photocopy or reproduce any of the content contained herein and distribute for any educational purposes at no charge. Visit: www.schoolclub.co.za to download Pick n Pay School Club material.

Contact us

Please note: while we are not subject to copyright, this material is not for resale and the learning content and images remain the property of Pick n Pay School Club. Please contact the Pick n Pay School Club team at E-Classroom on 021 785 1214 and support@e-classroom.co.za if you have any queries.

Section A

Introduction

Foreword

Background and Context

Acronyms

Section B

2. Intermediate Phase

2.1 Grade 4

Section C

Resource Section

Section A

Introduction

Foreword

The Pick n Pay Technical Educator Workbook for Grade 1-7 learners has been developed to cover some of the requirements in the Life Skills, Mathematics, Natural Sciences and Technology, Life Orientation and English Home Language curriculum that relate to nutrition. The grade-specific learner activities in the workbook are based on the CAPS curriculum that was introduced in 2012. The educator workbook will direct you with lesson plans based around the learner activities.

The learner activities can be used in the classroom to supplement what you are already doing as part of the CAPS curriculum. The focus of these learner activities is to educate learners about healthy living and making the right food choices. The lesson plans in the educator workbook help you to implement each lesson successfully.

Here is a quick overview of the CAPS-aligned content that you will find in this workbook:

Grade 4

Mathematics Term 1: Data handling: Carry out a favourite fruit survey
Life Skills Term 4: Healthy eating and personal life quiz

Background and Context

Pick n Pay School Club is celebrating its 16th year of providing much-needed educational material, which now reaches 105,875 teachers and 2.26 million learners across South Africa.

The Pick n Pay Technical learning programme is aligned to the CAPS curriculum, which adheres to the standards set by the Department of Education.

The material is designed to facilitate the learning process and culminates in the assessment of competency levels according to the standards set for each specific grade. The educator is supported by way of research and learning content that is presented clearly and is easy to implement in the classroom.

Acronyms

CAPS: Curriculum and Assessment Policy Statement

GET: General Education and Training

Section B

Intermediate Phase

Grade 4

Name of Learner Activities: Learner Activity 1: Data handling: Carry out a favourite fruit survey Learner Activity 2: Healthy eating and personal life quiz		Time: 1 hour per lesson
Grade 4		Subject: Mathematics: Term 1 Life Skills: Term 4
Curriculum Standards (CAPS): Intermediate Phase: Mathematics: Term 1. Data handling: Collecting and organising data. <ul style="list-style-type: none"> Representing data: Analysing, interpreting and reporting data Intermediate Phase: Life Skills: Term 4. Personal and Social Wellbeing: Health and environmental responsibility. <ul style="list-style-type: none"> Dietary habits of children 		
Objectives		
The learners will: <ul style="list-style-type: none"> Create a tally chart to record responses from a favourite fruit survey Create and interpret a pictograph as well as a bar graph based on the findings of the survey Consider why unhealthy options should be avoided Explain how to change unhealthy options to healthy options 		
Content	Skills	Values
Learner Activity 1: Data handling: Carry out a favourite fruit survey Benefits of fruit; survey; tally chart; data; bar graph; pictograph; interpreting bar graphs.	Learner Activity 1: Data handling: Carry out a favourite fruit survey Discuss the benefits of different fruit; gather votes using a tally chart; create a pictograph and a bar graph; interpret the graphs and summarise findings.	Learner Activity 1: Data handling: Carry out a favourite fruit survey Graphs are a good way to collect, organise and interpret information.
Learner Activity 2: Healthy eating and personal life quiz Healthy and unhealthy eating; health terminology; reasons to make healthy choices.	Learner Activity 2: Healthy eating and personal life quiz Discuss unhealthy options; change unhealthy options to healthy options; define health terminology such as low GI, diabetes, sodium, nutrients; listen to and discuss a story; link unhealthy food to its healthy option and the correct explanation.	Learner Activity 2: Healthy eating and personal life quiz We should think about the food items we eat regularly and whether they are healthy or unhealthy.
Resources needed		
Learner Activity 1: Data handling: Carry out a favourite fruit survey A4 paper for the survey; workbooks for the pictographs and bar graphs; teacher examples of pictographs and bar graphs; teacher examples of a tally chart; five images of different fruit; pencil to record votes; crayons; a ruler; an eraser; pens; khaki pens; copies of the worksheet; Healthy Lifestyle Month: http://bit.ly/2H2cTbC ; The South African Food Guide: http://bit.ly/2TyUnsW		
Learner Activity 2: Healthy eating and personal life quiz Crayons; an eraser; pens; images from the Internet of: donuts, pies, sugary drinks, polony, sweets, slap chips and cake; flashcards with the words: low GI, diabetes, sodium, nutrients; copies of the worksheet; National Nutrition Week: http://bit.ly/2H5kITq ; World Diabetes Day: http://bit.ly/2H5lo50		

Section B

Intermediate Phase

Grade 4

Teacher preparation before starting

1. Look through the worksheets and the lesson plan and familiarise yourself with content for the two lessons.
2. Collect the resources needed before the lesson.
3. Print sufficient worksheet activities.
4. Create a tally chart, a pictograph and a bar graph on a different topic as visual aids.
5. Make flashcards for important vocabulary.

Teaching the Learner Activities:

Learner Activity 1: Data handling: Carry out a favourite fruit survey

The goal of this lesson is to get the learners to think about the importance of eating fruit whilst covering the data collection section of the Grade 4 Maths curriculum. It is important to eat fruit as part of a healthy diet. Fruit contain many essential nutrients that protect us from disease. Many fruits contain fibre, which helps us feel full. Fibre also helps our tummies work properly.

- a) Introduce the lesson to the whole class.
- b) Find images of five fruit and put them on the board – strawberries, watermelon, pawpaw, grapefruit, apples. Tell the class you are going to do a survey. (Explain the meaning of survey). Ask the class which piece of fruit they like the best. Go through the five fruits and attempt to count the hands that go up for each fruit. Write the numbers on the board under the fruit images i.e. 10, 12, 8 etc.
- c) Explain that when we do surveys, we use tallies to count them. Explain how a tally works in fives.



- d) When we tally up numbers, they are meaningless unless they are presented as graphs. Discuss different kinds of graphs. Show the class your two handmade examples of a pictograph and a bar graph. Let them interpret your two graphs. Then go back to the data collected and, with the help of the learners create a pictograph and a bar graph about your survey. Interpret the two graphs.
- e) Discuss surveys and how the learners can find out people's preferences on selected topics. Ask if any of them have been asked survey questions in a survey before?

Complete the worksheet

- a) Hand out the worksheets. Start off by telling the learners about Healthy Lifestyle Awareness Month in South Africa which takes place in February each year. It is a month in the health calendar, that highlights the importance of healthy living through regular physical activity and healthy eating. The body needs a minimum amount of vitamins and minerals each day to remain healthy and function properly and it is important to know how to get the right nutrients from food. You can read more about Healthy Lifestyle Month: <http://bit.ly/2H2cTbC>. The worksheet is about fruit, and fruit is an excellent source of vitamins and minerals for the body.
- b) Go through the worksheet with the learners so that they understand the task. Talk about each fruit on the worksheet and its importance for healthy living. For example: One orange provides all you need for vitamin C for one day and it has a range of other vitamins as well. Vitamin C is needed by your body every day and it helps your body to fight sicknesses like colds and flu. Apples also have vitamin C and other vitamins – remember 'an apple a day keeps the doctor away'. Bananas too give us lots of different vitamins and they are easy to pack into a lunchbox or have as a snack when you get home. Grapes are also a convenient and delicious way to get vitamins – have them instead of a dessert. A small bunch, or 9–18 grapes is one serving.
- c) Draw a table on the board with the names of the five fruit, one in each column. The learners need to do the same in their workbooks.
- d) Now do a class count for their favourite one fruit. Count numbers and put them on the board as numbers but instruct the learners to write them as tally marks.

Section B

Intermediate Phase

Grade 4

- e) Draw another table and start a bar graph. The learners must create their own bar graphs.
- f) Create a pictograph with the results.
- g) Interpret the results together with your learners and let them write some explanatory sentences in their workbooks.

The learners carry out a survey among their friends at break.

- a) Let your learners use a fresh piece of paper and create a table with the five fruit names, one in each column.
- b) Learners can then do their own survey at break and complete the tallies, graphs and interpretation on their own in their workbooks.
- c) When they are finished, allow the learners to discuss the results with the other learners.

Learner Activity 2: Healthy eating and personal life quiz

The goal of this lesson is to motivate learners to think about the food items they eat regularly and whether they are healthy or unhealthy choices. Learners are to be encouraged to change unhealthy options to healthy options.

- a) Introduce the lesson to the whole class. Start off by telling them about National Nutrition Week in South Africa. This takes place in October every year. The purpose of National Nutrition Week is to help the public become aware of the importance of good nutrition and a healthy eating plan. If we eat the wrong food items – too much sugary food and an unbalanced nutritional diet for example – we become unhealthy. National Nutrition Week emphasises making informed food choices. In South Africa we use The South African Food Guide which has great suggestions for balanced eating. Every year there is a different health focus and last year it was on the importance of eating a good breakfast. Find out more about The South African Food Guide: <http://bit.ly/2TyUnsW>. Read up about National Nutrition Week in 2018: <http://bit.ly/2H5kITq>. Have a discussion on the eating habits of the class – do they eat breakfast and what are other health issues experienced?
- b) After this talk about World Diabetes Day. This takes place on 14 November. The theme for 2018 and 2019 is 'The Family and Diabetes'. Diabetes is a chronic condition, but if treated correctly, can be managed. Diabetes is a condition where your body is not able to use or access the glucose that you get from food for energy. Glucose is the fuel that feeds your body's cells, but if you have diabetes, the glucose can't get to the cells to fuel them. Type 2 Diabetes contributing factors are being overweight and not getting enough exercise. Our more inactive lifestyles, and unhealthy diets, including high sugar intake are problematic to our health. We need to make sure that we get enough exercise and keep the sugar intake in our diet low. The World Health Organisation estimates that by 2035, almost 600 million people in the world will have diabetes. Type 2 Diabetes is becoming a big problem in South Africa. Find out more about World Diabetes Day: <http://bit.ly/2H5lo50>
- c) Print some pictures of the following unhealthy options and stick them on the board: donuts, pies, sugary drinks, polony, sweets, slap chips and cake. Ask the learners if these are healthy or unhealthy. As they make their suggestions explain why their answers are correct or incorrect. You will be using the information on the worksheet without the learners realising it.
- d) Revise some of the terminology with the learners: fibre, diabetes, sodium, nutrients. Write these on flashcards so that you can pull them out regularly and check your learners' knowledge.
- e) Now read the story of Cindy, on the worksheet, to your learners. As you read, ask one learner to place the items in a list on the board: donuts, pies, sugary drinks, polony, sweets, slap chips and cake. You could also ask another brave learner to be Cindy and role play expressions and actions as you read. Discuss the story and the food items the family are eating.
- f) Ask the learners how Cindy could help her family in both the rural area and the city to eat properly.

Complete the worksheet

- a) Hand out the worksheets.
- b) Read through the blocks with the learners and make sure they understand how they should link the correct blocks in different colours so that the unhealthy options, the healthy options and the explanations all match one another.
- c) Then let the learners read the story of Cindy aloud, together.
- d) After this, learners can then complete the linking of the blocks section of the worksheet. They write their advice for Cindy in their class workbooks.

Section B Intermediate Phase Grade 4

Answers:			
	INSTEAD OF THESE FOODS...	RATHER CHOOSE THESE FOODS	EXPLANATIONS
1	White bread and rolls with very little fibre.	Wholewheat, high fibre, rye, seed loaf, brown and low GI breads with more fibre.	Foods higher in fibre help keep you fuller for longer and keep your tummies working well.
2	People eat sweets and cake when they want something sweet.	It is better to eat fruit when you want something sweet.	The vitamins from fruit help your body to fight disease.
3	When some people are thirsty they drink sweetened fizzy drinks.	Water is the healthiest drink.	Water flushes the body and we should drink at least 8 glasses of water every day.
4	Refined maize meal is a staple food but it is low in fibre.	Coarse maize meal or maize meal combined with beans, such as samp and beans.	Beans, peas and lentils have a great fibre content. Foods higher in fibre help keep you fuller for longer and keep your tummies working well.
5	Processed meats like viennas, polony and sausages that are high in sodium.	Lean processed meats like ham or other proteins such as chicken, fish and eggs that don't have so much fat and salt (sodium).	Too much sodium (salt) holds fluid in the body and causes our blood pressure to rise.
6	Ice-cream or cream on a dessert is high in sugar and calories and low on nutrients.	Low fat yoghurt and custard are healthier choices as they have less fat and contain lots of calcium.	The calcium in dairy products helps keep our bones and teeth strong.
7	White rice is high in carbohydrates, but low in fibre.	Brown rice is a whole grain food that is high in fibre.	Brown rice has a high fibre content. Foods higher in fibre help keep you fuller for longer and keep your tummies working well.

The advice for Cindy would be based on the information provided in this table.

Assessment

Refer to the Resource Section for the Assessment Rubric.

Teacher reflection

Is there anything you would do differently if you taught this unit again?

Section B

Intermediate Phase

Grade 4

Data handling: Carry out a favourite fruit survey

Name:..... Date:.....

It is important to eat fruit as part of your healthy diet. Fruits contain many essential nutrients that protect us from disease. Many fruits contain fibre, which helps us feel full. Fibre helps our tummies work properly.

Here are five fruit:

- Pears
- Oranges
- Apples
- Bananas
- Grapes

1. Which is your favourite fruit? _____

Let's find out which of the five fruit is the most popular with your friends.

2. Write the names of the five fruit above and survey your friends. They may only choose one fruit. Use a tally chart to record which of the five fruits is the most popular. For example - cherries:

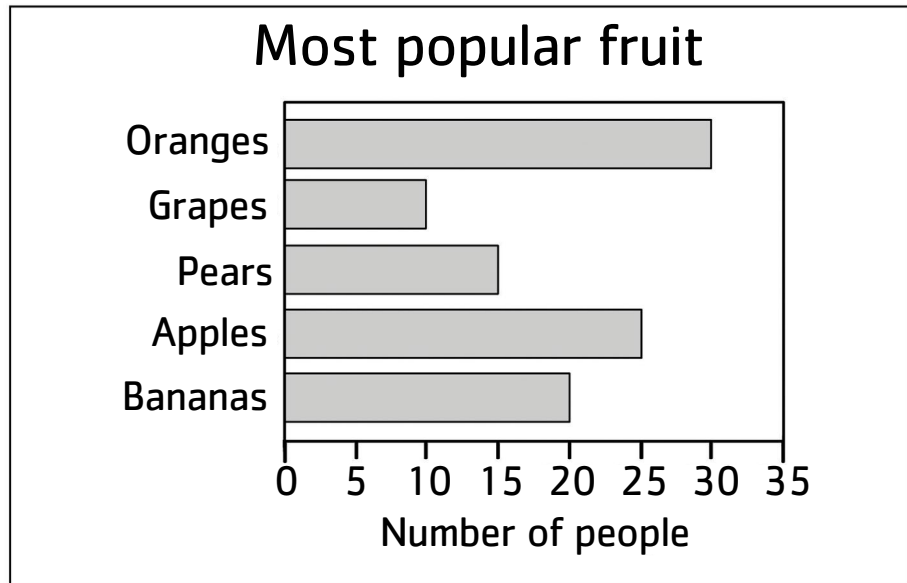


3. When you have collected all your data from your friends' votes, make two graphs to record and interpret your findings.

a) Create a pictograph.
A pictograph uses a picture symbol.
Here is an example of a pictograph.

Fruit	Number of children who chose it
Bananas	
Pears	
Apples	
Oranges	
Grapes	

- b) Create a bar graph with the heading: 'Most popular fruit'. Here is an example of a bar graph.



4. Discuss your graphs with a partner. What were the top three favourites? Which graph did you prefer creating? Write a few sentences about your graphs and what they showed you in your class workbook.

Section B

Intermediate Phase

Grade 4

Healthy eating and personal life quiz

Name:..... Date:.....

In the first column are foods that are less healthy choices. In the second column are the healthier choices. These are jumbled.

1. Draw different colour lines connecting the less healthy eating statements to the correct healthier alternatives and explanations to show their connection. The first one has been done for you.

Learner Activity 2

LESS HEALTHY

White bread is a less healthy choice as it has very little fibre.

White rice is a good source of energy but it has very little fibre.

When some people are thirsty they drink sweetened fizzy drinks.

Processed meats like Viennas, polony and sausages that are high in sodium.

People eat sweets and cake when they want something sweet.

Ice cream or cream on a dessert is high in sugar and calories and low on nutrients.

Refined maize meal is a staple food but it is low in fibre.

HEALTHIER

Water is the healthiest drink.

It is better to eat fruit when you want something sweet to eat.

Wholewheat bread and seed loaf are healthier, high fibre choices.

Low fat yoghurt and custard are healthier choices as they have less fat and contain lots of calcium.

Brown rice is a whole grain food that is high in fibre.

Coarse maize meal or maize meal combined with beans, such as samp and beans.

Lean, processed meats like ham or other proteins such as chicken, fish and eggs that don't have so much fat and salt (sodium).

EXPLANATIONS

Foods high in fibre help keep you full for longer and keep your tummy working well.

The calcium in dairy products helps keep our bones and teeth strong.

Too much sodium (salt) raises our blood pressure.

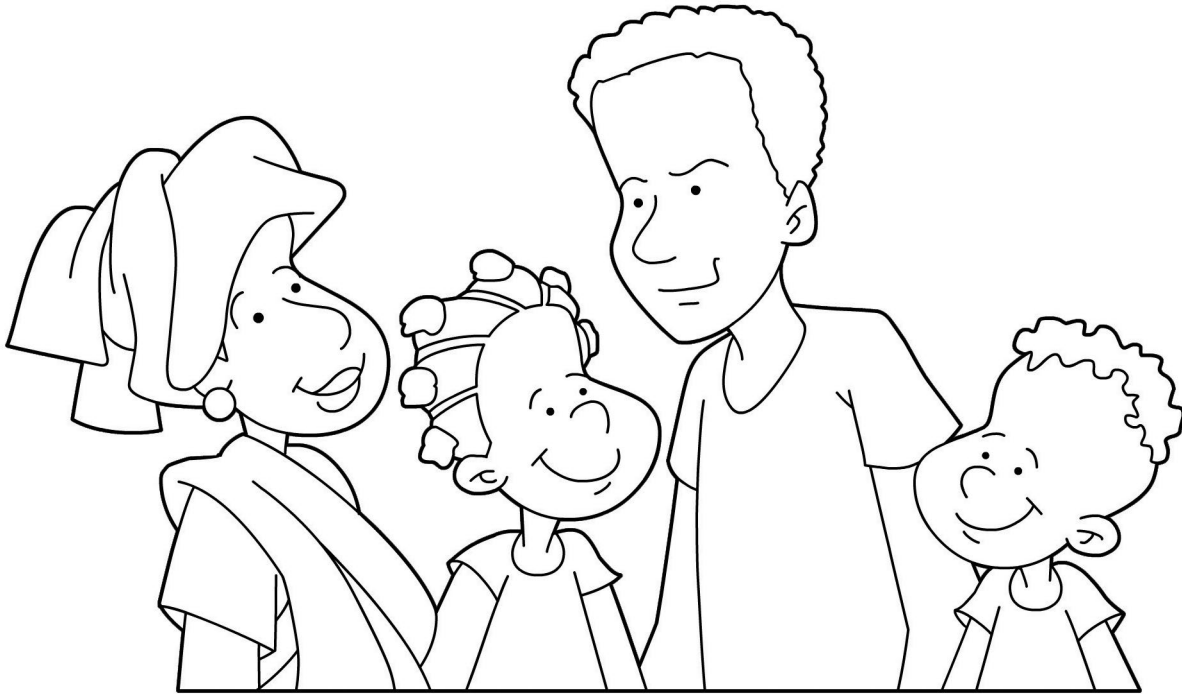
Beans, peas and lentils have a great fibre content. Foods high in fibre keep you full for longer and keep your tummy working well.

Water flushes the body and we should drink at least 8 glasses of water every day.

The vitamins from fruit help your body to fight disease.

Brown rice is a better choice as it has more fibre. Fibre helps to keep our tummies working properly.

Help Cindy's family to start making healthy choices.



Cindy grew up in a village where many people were poor, and they ate mainly maize meal, beans and home grown vegetables. When Cindy moved to her aunt's house in the city to attend high school, she was surprised that the family drank a lot of sugary fizzy drinks and they had ice cream for dessert. They ate processed meats like polony and Vienna sausages with chips. Her cousin, who is the same age as her, ate lots of cakes, biscuits and sweets. When Cindy started learning about nutrition at school, she decided to help her family learn to eat properly.

2. In your class workbook, write some of the things you think Cindy told her family in the village and in the city about healthy choices.

Section C

Resource Section

Assessment Rubric:

Assessment	
Rating code	Description of competence
7	Outstanding achievement
6	Meritorious achievement
5	Substantial achievement
4	Adequate achievement
3	Moderate achievement
2	Elementary achievement
1	Not achieved

For health queries, contact the Pick n Pay
Health Hotline on 0800 11 22 88
or email healthhotline@pnp.co.za



For more information find us on Facebook or call 021 785 1214