

# *A Guide to Finance*

## **Teaching Approach**

In Grade 10, Finance is covered in the second, third and fourth terms over a period of two to three weeks respectively. In term two you need to cover financial documents and Tariff systems. In term three you need to cover Income, expenditure, profit/loss, income-and – expenditure statements and budgets. In term four interest, banking and taxation are covered.

The videos included in Grade 10 Finance do not need to be watched in any particular order. Summaries of the skills and contexts of each video are in this document, allowing you to find something appropriate quickly and easily.

In total there is roughly 100 minutes of video. Each video is short enough to easily fit into one lesson with time to discuss the content and do some related work. You will find a selection of tasks covering the required skills in the task video. These tasks have not been linked to the videos so that they can be used without viewing them.

When teaching finance to learners it is important that you show learners as many different examples of financial documents. Banking materials such as brochures and adverts, financial statements such as account statements and various tariff systems such as school fees or membership fees at clubs are some ideas.

Although most of the basic knowledge that learners will use would have been covered in earlier grades it is advisable to revise this knowledge while exploring these documents to get learners comfortable with questioning the information at their disposal.

This topic can be very interesting as everybody loves the concept of money and all the content that must be mastered is found within this context. Let your learners and yourself strive towards financial wellbeing.

## Video Summaries

Some videos have a 'PAUSE' moment, at which point the teacher or learner can choose to pause the video and try to answer the question posed or calculate the answer to the problem under discussion. Once the video starts again, the answer to the question or the right answer to the calculation is given.

Mindset suggests a number of ways to use the video lessons. These include:

- Watch or show a lesson as an introduction to a lesson
- Watch or show a lesson after a lesson, as a summary or as a way of adding in some interesting real-life applications or practical aspects
- Design a worksheet or set of questions about one video lesson. Then ask learners to watch a video related to the lesson and to complete the worksheet or questions, either in groups or individually
- Worksheets and questions based on video lessons can be used as short assessments or exercises
- Ask learners to watch a particular video lesson for homework (in the school library or on the website, depending on how the material is available) as preparation for the next days lesson; if desired, learners can be given specific questions to answer in preparation for the next day's lesson

### 1. Financial Statements

This video covers a few financial documents that you will often encounter such as till slips, bank statements, prepaid electricity tokens, telephone accounts, receipts and refund policies.

### 2. Municipal Accounts and Tariffs

In this video we discuss the details of a municipal account and a clothing account. The explanations of how electricity usage is calculated as well as water consumption.

### 3. Telephone Accounts and Tariffs

In this video we discuss the details of a telephone accounts.

### 4. Income and Expenditure

In this video the concept of income and expenses are explained, as well as the income and expenditure types. The method of drawing up an income/expenditure table is explained in detail.

### 5. Budgeting and Planning for a Holiday

This video explains the costing involved when planning a holiday to Cape Town for five people and also includes a trip on the Blue Train. The effect of price increase is considered too.

### 6. Transport Tariffs

In this video we compare the costs of two bus companies and represent them graphically. We also explain bank fees while using an account as an example.

### 7. Calculating Interest

In this video the concept of interest is defined and the difference between credit and debit interest is explained. Simple and compound interest is introduced to learners. Calculations are done explaining how to calculate simple and compound interest without the use of a formula.

### 8. Banking

In this video common banking terminology is defined. The various types of accounts found with a bank are listed. The workings of a savings account are expanded upon and attention is paid to costs of transactions.

### 9. VAT

In this video VAT is defined and explained. The rate at which it is calculated is explained. The understanding of what is VAT exempted and what is taxable. The method of VAT calculation and calculating the VAT component of goods and services is explored.

### Resource Material

<a href="http://www.sars.gov.za/Pages/default.aspx">http://www.sars.gov.za/Pages/default.aspx</a>	The home page for the South African Revenue Service.
<a href="http://www.banking.org.za/index.php/initiatives/teach-children-to-save/downloads/">http://www.banking.org.za/index.php/initiatives/teach-children-to-save/downloads/</a>	South African created lesson plans for teaching children how to save.
<a href="http://en.wikipedia.org/wiki/List_of_banks_in_South_Africa">http://en.wikipedia.org/wiki/List_of_banks_in_South_Africa</a>	A Wikipedia list of all the banks in South Africa.
<a href="http://www.pinterest.com/smidgez1/money-budgeting-lessons/">http://www.pinterest.com/smidgez1/money-budgeting-lessons/</a>	A Pinterest page containing a collection of lessons on budgeting and managing personal finances.
<a href="https://www.practicalmoneyskills.com/foreducators/lesson_plans/highschool.php">https://www.practicalmoneyskills.com/foreducators/lesson_plans/highschool.php</a>	A list of lesson plan on money management skills for high schoolers.
<a href="http://www.pathwaytofinancialsuccess.org/node/42">http://www.pathwaytofinancialsuccess.org/node/42</a>	Lesson plans from Pathway to Financial Success
<a href="https://everythingmaths.co.za/grade-10-mathematical-literacy">https://everythingmaths.co.za/grade-10-mathematical-literacy</a>	Everything Maths Grade 10 Mathematical Literacy textbook.

**Task**

**Question 1**

Look at the till slip below and answer the questions that follow:

<b>ABC SPAR</b>		
CK1920/00001/98		
WELCOMES YOU		
VAT NO. 4170134359		
TEL NO. 043 7263 6789		
CARRIER BAG 24L		R0.40
CRIC, F/MILK		R7,49*
ASHMEL BILTONG		
0,088KG @ R209,99/KG	R18,43	
STAR BREAD BROWN	R5,99*	
RYE BREAD 100%	R13,99	
MIGHTY BITE MILD	R5,99	
MIGHTY BITE MILD	R5,99	
CADBURY SLAB	R9,99	
<b>8 BALANCE DUE</b>	<b>R71,32</b>	
Rounding	R0.02	
CASH	R72.00	
TAX CODE TAXABLE-VALUE TAX VALUE		
Zero Vat	R14,48	R0,00 *
VAT	R56,84	R6,98
TOTAL TAX		R6,98
CHANGE	R0,70	
<b>CASHIER NAME: A Person</b>		
<b>12:43:40</b>	<b>30JUL2012</b>	

- 1.1 What is the date of the till slip?
- 1.2 Is the Spar a registered VAT vendor? Validate your answer.
- 1.3 How many items were bought at the Spar?
- 1.4 How were the goods paid for at the Spar?
- 1.5 Explain what “rounding” means on the till slip.
- 1.6 What are the asterisks (\*) indicating on the till slip.
- 1.7 VAT is calculated at a rate of 14%. Redo the calculation on this till slip and check if the VAT has been correctly calculated.

**Question 2**

You have decided to leave home and rent your own flat. After deductions, your take home salary R 4 600, food will cost you R 1 500, your clothes account costs R 400 a month, and your monthly transport is R 250. Electricity and water will cost R320 a month.

You have been advised by your father that your rent must not exceed 50% of your income and you must save at least 2,5% of your salary for emergencies.

- 2.1 Draw up an income and expense statement in order for you to know what your budget is for rent.
- 2.2 Your rent on your flat increases to R2100 per month from R2000, show how you would adjust your budget to still afford your flat.

**Question 3**

You have now moved into your flat and receive your first water bill. You have used 12435 litres of water.

Usage per kl	Tariff
0 – 6 kl (indigent)	FREE
0 – 6 kl	R4,20
6 – 10,5 kl	R5,80
10,5 – 20 kl	R10,71
20 – 30 kl	R13,54
30kl – 50 kl	R15,89
50 – 90 kl	R19,47
90 kl and more	R23,89

- 3.1. Use the water tariff table and calculate how much you need to pay for this water use.
- 3.2. What is the cost of your water usage before VAT was added? Show all your calculations

**Question 4**

Suzi wishes to take her 10 preschoolers to the zoo. The entrance fee is R12 per child and R25 per adult. She intends buying prepacked lunch-packs at R30 each. Transport to and from the zoo will cost R6,50 a kilometre. The zoo is situated twelve kilometres away.

- 4.1 How many lunch packs need to be bought?
- 4.2 Draw up a rough budget for the outing.
- 4.3 How much must each child pay for the trip? Keep in mind that the cost of Suzi attending the outing will be distributed amongst the children so that she doesn't pay for herself.

**Question 5**

You decide to investigate two internet service providers (ISP) for your home.

ISP A	
Basic charge	R139,00 pm
0 to 500 MB	R0,20/MB
Any further data is charged at R1,50 /MB	

ISP B	
Basic charge	R219,00 pm
Unlimited use	Nil

- 5.1 What would the monthly cost be if you used 300MB of data with ISP A?
- 5.2 What would the monthly cost be if you used 510MB of data with ISP A?
- 5.3 What would the monthly cost be if you used 510MB of data with ISP B?
- 5.4 Draw a graph showing the difference between the tariffs of ISP A and ISP B

**Question 6**

Moses borrows R300 from his father. His father says that he must repay this amount with interest. They agree that he must pay back the loan with interest in 12 months time. Interest is charged at 12% for the year. Show how this interest is calculated so Moses can repay his father. You need to explain all your calculations and no formula should be used.

**Question 7**

Thomas has a bank account with a local bank and he is not happy with all the charges on his account. He has asked you to check them for him. Below is an extract of his account

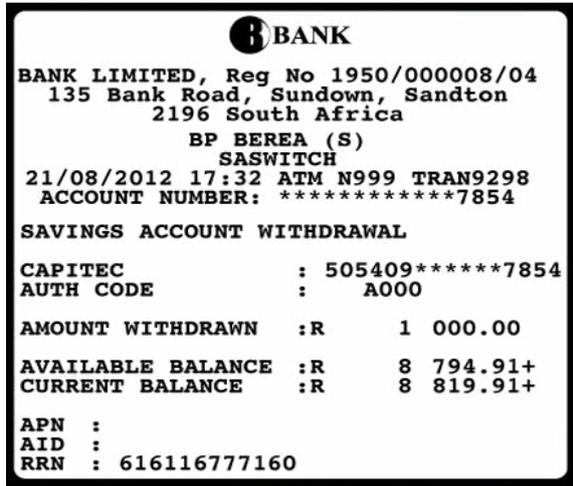
RCH Bank Ltd

Date	Transaction	Debit	Credit	Balance
3/8	Nu-metro movies	72-00		1324-98
3/8	ATM withdrawal	300-00		1024-98
3/8	Cash deposit		3000-00	4024-98
3/8	Cash deposit fee	48-00		3976-98
4/8	Insurance d/o	137-98		3839-00
4/8	M/Aid refund		765-56	4604-56
5/8	ATM withdrawal	250		4354-56
5/8	ATM charge	7-50		4347-06
6/8	ATM withdrawal	250		4097-06
6/8	ATM charge	7-50		4089-56
7/8	ATM withdrawal	360		3729-56
7/8	ATM free	nil		3729-56
7/8	Spur	348-12		3381-44

- 7.1 Explain what is meant by debit and credit on this statement?
- 7.2 Write down the total amount paid in bank charges on this statement.
- 7.3 What was the amount that was deposited into the account on the 4/8?
- 7.4 Why would the ATM withdrawal on the 7/8 not have a charge?
- 7.5 What advice would you give him regarding his bank charges?

**Question 8**

You made a cash withdrawal out of your bank account. The cash withdrawal slip is shown below. Study the slip and answer the questions that follow.



- 8.1 What is the date of the withdrawal?
- 8.2 What was the amount of the withdrawal?
- 8.3 If the bank charges R7,50 for this cash withdrawal inclusive of VAT, what is the amount of VAT that is charged for the transaction?
- 8.4 Explain the difference between available balance and current balance.

### Task Answers

#### Question 1

- 1.1 30 July 2012
- 1.2 Yes, on the till slip the VAT vendor no 4170134359 is printed
- 1.3 Nine items including the carrier bag
- 1.4 The goods were paid for with cash
- 1.5 As there are no more one and two cent coins all shops round down to the nearest five cent.
- 1.6 They indicate VAT free items
- 1.7 The cost of all the items that are taxable is R56,84. Therefore the VAT calculation is as follows:

$$R56,84 \times \frac{14}{100}$$

$$= R7,96$$

The VAT on this till slip is incorrect

#### Question 2

2.1

Income		Expenses	
Salary	R4600	Food	R1500
		Clothes account	R400
		Transport	R250
		Electricity and water	R320
		Emergencies	R115
<b>Total</b>	<b>R4600</b>	<b>Total expenses</b>	<b>R2585</b>
Available for rent	R2015		

Calculation of emergency money:  $\frac{2,5}{100} \times 4600 = R115$

Advice from father is that rent must not exceed 50% of salary and calculated as follows:

$$4600 \times \frac{50}{100} = R2300$$

R2300 is within these instructions based on his income and expenses statement.

- 2.2 If rent increases to R2100 pm from R2000 you will face an increase of R100  
 You have an extra R15 left over from your old budget and you now are R85,00 short.  
 The only expense that you are able to cut would be your food expenses.  
 This would result in your food expense will now be R1415pm  
 Alternatively you should start looking for another flat.

#### Question 3

- 3.1 12 435 litres of water use falls within the 10,5 and 20 kℓ band which is R8,67 per kℓ  
 He needs to pay for:  
 $12435 \div 1000 = 12,435 \text{ kℓ}$  therefore the cost of the water will be:  $12,435 \times R8,67 = R107,81$

3.2 The price before Vat added =  $\frac{100}{114} \times R107,81 = R94,57$

**Question 4**

4.1 11 lunch packs

4.2

Income		Expenses	
		Zoo entrance R12 x 11	R132-00
		lunch pack R30 x 11	R330-00
		Total costs	R462-00

4.3 Therefore each child must bring  $R462 \div 11 = R42,00$

**Question 5**

5.1  $R139 + (0,2 \times 300) = R199$

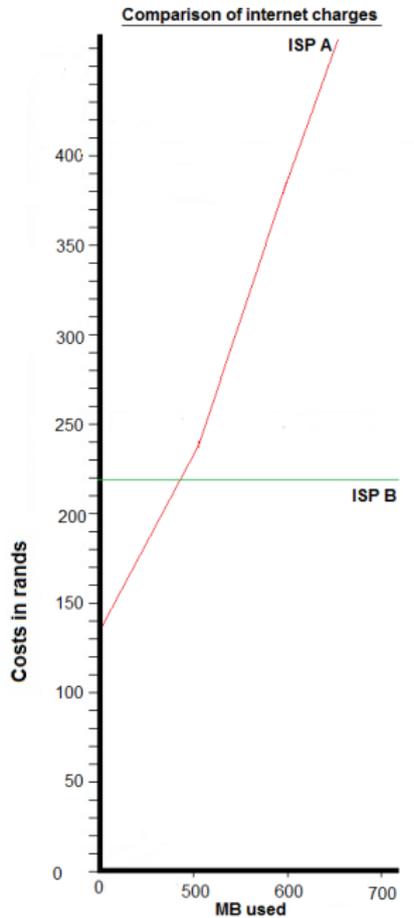
5.2  $510 - 500 = 10$  MB at R1,50 each equals  $10 \times R1,50 = R15$

The first 500mb cost  $0,2 \times 500 = R100$

Therefore the total cost for 510MB will be  $R139 + R100 + R15 = R254$

5.3 R219

5.4



**Question 6**

$R300 \times \frac{12}{100} = R36$  This is the interest charged over the period of 12 months

He needs to repay  $R300 + R36 = R336$  this is the original amount plus the interest.

### Question 7

- 7.1 Debit means when money is taken out of the account with the bank and credit means that money is being deposited into the account with the bank.
- 7.2 The bank charges on this account is calculated as follows:  $R48 + R7,50 + R7,50 = R63,00$
- 7.3 R765,56
- 7.4 Banks have a policy that you pay extra when withdrawing from another banks ATM so this withdrawal was probably his own bank's ATM
- 7.5 Try and not withdraw at other banks ATM's and do not deposit cash in the bank as costs are very high. Rather use your own bank's ATM for deposits and withdrawals

### Question 8

- 8.1 21 August 2012
- 8.2 R1000
- 8.3 VAT payable is  $R7,50 - \left(\frac{100}{114} \times R7,50\right) = R0,92$
- 8.4 Available balance is that amount in the account that can be withdrawn. Current balance is the amount of money that is in the account that may not be available to withdraw as it could be part of the bank's minimum balance criteria or it could include deposits made into the account that have not yet been cleared for withdrawal by the bank.

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