6. The accounting cycle

6.1. Activity

You will need: A box of Smarties and a packet of Jelly Tots

Although the accounting equation illustrates the effect of transactions on a business, it would be very tedious to use this method to record all transactions in order to prepare financial statements. A more sensible method is needed that easily shows the balances of the different accounts.

The following examples are those used in the previous Smarties game. This time, however, use Smarties to increase Assets and Jelly Tots to increase Equity and Liabilities.

Transactions:

1. Owner contributed 5 sweets to start the business.
2. Bought a laptop to do business administration for 2 sweets.
3. Took out a loan of 3 sweets and used them to buy a delivery van for the business.
4. Paid 1 sweet for petrol.
5. Paid 2 sweets to advertise the courier service.
6. Earned 4 sweets from courier services provided to clients.
7. Paid 2 sweets in part repayment of the loan.

You may work in groups, pairs or on your own.

1. Decide which two accounts are affected and identify them in the accounting equation.
2. Decide whether each account will increase or decrease as a result and add sweets accordingly. This time you may NOT remove sweets but have to ADD sweets each time.
3. What do you notice about the way in which you have used your Smarties and Jelly Tots?
4. What do you notice about the number of Smarties and Jelly Tots you have used?

WHAT I HAVE (Smarties)	WHERE IT CAME FROM (Jelly Tots)	
ASSETS	EQUITY	
	-	+
Vehicles	Advertising	Capital
Equipment	Vehicle expenses	Current income
Bank	LIABILITIES	
	Loan	

Recording transactions

Preparing financial statements by having to look at each individual transaction and its effect on the accounting equation would be very tedious for a business which has many transactions. All financial transactions of a business therefore need to be recorded in such a way that they easily become meaningful information from which financial statements can be prepared and decisions can be made. We record the effect of each transaction on the accounting equation using "accounts" to group similar items together. As seen previously, some of these accounts are asset accounts, others are equity and liability accounts.

Debits and credits

The accounting system that is used today was created a long time ago by Luca Pacioli. He laid accounts out on a page, calling the left side the **debit** side, and the right side the **credit** side. The accounts increase on one side and decrease on the other. The catch is that assets will increase on the debit side, but equity and liabilities on the credit side – because of being on the opposite side of the accounting equation. Since both sides of the accounting equation must at all times be equal, "debit" on one side of the equation indicates an increase, while on the other a decrease occurs, shown by a "credit".

ASSETS		**OWNER'S EQUITY + LIABILITIES**	
Debit	Credit	Debit	**Credit**
+	-	-	**+**

As a result, for every transaction one account will be debited and one account credited with equal amounts. At all times, the total debits should equal the total credits.

T-accounts

T-accounts can be used to show the effect of transactions on each account. They are a simplified version of general ledger accounts (which will be learnt later), and show only the value of the effect, and the other account involved for each transaction (general ledger accounts also show the date and folio numbers). When recording transactions, it is important to remember that TWO accounts are always affected - one account must be debited and another credited with equal amounts.

6.2. Example

Transactions

1. *The owner introduces R150 000 capital into the business.*
2. *Equipment is purchased from Office Mart and paid for - R50 000.*
3. *Owner cashes a cheque for R2 000 for his personal use.*
4. *Current income earned, R10 000.*
5. *Advertising paid for, R3 000.*

Accounting Equation

	ASSETS	=	OWNER'S EQUITY		+ LIABILITIES	
	Effect	Reason	Effect	Reason	Effect	Reason
1	+ 150 000	Bank increases	+ 150 000	Capital increases		
2	+ 50 000	Equipment increases				
	- 50 000	Bank decreases				
3	- 2 000	Bank decreases	- 2 000	Drawings		
4	+ 10 000	Bank increases	+ 10 000	Current income		
5	- 3 000	Bank decreases	- 3 000	Advertising expense		

T- Accounts

ASSETS		OWNER'S EQUITY + LIABILITIES	
debit	credit	debit	**credit**
+	-	-	**+**

ASSETS

Equipment

2. Bank	50 000		

Bank

1. Capital	150 000	2. Equipment	50 000
4. Current income	10 000	3. Drawings	2 000
		5. Advertising	3 000

Transactions are summarised – it is easy to see the net effect on each account.

For example, the amount of money left over in this example can be calculated as follows:
Bank increases (debits) – bank decreases (credits)
= 150 000 + 10 000 – 50 000 – 2 000 – 3 000
= 105 000 available in the bank account.

OWNER'S EQUITY + LIABILITIES

Capital

		1. Bank	150 000

Drawings

3. Bank	2 000		

Current income

		4. Bank	10 000

Advertising

5. Bank	3 000		

Capital and current income increase equity, and so are credited.
BUT
Drawings and Advertising expense decrease equity, and so are debited.

6.3. Exercise

Record the following transactions using T-accounts:

1. Owner introduces R160 000 as capital into the business.
2. Purchased vehicle and transferred R145 000 by EFT.
3. Loan received from Trust Bank, R80 000.
4. Owner transferred R2 000 out of the business bank account for his own use.
5. Earned R15 000 for services rendered.
6. Paid the business telephone account, R500.

ASSETS		OWNER'S EQUITY + LIABILITIES	
debit	credit	debit	**credit**
+	-	-	**+**
Vehicles		Capital	
Bank		Drawings	
		Loan	
		Current income	
		Telephone	

6.4. Exercise

Record the following transactions using T-accounts. The business had R15 000 in the bank account.

1. Took out a loan of R20 000.
2. Advertising paid by cheque R 3 500.
3. Paid salaries by cheque R12 500.
4. Received R12 000 as current income.
5. Received proof of internet transfer for R3 000 from Mrs A Tenant for rent income.
6. Bought equipment and paid R10 000.
7. Paid telephone account, R500.
8. Bought Stationery, R1 500, and paid cash.
9. Cash received for services rendered, R14 000.
10. Repaid R5 000 of the loan.

ASSETS		**OWNER'S EQUITY + LIABILITIES**	
debit	credit	debit	**credit**
+	-	-	**+**

ASSETS

Equipment

Bank

Balance	15 000		

OWNER'S EQUITY + LIABILITIES

Loan

Current income

Rent income

Advertising

Salaries

Telephone

Stationery

How much cash is available to spend at the end of the month?

How much is still owing on the loan?

6.5. Formative assessment

(20 marks, 15 minutes)

Record the following transactions using T-accounts.

1. Owner introduced R180 000 capital into the business.
2. Purchased equipment by cheque for R45 000.
3. Loan received from Nedbank, R90 000.
4. Services rendered, R30 000.
5. Owner took out cash cheque for own use, R7 000.
6. Materials costs paid for, R35 000.
7. Repaid R10 000 of the loan.
8. Rates and taxes paid to Municipality, R6 000, by cheque.
9. Bought and paid for stationery, R2 000.
10. Services rendered, R20 000.

ASSETS		OWNER'S EQUITY + LIABILITIES	
debit	credit	debit	**credit**
+	-	-	**+**
Equipment		Capital	
Bank		Drawings	
		Loan	
		Current income	
		Material costs	
		Rates and taxes	
		Stationery	

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The accounting cycle

A business will usually have many more transactions to keep track of than could easily be recorded in the simple T-accounts you have used so far. In order to manage the larger volume of work, transactions are usually tracked and recorded through the following **accounting cycle**.

Source documents
- Receipts are issued when money is received by the business
- A cash invoice or cash register roll is used for cash sales
- Proof of payment of EFTs (for both receipts and payments)
- Cheque counterfoils record payments made
- Invoices for both credit sales to debtors and credit purchases from creditors (grade 9)

Journals
- Cash receipts journal summarises cash receipts
- Cash payments journal summarises cash payments
- Debtors journal summarises credit sales (grade 9)
- Creditors journal summarises credit purchases (grade 9)

General ledger
- This is basically made up of T-accounts in a more detailed format
- The total effect of transactions on each account
- Account balances or totals indicate the actual value or total effect

Trial balance
- Checks that both debit and credit entries have been entered

Financial statements
- Statement of Income shows financial performance i.e. net profit
- Statement of Financial Position reflects the accounting equation

Using technology

Transactions may be recorded manually using pen and paper in large cash books and ledger books, as was always done in the old days, or using available technology. For very small businesses, a system may be created in Excel where, for example, transactions are entered in journals and then formulae used to generate the trial balance and financial statements. In this case the formulae would represent what takes place in General Ledger accounts. A number of accounting packages such as Quickbooks or Pastel are also available for small to large businesses. Entries are made into source documents and then processed by the system to generate reports needed by management i.e. account information, financial statements and a variety of other information such as sales by customer etc.

6.6. Summative assessment

(50 marks, 30 minutes)

Question 1 Accounting concepts (10 marks, 5 minutes)

Mr. Smart started his business 2 months ago with R50 000, and borrowed a sum of money to be paid back over two years. At present he has a vehicle that originally cost R30 000, equipment to the value of R15 000, trading stock costing R10 000 and R5 000 cash. A number of people owe him money for goods bought on credit – the total amount being R8 000. Since starting his business, Mr Smart has made a profit of R12 000. He has not needed to draw any money out of the business as yet.

1.1. The total value of Smart traders' non-current assets is
   A. R130 000
   B. R68 000
   C. R60 000
   D. R45 000

1.2. The total value of the business' current assets is
   A. R60 000
   B. R35 000
   C. R23 000
   D. R15 000

1.3. Mr. Smart's investment in this business is worth
   A. R130 000
   B. R68 000
   C. R62 000
   D. R12 000

1.4. The amount of the loan was
   A. R14 000
   B. R12 000
   C. R8 000
   D. R6 000

1.5. Mr. Smart's investment was R50 000, and the profit made R12 000 in these two months. What is the return on investment?
   A. 12% per month
   B. 24% per month
   C. 24 % per year
   D. 72% per year

10

<u>Question 2</u> Accounting equation (12 marks, 6 minutes)

Show the effect of the following transactions on the accounting equation (the business uses a mark-up of 200%):

2.1. R75 000 is contributed to a new business by its owner.

2.2. A loan is received from Nedbank, R10 000.

2.3. A computer is bought and paid for, R7 000.

2.4. Current income, R6 000.

2.5. Bought stationery, R1 500.

2.6. Owner took stationery for his own use, R500.

	ASSETS =		OWNER'S EQUITY		+ LIABILITIES	
	Effect	Reason	Effect	Reason	Effect	Reason
1						
2						
3						
4						
5						
6						

12

(Please turn over for Questions 3 and 4)

Question 3 — T-accounts (18 marks, 14 minutes)

3.1. Record the transactions in Question 2 in T-accounts. (12)

ASSETS		OWNER'S EQUITY + LIABILITIES	
debit	credit	debit	**credit**
+	-	-	+

Computer equipment

Bank

Capital

Drawings

Loan

Current income

Stationery

3.2. Answer the following questions:

3.2.1. How much money is available in the bank account? (2)

3.2.2. Calculate the total profit made by this business so far. (4)

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Question 4 The accounting cycle (10 marks, 5 minutes)

4.1. How would the accountant know about the transactions in Question 2 i.e. what records would have been kept initially? Give TWO examples. (3)

4.2. Where would these transactions have been recorded to summarise similar transactions? (1)

4.3. What part of the accounting cycle is based on T-accounts, showing different accounts being debited and credited? (1)

4.4. How can the accounting records be checked for double entry errors i.e. that for every debit an equal credit has been made? (1)

4.5. What are the two main financial statements that are usually prepared at the end of each year from the accounting records, and what do they show? (4)

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TOTAL 50 marks