

# Grades 10 – 12

CAPS-approved Catalogue



# Welcome



**At Pearson, we believe that learner performance can be improved when both teachers and learners are equipped with quality learning resources filled with relevant and engaging content.**

We are proud to present the Pearson South Africa Grade 10 – 12 catalogue. Our Grade 10 – 12 portfolio brings you the widest range of CAPS-approved titles in South Africa. We aim to support learners along their learning journey as they prepare for their final matric exams and acquire the skills and knowledge to help them progress beyond school.

To support you in the classroom, we continue our strong tradition of excellence in teacher training. These teacher-training workshops are run across the country by our dedicated and passionate team of trainers whom are trained teachers. If you require more information about our workshops, please contact your local Pearson office.

**Wishing you all the best for the year ahead.**

Reggie Mokotsi  
Executive Director: Sales  
Pearson South Africa

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*Our Grades 10–12 supplementary resources can be found in the Grades 8–12 Library & Supplementary Resources Catalogue.*

## Key to symbols



This title is also available in eBook format.



This title is also available in Afrikaans.



Features one or more digital resources, e.g. CD, DVD, Online Support.



Additional information.



Resources with audio components.

# About Pearson

**At Pearson, home of Maskew Miller Longman and Heinemann, we're here to help people make progress in their lives through learning.**

Learning isn't a destination, starting and stopping at the classroom door. It's a never-ending road of discovery, challenge, inspiration, and wonder.

For many people, learning is the route to a job to support their family or the skills to help them progress in their career. For others, it's simply a passion for discovery.

Whether it's in the classroom, at home, or in the workplace, learning is the key to improving our life chances.

That's why, at Pearson, we provide trusted CAPS-approved textbooks, digital and supplementary resources, services and support, and professional development

courses, to make learning more engaging and effective.

We create content in all 11 official languages and have a footprint in all 9 provinces. Our unique insight and local expertise comes from our long history of working closely with the Department of Education, teachers, learners, researchers, authors and thought leaders.

We have a clear and simple set of values – in everything we do, we inspire to be brave, imaginative, decent and accountable. These values describe what is important to all of us, and guide us to do what is right for the world around us.

Every day all over South Africa, our products and services help learning flourish. Because wherever learning flourishes, so do people.

Learn more at [za.pearson.com](https://za.pearson.com)



## Our strategic partners

Our dedication to creating positive social impact shapes everything we do, from our products and strategies to the way we engage with our millions of learners, partners, and communities around the world.

We are fortunate to have found B-BBEE partners who share our passion and commitment to education and will enable us to continue to positively impact many thousands of learners across South Africa.

Sphere Holdings is excited to be part of an enterprise whose key focus is on improving knowledge and education in South Africa. The relationship with Pearson South Africa aligns this imperative with their passion for delivering meaningful interventions for change.

### Sphere Holdings (Pty) Ltd

- Itumeleng Kgaboesele
- Marang Denalane

Sphere Holdings was founded in 2003 and has a transformative business model that creates wealth that uplifts by putting real money back into the community with a focus on education. Since inception, about 14% of Sphere has been owned by four community charities with a focus on education.

### Pearson Marang Education Trust

Through research, engagement and development at the coalface of education, the school and the classroom, the Pearson Marang Education Trust has focused on best practice as an approach to improving the quality of teaching, learning and school management in South Africa. The Trust brings deep knowledge of school improvement and performance into this dynamic partnership.

“

We look forward to working with Pearson to adapt their unparalleled global education expertise, content and services to meet the needs of South African learners, teachers, education departments and schools.

”

Marang Denalane, Sphere director and Pearson SA board member

# Our commitment to learning

**The challenge for education is not just about providing access, but also ensuring progress.**

For Pearson, providing great products and services is just the beginning. It's important for us to know that they are working. Everything we do is driven by its measurable impact on learning outcomes. ***We call this efficacy.***

In 2013, we announced our commitment to report publicly on our progress and make the results transparent. We were the first education company to make this commitment.

By focusing on the efficacy of our products and services, we can see exactly how effective they are at producing successful

outcomes for learners. This involves continually measuring, assessing, and improving everything we do and putting the learner at the heart of our learning solutions. By questioning everything, we ensure that we're always delivering better results.

We work with educators and learners to continually improve our products and services, ensuring they have the most positive impact on learning. In this way, we're able to deliver better education to more people – whatever, whenever, wherever, and however they choose.

Read some of our efficacy reports to learn more about our products and their impact on [pearson.com](https://www.pearson.com) or [classroomsolutions.co.za](https://www.classroomsolutions.co.za)

# For us, the future's already begun

**It's a future full of powerful challenges and exciting opportunities. While we're dedicated to making change happen, we're well aware that we can't do it alone.**

So we collaborate with employers, teachers and educational experts, entrepreneurs, and other organisations to gain in-depth global perspectives and develop pioneering ideas that will help solve the many educational challenges facing the world.

Working with you enables us to make even bigger changes happen as we collaborate to address some of the biggest education challenges.

One of our initiatives is ***Project Literacy***, a campaign to bring the power of words to everyone so that by 2030, every child born can grow up to be a literate adult. Learn more at [projectliteracy.com](https://www.projectliteracy.com)

Our dedication to creating positive social impact shapes everything we do, from our products and strategies to the way we engage with our millions of learners, partners, and communities around the world.



# Our Brands

# Platinum

## Simply Superior!

**Platinum** is the perfect partner to deliver exceptional results. The series has superior illustrations for clearer understanding and a diverse range of activities for practice, along with excellent teacher support.

- **Superior** content written by expert authors.
- **Superior** CAPS curriculum coverage.
- **Superior** illustrations and activities improve results and motivate learners.
- **Superior** teacher support saves time and makes teaching easy.
- **Superior** quality = exam success.



**Platinum** components include Learner's Books, Teacher's Guides, Workbooks, and **FREE** Control Test Books and a Question Bank CD (grade-specific).







“

I have found *Platinum* to be user-friendly for the learner as well as the teacher. I like that there are plenty of examples, relevant and challenging activities, and exam questions and answers. The learners find the colourful pictures and examples to reflect everyday life, and the content easy to follow. I have experienced a great improvement in the results of my learners.

”

Buyisiwe Nkomo, teacher,  
Magadla Senior Secondary School,  
Eastern Cape

# FOCUS

## Focus on exam success!

**Focus** has been carefully developed and tested in classrooms to deliver successful teaching and learning support. The series develops learners' skills and grows their exam confidence. It has a variety of stimulating activities, uses reader-friendly language and provides balanced curriculum coverage.

- F**ully CAPS-compliant.
- O**pportunities for exam practice and assessment.
- C**omplete programme of assessment provided.
- U**sed and tested in schools throughout South Africa.
- S**upports and engages learners for success.



The *Focus* series is also available in Afrikaans as *Verken*



**Focus** components include Learner's Books, Teacher's Guides, **FREE** Exam Practice Books and a **FREE** Question Bank CD (grade-specific).

“

Learners like *Focus* as the content is easier to understand and a summary of the content is provided after each topic. As a teacher, I like the additional activities and answers that assist me in my teaching. I have seen an improvement of results from 80% to 90% in my class.

”

Mr TA Tlali, teacher,  
Reikaeletse Secondary School,  
Free State





## ***Spot On is spot on!***

**Spot On** contains everything a learner needs in one book. This series is clearly structured and easy to use, making learning enjoyable and teaching a pleasure, while also improving results.

- Clearly written and accessible content.
- Step-by-step approach to concept development.
- Structured to encourage classroom interaction.
- Wide range of activities for mastering different skills.
- Complete CAPS curriculum coverage.
- Comprehensive programme of assessment.



The *Spot On* series is also available in Afrikaans as *Kollig Op*



*Spot On* components include Learner's Books, Teacher's Guides and a **FREE** Teacher Resource CD (grade-specific).

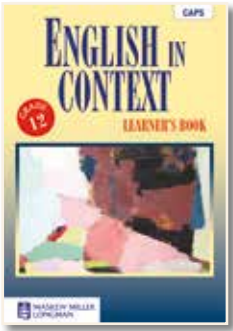
“

*Spot On* makes my work as a teacher very easy. This series contains clear diagrammatic illustrations relevant to the CAPS programme, and lots of exercises I can select from for learners. It has many illustrations and pictures that make learners appreciate what is being taught. *Spot On* will surely improve the pass rate of my learners.

”

G Usifo, teacher,  
Vine Christian School,  
Western Cape





# ENGLISH IN CONTEXT

**English in Context** has rich and detailed texts and activities for the acquisition of comprehensive language skills. This best-selling home language course has been revised to be fully CAPS-compliant.

**English in Context** key features:

- A wide range of literary and non-literary texts to develop reading proficiency.
- Activities to promote writing practice, develop critical listening skills and extend vocabulary use.
- Opportunities to practise effective listening and speaking strategies and express ideas and opinions.
- Integration of language and literacy skills across other subjects.
- The Teacher's Guide provides planning assistance, teaching guidelines and answers.
- The **FREE** Question Bank CD provides a rich source of questions for assessment.



# AFRIKAANS SONDER GRENSE

**Afrikaans sonder grense** is 'n volledige taalreeks beskikbaar vir Afrikaans Eerste Addisionele Taal en Tweede Addisionele Taal. Dié taalreeks het 'n multikulturele aanslag waarmee alle leerders in Suid-Afrika kan identifiseer. **Afrikaans sonder grense** voldoen aan al die vereistes van die KABV vir Graad 10, 11 en 12, en komponente sluit Leerderboeke, Onderwysersgidse, Kontroletoeetsboeke en 'n Eksamenbank-CD in.

**Afrikaans sonder grense** bied die volgende:

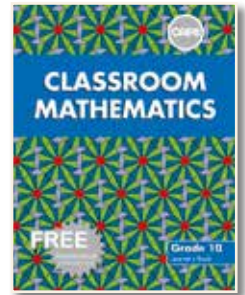
- 'n Verskeidenheid interessante leestekste prikkel die verbeelding.
- Sterk klem word op begrips- en leesvaardighede geplaas.
- Taalstrukture word in konteks toegepas.
- Die Onderwysersgidse bevat voorstelle vir onderrigstrategieë en volledige antwoorde.

## Classroom Mathematics

**Classroom Mathematics** is trusted by teachers to guarantee results. This course is research-based to ensure the best methodology. Providing comprehensive coverage of the CAPS curriculum, it has a strong focus on skills building, problem-solving and concepts mastery.

**Classroom Mathematics** key features:

- Step-by-step guidance with detailed explanations.
- Strong focus on skills building, problem-solving, and concepts mastery.
- Many practice opportunities with graded exercises.
- The Learner's Book includes a **FREE** Practice Book.
- The Teacher's Guide contains detailed teaching guidelines and answers.



*i*

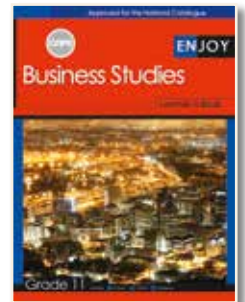
Also available in Afrikaans as **Wiskunde vir die Klaskamer**

## ENJOY

The **Enjoy** series is carefully scaffolded to meet the growing needs of an economically empowered South Africa. These books are CAPS-aligned, with activities to enhance both an understanding and application of business and economic concepts.

**Enjoy** key features:

- Content is fully CAPS-compliant.
- Written in clear and accessible language.
- Systematic development of skills for easy grasp of concepts.
- Case studies and examples for application of knowledge in real-world situations.
- Wide range of activities for practising knowledge and skills learnt.
- The Teacher's Guide contains extensive teaching guidelines and model answers to activities.



*i*

Also available in Afrikaans as **Geniet**

# X-kit Achieve!

CAPS  
aligned

Help learners approach their exams with confidence

## STUDY GUIDES

GRADE 8–12



- ★ Step-by-step explanations and worked examples.
- ★ Annotated diagrams and illustrated concepts.
- ★ Graded activities and answers.

## EXAM PRACTICE BOOKS

GRADE 10–12



- ★ Follows National Examination Guidelines.
- ★ CAPS-compliant exam papers.
- ★ Complete memos with mark allocations.

## LITERATURE STUDY GUIDES

GRADE 10–12

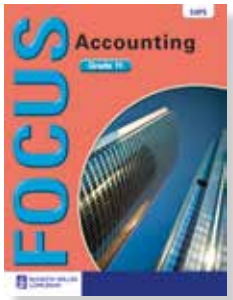
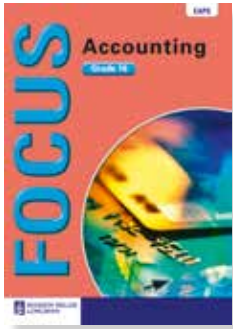


- ★ Themes, plots and characters thoroughly explained.
- ★ Diagrams summarise important content.
- ★ Thought-provoking exercises and answers.





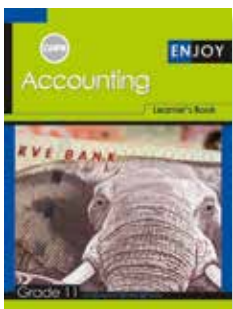
# Commerce



## Focus Accounting



- The content has been carefully structured and written to ensure progression of learning term-by-term.
- Each unit starts with a list of key questions that the learner should be able to answer when they have completed the unit.
- A wide range of activities develops learners' ability to apply skills.
- Each chapter includes exam practice questions and summaries that can be used for consolidation and revision.
- *Focus Accounting Workbook* is available.



## Enjoy Accounting



- The term and weeks of the school year are indicated at the top of the page for easy planning.
- A summary at the end of each module enables learners to check their understanding.
- *Enjoy Accounting Workbook* available.

The aim of each unit is clearly stated to maintain focused learning

A wide range of activities test learners' knowledge and ability to apply new skills

Term 2 Weeks 1-3

**Unit 5**  
Analysis and interpretation of the Financial Statements of partnerships

**The aim of this unit**  
This unit explains how to identify and solve problems that affect partnerships through analysing and interpreting Financial Statements.

**1. Interpretation of Financial Statements**

From preparing the Financial Statements you must have become aware that these statements are prepared with the purpose to provide information that enables the partners and other stakeholders to assess the performance of the business and to make decisions based on the information provided by these statements.

When reading the Financial Statements, the readers will be interested in the following:

- Is the business profitable? How well do they control their expenses and did they make a good profit?
- Is the business solvent? Can the business pay all its debts?
- Is the business liquid? Can the business pay its short-term debts immediately?
- Is the business earning a good return for the partners?


The business must also be a going concern ('GAAP' principle) and must make sure that the business will exist in the foreseeable future. The partners must also look at the sustainability of the business. The following must be assessed:

- Does the business have good internal control of their assets, are their expenses well controlled, as well as their income?
- Does management look after the environment and the community and does the local community support the business?

The ratios learnt in Grade 10 in Module 4 Unit 5 about sole traders still apply. The following were covered in Grade 10:

- Profitability.
- Solvency.
- Liquidity.
- The debt-equity.
- Return on Owner's Equity.

These ratios still apply in Grade 11 and will be revised. The only differences are that in a partnership there is more than one capital and current accounts.



Financial accounting    Managerial accounting    Managing resources

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Term 2 Weeks 1-3

The additional ratios that are needed are:

- The total amount earned by each partner.
- Return on each partner's equity.
- Percentage return on each partner's investment.

**Activity 1**    10 minutes

When analysing Financial Statements you must be able to identify where the different information needed will be found in the Financial Statements. Where will you find the following information in the Financial Statements of a partnership?

No.	Information	Found in
1.	Gross profit	
2.	Amount invested by each partner	
3.	Operating expenses	
4.	Current liabilities	
5.	Net profit	
6.	Current assets	
7.	Trading stock	
8.	Total assets	
9.	Non-current assets	
10.	Operating profit	
11.	Non-current liabilities	
12.	Drawings of each partner	

**2. Knowledge of analysis and interpretation of financial indicators**

You must have knowledge of the following financial indicators in the context of the sole trader (Grade 10) and partnerships (Grade 11).

Profitability and operating efficiency indicators	Percentage gross profit on cost of sales Percentage gross profit on sales (margin) Percentage operating expenses on sales Percentage net profit on sales Percentage operating profit on sales
Liquidity indicators	<ul style="list-style-type: none"> <li>• Net current assets (net working capital)</li> <li>• Current ratio</li> <li>• Acid-test ratio</li> <li>• Rate of stock turnover</li> <li>• Period for which enough stock is on hand</li> <li>• Debtors average collection period</li> <li>• Creditors average payment period</li> </ul>

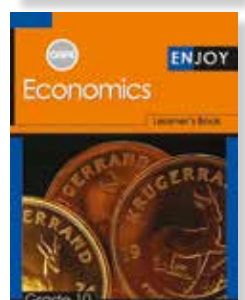
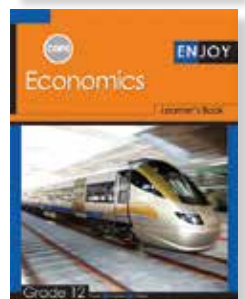
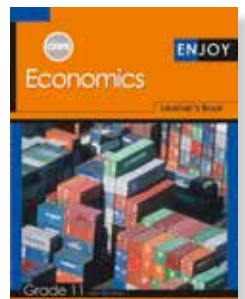
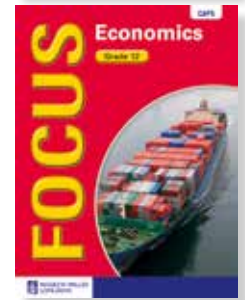
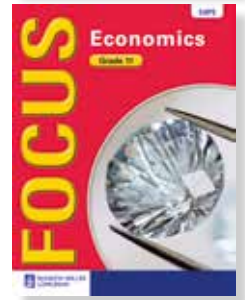
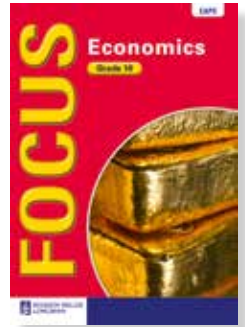
Financial accounting    Managerial accounting    Managing resources

Unit 5: Analysis and interpretation of the Financial Statements of partnerships    173

## Focus Economics



- Each topic starts with a clear summary of what will be covered in the chapter. A summary at the end of each chapter recaps the key concepts taught and can be used as a quick revision guide.
- Practice questions enable learners to test themselves on the content that has been covered and build up confidence with exam-style questions.
- The relevant assessments tasks are built in throughout the course at the correct time in the term.



Keyword feature helps learners understand new terms

Simple explanations help learners understand concepts

Clear, labelled illustrations support learning

**Activity 4: Show the role of participants in the economy**

1. Draw a circular flow diagram of the economy to show how the government interacts with households and business enterprises. Label the money and real flows in this diagram. (12)
2. As an individual, you are also an economic participant. You have part of household and so each you interact with business enterprises and with the government. In this activity you will explore some fully-fledged business enterprises, like you, interact with the government in the economy as a citizen. Clarify one of the following tasks:
  - Paying income tax
  - Applying for an identity document
  - Applying for a passport
3. Find out what you would need to do in order to complete this task (for example, how would you go about applying for a driver's license? What would you need? What documents do you need? What forms do you need to complete? How much do you have to pay?) (16)
- 3.2 If possible, get copies of the forms that need to be completed and bring them to class.
- 3.3 Prepare a 3-minute oral report back to tell other learners in your class what you have discovered about the government to complete this task. (1)

**Circular flow in the foreign sector**

Our economy is called an open economy because it trades with other countries in the world. A closed economy does not trade with the economy of any other country. Global trade is becoming more and more important among the nations of the world. Foreign trade has a great effect on a country's economic growth and development (see Figure 5.1). Let us now see what happens to our market when we sell the foreign trade component.

**Key words:**

**Open economy** - when a country trades with other countries.

**Closed economy** - when a country does not trade with the economy of other countries.

Figure 5.1 Circular flow of money and goods, including the foreign sector

Businesses make products that can be sold overseas. These goods are then exported to other countries and the businesses receive money for the products that they have required.

- Businesses and local businesses can not produce goods that we need, however, businesses in other countries do. We can then import these products for use in South Africa.
- When we import products, overseas firms pay for these and money comes into our economy. (It is an export or additional to our economy.)
- When we import products from overseas, we have to pay for them and money then leaves our economy and goes to that other country. (This is a foreign.)

Figure 5.2 shows a complete circular flow diagram of an open economy.

Figure 5.2 Circular flow of money and goods in an open economy

**Activity 5: Use a circular flow diagram**

Use the circular flow diagrams you have already learnt about to answer the following questions:

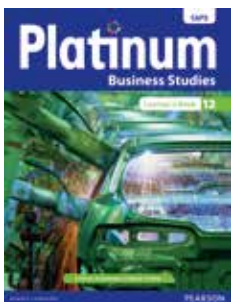
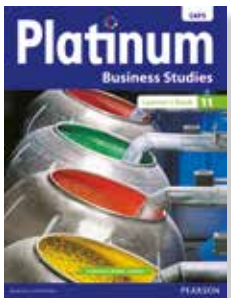
1. Why is it important that households buy all different goods and services? Should they not spend their money and only buy the basics? (6)
2. What are the advantages of specialisation (using your own ideas) and what are the disadvantages? (8)
3. Why do you think it is important that people save more money in South Africa today? Use the model to explain your answer. (4)
4. It is said that "It takes money to make money". Explain this saying by applying it to businesses taking loans from financial institutions. (8)

Focus Economics Grade 10 Learner's Book

## Enjoy Economics



- Module opener pages introduce learners to key concepts.
- Assessment questions at the end of each topic provide opportunities for informal assessment and tests.
- Note features provide additional facts to support understanding and examination tips are included throughout to help learners prepare for the final exams.



# Platinum Business Studies



- A clear and predictable structure promotes learning concepts in context.
- Concise summaries at the end of each chapter help with revision.
- Exam practice questions at the end of each chapter provide opportunities for assessment.
- Varied activities aimed at different cognitive levels help consolidate learners' knowledge.
- Difficult and new words are defined to build learners' vocabulary.
- Examples of South African businesses throughout the content promote inclusivity and indigenous knowledge.
- A study timetable and examination writing tips prepare learners for writing their final exam.
- Detailed and easy-to-understand, full-colour mind maps and graphics enhance learning.

Simple explanations help learners understand and remember

Full-colour diagrams and photographs support the learning process

**1 The three business environments related to the three economic sectors**

In Grade 10 you learnt about each of the business sectors and their classification. In Grade 11 the focus was on the **interrelationships** and **interdependence** of the three business sectors. In Grade 12 you need to be able to describe the three business environments related to the three economic sectors, and the extent to which a business can control these environments.

**9.1 The three economic sectors**

In South Africa we classify our businesses into three main economic sectors. This classification is determined by the nature of the business and the types of products or services provided to the consumer.

**ACTIVITY 9: IDENTIFY DIFFERENT BUSINESS SECTORS**

1. Identify the three business sectors and provide an example of each one, viz. 2. South the four pictures below and identify one which sector they fall. Provide a reason for your answer (1,2).

	Picture 1	Picture 2	Picture 3	Picture 4
Economic sector				
Reason				

**9.1.1 Primary sector**

The primary sector deals with raw materials and natural resources. Goods are sold in their raw state and the processing and packaging done and change the product in any way. These industries extract natural resources to sell to consumers. Examples of the primary sector are mining, fishing, agriculture, forestry, and hunting.

**9.1.2 Secondary sector**

The secondary sector manufactures and processes raw materials into final goods. All manufacturing, processing, construction and engineering fit into the secondary sector industry. The final goods are sold to the consumer. Examples of the secondary sector are: retail manufacturing, ship-building, clothing and food processing.

**9.1.3 Tertiary sector**

The tertiary sector is also known as the services industry and includes all industries that offer services to other businesses and consumers. The services may include distribution, transportation, banking, insurance, retail, entertainment and tourism. Examples of the tertiary sector are: retail stores (shops), transport companies, electricians, doctors, and consultants (IT, project manager, financial management). All the services are intangible and although they function in the micro-environment, they are influenced by the market and macro-environments. For example, a factory is impacted by telecommunications and electricity. Business need finance to operate their business and transport to get their products to the consumer.

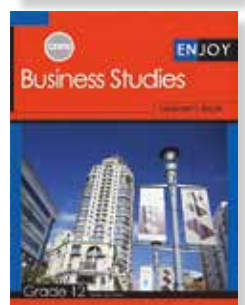
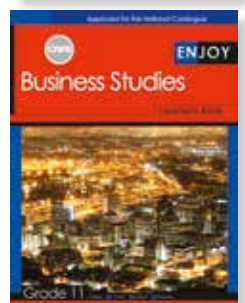
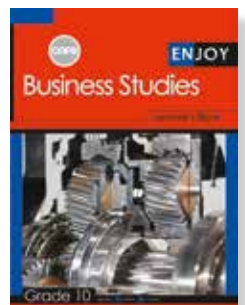
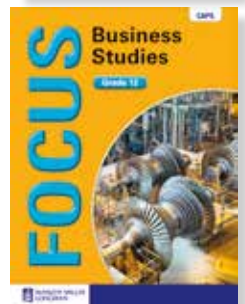
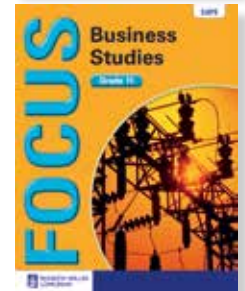
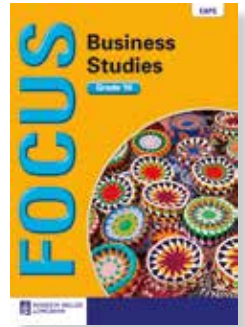
**9.2 The three business environments**

Platinum Business Studies Grade 12 Learner's Book

## Focus Business Studies



- Topics and units structure the content into manageable lengths according to CAPS.
- Contemporary case studies allow learners to apply Business Studies knowledge in real-world situations.
- Summaries at the end of each term support the consolidation of knowledge.
- Exam practice questions at the end of each topic provide opportunities for assessment.



Key questions help learners maintain focused learning

Keywords are highlighted and defined to help learners understand new terms

Fast fact boxes provide additional information

**Unit 1: Acquiring advanced problem-solving skills**

**1.1 Problem-solving skills**

Problem solving is a mental process that involves:

- problem finding, which is the ability to identify the problem
- problem shaping, which is the ability to break-down the problem in such a way that a clear solution can be found.

**1.2. The steps in problem-solving**

All problem-solving follows at least six basic steps, namely:

- defining the problem
- generating alternatives
- evaluating alternatives
- selecting the best option
- implementing the solution
- monitoring and evaluating the success of the solution.

**The problem-solving process**  
The steps taken to solve a problem:

```

graph TD
    A[Define the problem] --> B[Identify alternatives]
    B --> C[Evaluate alternatives]
    C --> D[Choose the best alternative]
    D --> E[Implement the decision]
    E --> F[Evaluate the decision]
    F --> A
    
    A --- G[Identify the problem. Gather as much information as possible to establish the cause of the problem.]
    B --- H[Decide on what caused the problem. Identify all the different possible solutions and the advantages and disadvantages of each.]
    C --- I[Look at the different possible solutions and the advantages of each.]
    D --- J[Identify which solution will be the best for the problem.]
    E --- K[Carry out the solution.]
    F --- L[Evaluate the result. Assess whether the problem has been solved partially or entirely.]
    
    L --> M[If not, re-evaluate the situation and start at the beginning of the process again.]
    M --> A
                
```

In between these steps, a number of skills can facilitate the problem-solving process. Testing the alternatives, or doing research before implementing the chosen solution can help to solve a problem.

**1.3 How to acquire advanced problem-solving skills**

The table below explains how to actively develop advanced problem-solving skills.

What must be done?	How can it be done?
1. Define the task clearly.	What exactly is required?
2. Set priorities.	What must be done first? What can be left until later?
3. Develop an appropriate strategy.	What steps must you take to address the task?
4. Use experience from similar problems.	What do you already know or what have you already done as a starting place on how to approach the current problem?
5. Set targets.	What steps must you accomplish by when? How will you know you have achieved each target? How will you measure your progress?
6. Develop an action plan.	List all the steps necessary to achieve each target. Identify the best order for all the steps and a deadline for each.
7. Get started.	Start early on the tasks that you can begin straight away. Keep yourself focused and motivated.
8. Monitor your performance against targets and indicators.	Check regularly whether you are meeting your targets and revise your action plan if needed.
9. Evaluate your performance.	How well did you achieve your targets? What did you learn that will be of use to you for future problems and tasks?

**The need for creative thinking**

Problems within a business environment must be solved as soon as possible. Constant changes in the market impact on business operations and businesses must adapt to them quickly and creatively. There is always space for improving systems to increase productivity, save on costs and increase market share. Creative and lateral thinking can help to solve problems successfully.

**Routine versus creative thinking**

Although businesses need creative thinking to remain competitive, routine thinking is required for many business processes. Logical responses are needed to solve routine problems. Routine problems in a business are a result of human error, for example, a supplier that is not paid on time or stock that is not delivered on time. To solve these types of problems, the business must just check the policy, check why it was not implemented, and ensure that the necessary control

Focus Business Studies Grade 12 Learner's Book

## Enjoy Business Studies



- The aim of each unit is clearly stated at the start of each unit to maintain focused learning.
- A wide range of activities test learners' knowledge and ability to apply new skills.
- Note features provide additional facts to support understanding and examination tips are included throughout to help learners prepare for the final exams.

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**FOCUS**



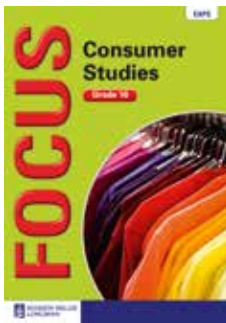
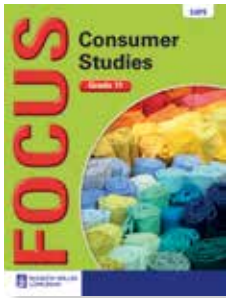
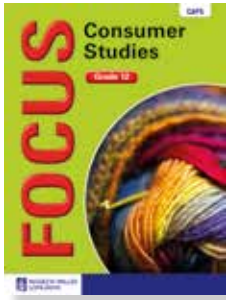
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A vibrant, multi-colored mosaic background composed of small, irregular tiles in shades of yellow, green, teal, blue, purple, and pink. A large, dark blue circle is centered over the mosaic, containing the word "Humanities" in a white, serif font.

# Humanities



# Focus Consumer Studies



- Each topic starts with a clear summary of what will be covered in the chapter.
- Each unit starts with a list of key questions that the learner should be able to answer when they have completed the unit.
- A summary at the end of each chapter recaps the key concepts taught and can be used as a quick revision guide.
- Practice questions enable learners to test themselves on the content that has been covered and build up confidence with exam-style questions.
- The relevant assessments tasks are built in throughout the course at the correct time in the term.

Fact focus boxes provide additional information

Activities develop learners' ability to apply skills taught

Keyword feature helps learners understand new terms

**12 Diabetes**

**Fact focus**  
The World Health Organization (WHO) predicts that total deaths from diabetes will rise by more than 50% in the next ten years, and by the year 2030 diabetes will become the seventh-largest cause of death in the world.  
*Source: [www.who.int/features/infocus/diabetes facts/en/index.html](#) (accessed May 2012)*

**Description**  
Diabetes is a disease in which the body does not produce insulin or is unable to use it properly. Insulin is needed to turn sugar into energy. Without insulin sugar builds up in the blood, causing high blood sugar levels.

**Type 1 diabetes**  
**Causes of type 1 diabetes**

- Type 1 diabetes occurs in children and young adults when the pancreas cells are damaged or unable to make insulin.
- Symptoms include excessive weight loss in spite of eating large amounts of food, excessive thirst or hunger, the need to urinate often, low energy levels and digestive problems.
- Unless treated, diabetes can lead to blindness, kidney disease, nerve disease and coronary heart disease, including heart attacks and strokes.

**Management of type 1 diabetes**

- Treatment involves regular insulin injections, a diabetic diet and sufficient exercise.
- Without daily insulin injections, a person with type 1 diabetes may die from the disease.
- All type 1 diabetics need to see a dietitian so that they can practise healthy eating patterns.
- Healthy eating means eating lean protein (fish, poultry and legumes) and lots of fibre-rich foods such as whole grains, fruit and vegetables. It also means limiting foods and snacks that are high in saturated fats and cholesterol.

**Fact focus**  
A new development is for diabetics to wear an insulin pump. With an insulin pump, the insulin reservoir is outside the body and tiny amounts of insulin are injected every few minutes automatically, according to a pre-set programme. The patient always carries the pump and there is enough insulin in the reservoir so that the patient will not run out during the day.

**Key words**  
**soluble fibre:** fibre that dissolves to form a gel in water. It slows the entry of sugar into the bloodstream.  
**insoluble fibre:** fibre that the body cannot digest as it does not dissolve in water, but rather binds and holds water as it passes through the body.

**Activity 1: Formulate guidelines to prevent diabetes**  
Type 2 diabetes is a lifestyle disease that causes an alarming number of deaths each year. Think about this statement and then formulate five guidelines for how people can prevent the onset of type 2 diabetes.

**1.3 Coronary heart disease**  
Coronary heart diseases are serious health conditions related to high saturated fat, trans fat and cholesterol intakes. We can protect ourselves from heart attacks and other heart conditions by making sensible food choices.

72 Chapter 9: Nutritional and food-related health conditions

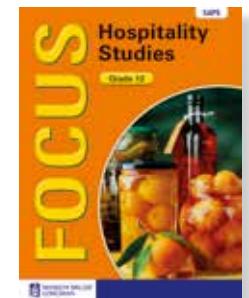
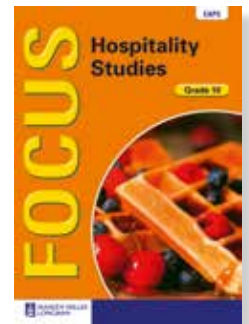
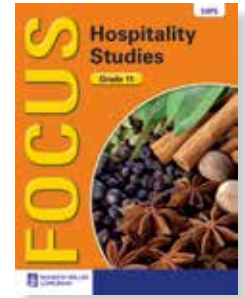
Unit 1: Prevention and management of nutritional and food-related health conditions 73



## Focus Hospitality Studies



- The content has been carefully structured and written to ensure progression of learning term-by-term.
- Each unit starts with a list of key questions that the learner should be able to answer when they have completed the unit.
- A wide range of activities develops learners' ability to apply skills.
- A summary at the end of each chapter recaps the key concepts taught and can be used as a quick revision guide.
- Each chapter includes exam practice questions and summaries that can be used for consolidation and revision.



Chef says boxes provide helpful tips

Key questions help learners maintain focused learning

Activities provide opportunities for consolidation and practice

**Unit 3: Key questions**

- How should breads be presented?
- What are the quality characteristics of bread?

The bread display on a buffet table

**Chef says:**  
Do not refrigerate baked goods, as they will become stale. Do not wrap Italian or French loaves, because wrapping causes the crusts to lose the desired crispness.

**Key word**  
**crumb** – the cell structures inside a baked product

**Unit 3: Presentation, quality and successful products**

**3.1 Presentation of bread**

Fresh breads are popular and relatively inexpensive. The many different shapes and forms of different breads often result in it being used as a display or focal point on a buffet table. Individual rolls are often served to guests at the beginning of a meal.

Serve bread within eight hours after baking. For longer storage, wrap cool breads in moisture-proof wrapping to prevent them from becoming stale. Wrapping and freezing maintains the quality of the product for a longer period.

**3.2 Quality characteristics of yeast products**

Good quality and well-prepared breads and other yeast products should have the following characteristics:

- They should be golden brown with a crispy crust and have a slight spring when poked at the sides.
- They should have a good volume, determined by the type of product.
- They should sound hollow when tapped at the bottom.
- The **crumbs** should be fine and the bread should have an even texture.
- Bread should be rounded on top without any coarse cracks.
- Bread should have a symmetrical shape with closed seams.
- Bread should have a pleasant nutty flavour.

**3.3 How to ensure a successful product**

Table 1 below identifies the problems that cause imperfect bread and how to prevent or correct these problems. Careful and precise preparation is required to produce quality-baked products. Accurate measurements are critical and the recipes (formulas) should be followed very carefully. Mistakes cannot be corrected and, unfortunately, they are often only discovered when taking the finished product out of the oven.

Problem	Cause
Heavy end product with poor volume dough	Too much flour forced into the dough Too little salt Too little yeast Improper fermentation or proofing Oven too hot
Crust too pale	Oven too low Dough over proofed Too little sugar or milk Too little salt Baking time too short
Crust too dark	Oven too hot Too much sugar Under fermented Baked too long

Top crust separates	Dough improperly shaped Dough dried out during proofing Overproofing Too much steam in oven at start of baking
Side of loaf cracked	Bread expanded after crust was formed Proofing too hot
Blisters on crust	Too much liquid Improper fermentation
Ropes of undercooked dough in bread	Insufficient or uneven kneading
Large holes in bread	Too much leavening Too much yeast

**Activity 3: Describe the storage and quality of bread**

- Mention how bread can be stored after baking. Which breads should not be wrapped and why?
- List the good-quality characteristics required from bread products.

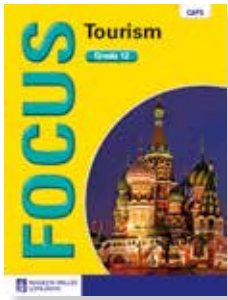
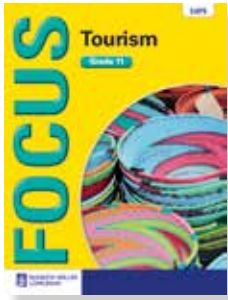
**Activity 4: Practical task 1: Yeast sweet baked products**

- Visit the local bakery in your area.
  - Make a list of all the different yeast products produced in the bakery.
  - Classify the products into rich, sweet and plain dough products.
- Look in the recipe section of this Learner's Book and find the recipes for yeast products. Choose one recipe for a sweet or rich yeast dough product and prepare it for a special breakfast or lunch function at your school. Note that you will be assessed according to how you cook and present the dish according to the recipe requirements, your standard of hygiene and work organisation. Your dishes will be tasted and assessed for their sensory characteristics. (25)

**Activity 5: Practical task 2: Yeast continued**

- Prepare a batch of dough (white or brown).
- With your partners, use yeast to prepare the following products from your dough:
  - a miniature pizza with a savoury topping
  - a bread roll to be served for breakfast or lunch
  - a pita (suggest a suitable filling)
  - a focaccia
  - 'vetkoek' with a suitable filling.
- Garnish each dish.
- Write down at least three accompaniments (sauces and side dishes) that you would serve with the baked products.
- Note that you will be assessed according to how you cook and present the dish according to the recipe requirements, your standard of hygiene and work organisation. Your dishes will be tasted and assessed for their sensory characteristics. (25)

Chapter 18: Bread products using yeast 159



## Focus Tourism

- The content has been carefully structured and written to ensure progression of learning term-by-term.
- Each unit starts with a list of key questions that the learner should be able to answer when they have completed the unit.
- A summary at the end of each chapter recaps the key concepts taught and can be used as a quick revision guide.
- Language support is built in throughout the course.
- Each chapter includes a wide range of activities, exam practice questions and summaries that can be used for consolidation and revision.



## Spot On Tourism

- Clear, step-by-step content makes *Spot On* Tourism suitable for all learning styles.
- Concise summaries at the end of each module help with revision.

Notes and Facts features provide additional information

Contemporary texts make Tourism relevant to learners

Wide range of activities test learners' knowledge

Extension activities provide opportunities for enrichment

The screenshot displays a page from the Spot On Tourism Learner's Book, Grade 11, Term 1, Week 4. The page is titled "Notes and Facts" and discusses "Touch screen information systems" and "The use of PDAs and smartphones for air travel". It includes a photograph of a person using a PDA at an airport. The page also features a "Notes" section on "New technological developments used at airports" and "Activities" for "Airport technology".

**Notes and Facts:**

- Touch screen information systems:** Touch screen information systems are similar to airport information counters. Instead of using screens for assistance, the system will self-service and provide information about flights, airport layout, announcements and delays. The information required is selected by touching the screen or typing on a virtual keyboard by tapping the letters.
- The use of PDAs and smartphones for air travel:** A smartphone is a phone that can operate as a computer by accessing the Internet and using various other functions. These phones can also be used to organize travel documents, book tickets, confirm identification and print boarding passes where services are available. They can also do exchange rate conversions, display checks of different countries' rates and weather forecasts. A personal digital assistant (PDA) is a mobile device that functions as a personal information manager. Smartphones including the iPhone™, the BlackBerry™ and others, are capable of performing these functions, making travelling easier. In fact, the iPhone™ has an application ("app") called "iTravel", which studies passengers to make travel reservations and check-in for flights. PDAs enable travellers to track flights, check in and view flight schedules without going to the airport.
- New technological developments used at airports:**
  - Bird tracking information system:** A bird tracking information system has been developed to prevent aircraft from colliding with birds. This system became a necessity after a bird flew into an aircraft, which then had to make an emergency landing in the Hudson River (New York) in 2009 during take-off. This tracking information system detects flocks of birds and will improve overall safety at airports.
  - An explosive trace-detection machine:** An explosive trace-detection machine is also known as a "sniffer machine". It is a security device that detects explosives and illegal drugs at airports by sensing minute particles for "sniff" on tiny particles of explosive material or drug substances.

**Activities:**

**Activity 4.1 Airport technology**

- How can airports benefit from technology?
- List three ways in which technology at airports facilitates travel.
- Describe biometric scanners in your own words.
- In what way can thermal body scanners be helpful to airports? Explain. You must include:
  - what the equipment does
  - what the benefits are of using the facility
  - where these machines can be found.
- Draw a table listing the advantages and disadvantages of biometric scanning.

**Activity 4.2 How airport technology assists travellers**

- What is an information display board?
- List four things a traveller might find on this board.
- How do you think these boards can help with the efficient running of an airport? Set two reasons.
- Create a display board for a flight that has either landed been delayed or is currently boarding. Provide the necessary information that would be displayed.
- Based on what you have learnt in this unit, what advice would you give a person meeting a friend at a restaurant in an airport who cannot find the airport entrance to help her? Explain the steps.
- The use of PDAs and smartphones has become a great help for people who are travelling. You heard about the "iTravel" application, which makes travel reservations and checks travellers in for flights. Consider your own application for people to use on their phones when travelling. Think of something that is useful for travellers. You must be creative and different. You must:
  - name your application
  - create an icon or picture for your application
  - describe what it does for travellers.

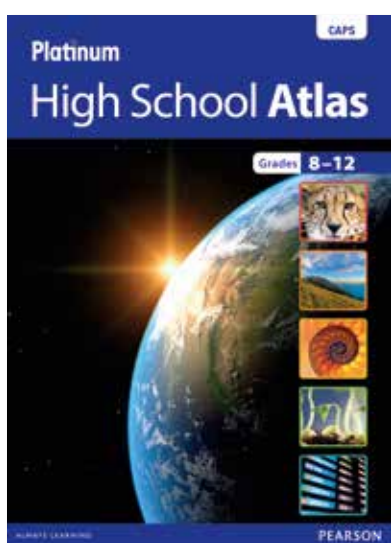
**Extension:**

Full-body scanning scanners are used at some airports to check the human figure underneath materials like clothes. This system is controversial because many people feel that it invades their privacy. Other airports have body scan devices where people are physically felt by sensors to see if they are hiding any potential weapons under their clothes.

- Do you think these methods are acceptable?
- Will they help catch terrorists?
- Write a short paragraph arguing your point.

# Platinum

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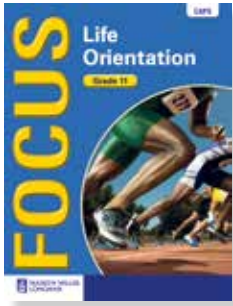
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# Focus Life Orientation



- Each chapter covers a two-week period for easy planning. A clear, scaffolded approach to concept development makes learning easy.
- A wide range of activities enables learners to master different skills.
- Difficult and new words are defined to build learners' vocabulary.
- A language reference section provides easy-to-understand grammar explanations and examples. A glossary of language and literature terms helps learners with their study of English.
- Revision activities at the end of each chapter strengthen and consolidate learners' knowledge.
- Colourful visuals stimulate their interest.

Activities provide opportunities for consolidation and practice

Case studies focus on issues relevant to South African learners

Skills focus features provide learners with important Life Orientation tools

**Unit 3: Time-management skills and annual study plan**  
Time: 1 hour

**3.1 How do you spend your time?**  
Grade 11 learners say that time, or the lack of time, is one of their biggest problems. Do learn how to manage your time well. Use every minute, as time is valuable!

**Activity 8: Make a pie chart of how you spend your time**

- Show how you spend your time on a typical day by writing in each segment and adding it to the size closest to the amount of time. (30)
- Do another pie chart to show how you spend your time in a typical week. (30)
- What do your pie charts tell you about how you spend your time? (10)
- Identify any time-wasters. (10)
- Explain how you will change time-wasting to time-saving. (10)

**3.2 Procrastination: A big time waster**

**Case study:**  
**Norman procrastinates**  
Norman knows he has to start studying for his exam. So he tells himself he first needs to tidy his desk and sort out his books. After that, he tells himself he needs to go to the shop to buy new pencils and an eraser.  
Once home, he looks tired, so tells himself he needs to sleep for 45 minutes so he can be fresh when he starts studying. He wakes up, and feels hungry. He tells himself he needs to eat well, as his brain needs fuel! So he makes himself a snack.  
Then he goes to his desk, determined to study. He opens a book, but then says he must first make a note study plan, he searches his pencils... and then looks for paper to draw up his study plan.  
'I had better SMS my friends to find out which exam is first,' he thinks. Two hours later he is still SMSING his friends.  
'I will start studying just after my favourite soapie,' he promises. After watching the soapie, he falls asleep in front of the TV. 'I will start studying tomorrow,' he tells himself.

**Activity 10: Investigate procrastination**

- What does procrastination mean? (10)
- Give an example of when you have procrastinated when you were supposed to study. (10)
- In what way did Norman procrastinate? (10)
- How did Norman waste time? (10)
- Give Norman advice about how he should manage his time better. (10)

**3.3 Manage your time**

**Skills focus**

**Time-management guidelines**  
Follow these guidelines to better manage your time:

- Always be on time for school.
- Walk fast when you move between classes, and be on time for the next class.
- Know how you spend your time.
- Identify your biggest time-wasters, and then deal with them.
- Make a study plan.
- Make to-do lists and keep to them.
- Avoid procrastinating or putting off doing tasks. If something needs to be done, do it immediately.
- Be self-disciplined.
- Follow a daily study schedule.
- Avoid distractions.
- Do at least two to three hours of homework after school, every day.

**When do you study the best?**  
Are you a morning person or an evening person? Do you study better early in the morning or late at night? Use your best study times to study for your most difficult subjects.

**Get enough sleep**  
As a Grade 11 learner, your diverging brain needs enough sleep. Your ability to learn depends on getting enough sleep on school nights. You need between eight and 10 hours' sleep per night. If you make up in the weekends and still feel very sleepy, or fall asleep in class at school, you know you are not getting enough sleep. So what to do?

- you have five minutes between midnight and 4 am? Rather sleep than see the floor for five days!
- your favourite TV shows are on late at night? Find the off switch – you need the sleep!
- you had your cell phone on and fell asleep late at night because it is late early the next day? Learn from this mistake and send the text messages.

Focus Life Orientation Grade 11 Learner's Book

# Spot On Life Orientation



- Module opener pages introduce learners to key concepts.
- Content is taught using simple explanations to help learners understand and remember.
- Varied activities test learners' knowledge and their ability to apply new skills.



Helpful tips keep learners safe during physical activities

Case studies allow learners to apply knowledge in real-life situations

Keywords features help learners to understand new terms

**Term 2 Week 6**

**Tip**  
On the day of the sports event, sports activities also need to be able to run efficiently and smoothly. Use the tips to help you to run an event or sports activity smoothly.

- Plan a schedule or timeline of exactly how the event will take place on the day.
- Your schedule should include all the activities that need to take place during the event, the times they should happen, and so on.
- Communicate being clear that you get work.

**Safety**

- Tag people instead of catching them.
- Don't throw balloons at a person's head or face.

**Safety**

- Don't double-link by holding each other's wrists or arms. Only hands can be placed.
- Don't take the arms high to 'stretch' the runner or catch their arm over the head.
- Don't throw your jacket hands inward so that the runner can't see a fall.

**Physical Education: Participation in programmes that promote own umpiring, administrative, organisational and leadership skills in self-designed and structured community and/or playground and/or indigenous games that promote physical activity**

**Activity 2.2 Play childhood games**

**Capture the Flag**

**Equipment:**

- Two impregnable bags and baggies. Fabric strips or sticks will do.
- Saltwater.

**How to play**

- Two teams are needed to play this game.
- Each team has a flag that they have to protect. The opposing team has to try to capture the other team's flag.
- Each team must choose someone like a stick or a tree to serve as their jail.
- When the game begins, each team decides when to place its flag. Teams can protect their flag by using the water-filled balloons. Players can throw the balloons at opponents. If a player gets wet, then they have to sit out until dried.
- Team members have to guard their own flag or to enter their opponent's territory to capture the other team's flag. Players in enemy territory can be caught (tagged) and put in jail. A teammate can tag someone to release them from jail, but only they can only release one person at a time.
- The team that captures the other team's flag and brings it back to their territory wins the game.

**Red Rover**

**Equipment:**

- No equipment is needed.

**How to play**

Divide into two teams.

- Learners form two lines, holding hands and facing each other. The lines should be 10 to 15 metres apart.
- The team that goes first calls for a runner from the other team, by shouting "Red Rover, Red Rover, let your runner over!" The runner has to break through the other team's line. If the runner breaks through the opposing team's line, he can release one of the team members from the opposing team to take back to his team. If he doesn't break through the line, he becomes part of the opposing team.
- The game is over when everyone is in one team's line.

Divide into two groups. One group plays Capture the Flag and the other group plays Red Rover. At the halfway point in the lesson, swap and play the game you haven't played.

100

**Term 2 Week 7**

**Unit 3 Participation in a community service that addresses a contemporary environmental issue**

**How environmental issues harm certain sectors of society more than others**

Community service is often done voluntarily, meaning that people give of their time, skill and resources without expecting any payment. Volunteering is an important part of being a valuable citizen in a democracy.

Because of the importance of community service, it is necessary that you develop your ability to identify, analyse and respond to environmental issues. This involves:

- identifying environmental problems
- understanding that systems are all interconnected (that is political, economic, ecological, cultural and social)
- understanding the historical background to various environmental issues (for example, apartheid, which has been the cause of many social and environmental issues)
- developing action plans to address these issues
- being informed about current environmental issues
- clarifying your beliefs about various environmental issues
- researching, evaluating and using information
- having the courage to act.

**Community service activities**

There are many volunteers in our country who work hard to address environmental issues.

**Case Study 2**

**South Africa: Durban's poor fight for clean air**

Thousands of people live in south Durban, an industrial area which houses the country's largest petrochemical plant. People in this area, mostly of Indian and mixed-race descent, are surrounded by low-flying oil refineries and power plants. The pollution never stops due to the 24-hour, under-constant flow, as a result of cheap labour for the industries.

The first environmental civil organisation, South Durban Community Environmental Alliance (SDCEA), has since their investigations revealed a high incidence of cancer and respiratory illnesses among residents.

Volunteers are special 'heroes' in pollution or weather as neighbourhood-formation all activities, to monitor air pollution, to South Africa, legislation on air pollution has failed to keep up with growing concerns. Its local incidents have the problem of investigating and proving that states that industries are doing damage, are making them feel.

SDCEA has become the first African grassroots group to take its case into their own hands by taking their own air samples. The organisation has a community plan a major part in lobbying the petroleum giant to change the way they process fuel.

Source: Adapted from <http://www.globe.gov.za> (Accessed August 2011)

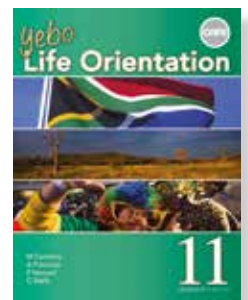
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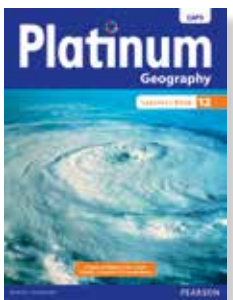
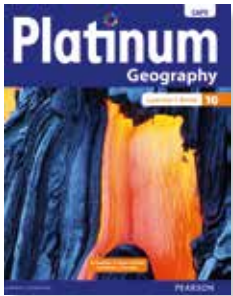
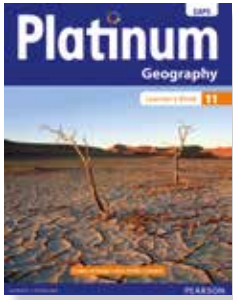
Spot On Life Orientation Grade 11 Learner's Book

# Yebo Life Orientation



- Clearly written and accessible content contains relevant, interesting information.
- Term and week breakdowns allow for easy planning.
- Full-colour photographs illustrate and support learning.
- New and difficult terms are explained in context.
- Many fun and challenging activities test learners' participation and movement performance. *Challenge* activities are included to provide extension and enrichment.





# Platinum Geography

- Chapters and units provide content with a clear and predictable structure.
- A clear, step-by-step approach to concept development enhances understanding.
- Revision activities at the end of each topic strengthen and consolidate learners' knowledge.
- Map work is integrated with the content throughout the topics to facilitate the learning process.
- Relevant case studies allow learners to apply Geography knowledge in real-life situations.
- Full-colour illustrations and photographs stimulate learners' interest.

Keyword features help learners understand new terms

A wide range of activities allow learners to test their knowledge and skills

About our world boxes provide additional information

## 4 Drought and desertification

**Unit 1: Areas at risk of drought and desertification: regional and local scales**

**KEY WORDS**

**Drought** is a period of time with less rain than usual that leads to water shortage.

**Desertification** is the process in which aridity and vegetation cover decrease, and productive land changes into desert.

**Degraded land** is land that is no longer as productive as it was previously.

**Desertification** is the process in which land in semi-arid areas gradually changes into desert. The change takes place as soil becomes less fertile and vegetation cover decreases. Look at Figure 2.49, which shows contours of land productivity due to desertification. In the process of desertification, land that is capable of supporting natural vegetation changes into unproductive land. When this happens, we say that the land is **degraded**. Some places are more at risk of drought and desertification than others.

Figure 2.49 Areas at risk of drought and desertification in Africa.

**1. Areas in Africa at risk of drought and desertification**

Figure 2.49 shows that, in Africa, there are three regions that are most at risk of drought and desertification. They are all semi-arid areas and include:

- Lands bordering the Sahara desert in north Africa, especially the strip of land along the southern border. This strip of land is known as the Sahel.
- The Horn of Africa
- Lands bordering the Kalahari desert of southern Africa.

## 2. Areas in South Africa at risk of drought and desertification

Figure 2.49 shows areas of risk of drought and desertification for the region of Africa as a whole. Although it gives some information about South Africa, Figure 2.50 gives additional detail at a more local scale. It shows the percentage of months in a year which receive less than three quarters of annual rainfall at different places. In places where the percentage of months is high, the risk of drought is greater than where it is low.

Figure 2.50 Percentage of months at risk of drought and desertification in South Africa.

**ACTIVITY 1: USING MAPS TO FIND OUT ABOUT PLACES AT RISK OF DROUGHT AND DESERTIFICATION**

- Look at the map of Africa in Figure 2.49 and answer the questions below:
  - Name the deserts labeled F and G. (1)
  - Which countries in southern Africa are shown to have areas at high risk of desertification? (1)
  - In which part of Africa is the area of land at risk of desertification the greatest? (1)
  - How does the risk of desertification change with distance from the Sahara desert? (1)
- Look at the map of South Africa in Figure 2.50 and answer the questions below:
  - How does the risk of drought change from west to east across South Africa? (1)
  - In which province is the risk of drought the greatest? (1)
  - Which province has the lowest risk of drought? (1)
  - Which three provinces are shown on the map to have areas at risk of desertification? (3)

**ABOUT OUR WORLD**

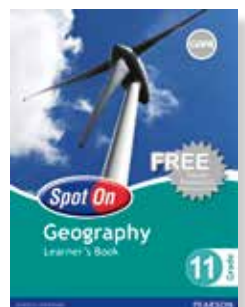
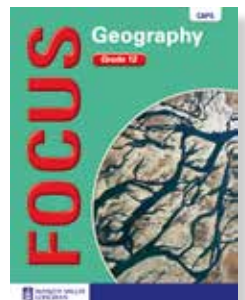
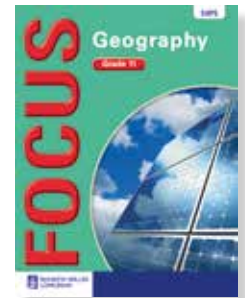
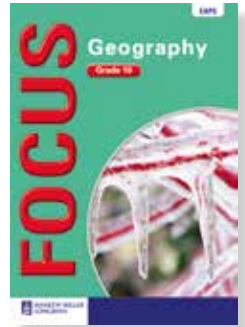
It is estimated that about 75% of the world's already degraded land is in arid, semi-arid and dry sub-humid areas. A total of 1.2 billion people of 100 countries depend on the world's degraded land.

Figure 2.51 A water pump in the Northern Cape province of South Africa.

# Focus Geography



- The topic opener pages introduce learners to the key concepts covered in that section. A clear, step-by-step approach to concept development enhances understanding.
- Varied activities provide learners with frequent opportunities for consolidation and practice.
- Key questions at the beginning of each unit maintain focused learning.
- Revision of geographical skills and techniques at the end of each topic consolidates learners' knowledge.



Geo facts provide interesting details to support the text

Activities are structured to develop learners' ability to apply Geography skills

Full-colour, detailed maps and diagrams help learners understand Geography concepts

**Unit 2: Areas where mid-latitude cyclones form**

**2.1 World distribution of mid-latitude cyclones**

Mid-latitude cyclones develop in the middle latitudes from 30° north, and 30°–50° south of the equator along the regions known as the polar front. Study the map in Figure 2.6 to find out which parts of the world experience mid-latitude cyclones. Notice that:

- The mid-latitude cyclone zones tend to run from the northern and southern hemispheres.
- They occur mainly over the oceans and coastal areas. They do not spread across large areas of land such as Canada and Asia.
- They affect regions between 30° and 50° north and south of the equator.

**Key word**  
pressure belts: bands of high or low pressure that surround belts of contrasted latitudes, but equate the equatorial low-pressure belt at the equator.

**Geo fact**  
Sometimes mid-latitude cyclones are called depressions.

**Figure 2.6** Areas of the world where mid-latitude cyclones form.

**Mid-latitude cyclones in South Africa**  
Mid-latitude cyclones develop between 30° S and 50° S, at the polar front. The southern tip of South Africa is 33° S, so the cold fronts only cross the southern Cape, as shown on the map in Figure 2.7. The warm fronts are best southwards away from South Africa. Also, the cold fronts only reach South Africa in winter when all the pressure belts and wind systems move slightly north. This is why the southernmost Cape receives winter rainfall. The rain is brought by cold fronts passing across the region from west to east. Figure 2.7 shows a 'family' of cold fronts passing over the southern Cape. This will bring a week of cold, clear, frosty weather. Sometimes cold fronts can travel as far as the southern portions of South Africa or even Zimbabwe, bringing cold, cloudy, rainy weather.

**Figure 2.7** The area of South Africa affected by mid-latitude cyclones.

**Activity 3: Locate mid-latitude cyclones**

1. Give the latitudes where cold latitude cyclones occur in the world. (2)
2. Explain why mid-latitude cyclones usually only occur in South Africa during winter. (2)

**Unit 3: Conditions necessary for the formation of mid-latitude cyclones**

It is about the latitude of 30° S, only a relatively short distance separates the warm tropical air mass from the cold polar mass. This transition zone is called the **polar front**. Remember that a front is a zone where two air masses of different temperature meet. The polar front is where the warm, moist air of the mid-latitude cell meets the cold air of the polar cell. Look at Figure 2.8 to see the position of the polar fronts in the northern and southern hemispheres.

The warmer air gets pushed up the polar front while the colder air wedges in underneath as shown in Figure 2.9.

A pressure difference exists between the warm tropical air and cold polar air. This results in a pressure gradient. The westerly winds and the polar easterlies blow along these pressure gradients towards the polar front.

**Figure 2.8** The position of the polar fronts in the northern and southern hemispheres.

**Figure 2.9** The polar front is between the mid-latitude and polar cells.

Sometimes a **low** forms in the polar front as shown in Figure 2.10. This is due to a disturbance in winds high in the atmosphere in the jet stream, or it can be caused by a mountain range or the shape of the coastline.

This change in conditions of the polar front causes the **low** to form more of a circular pattern, and a cell of low pressure begins to form. The winds then deflect and blow into the low pressure cell as shown in Figure 2.11. This is the condition necessary for the beginning of a mid-latitude cyclone.

**Key words**  
**air mass** – a large mass of air, extending for hundreds of kilometres, with similar temperature and humidity.  
**polar front** – a zone where the cold polar air mass and warm tropical air mass meet.  
**jet stream** – a band of very strong westerly winds high in the atmosphere – about 7 000 m – which partly causes the development of mid-latitude cyclones.

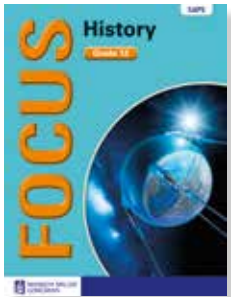
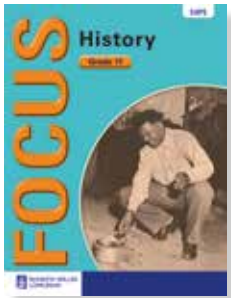
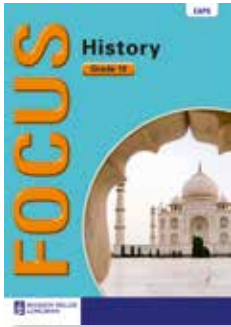
**Geo fact**  
Winds in the jet stream blow at 200 km/hour. Therefore there is an friction with Earth's surface.

Focus Geography Grade 12 Learner's Book

# Spot On Geography



- Content breakdowns into terms and weeks according to CAPS make planning easy.
- Full-colour artwork and photographs stimulates learners' interest and supports comprehension.
- Interesting case studies help contextualise the Geography learning experience.
- Plenty of activities provide opportunities for consolidation and practice.



# Focus History



- Chapters and units structure content into manageable lengths according to CAPS.
- Simple explanations help learners understand and remember History content.
- *Skills focus* features develop subject-specific skills such as analysing historical sources.
- Summaries at the end of each topic support the consolidation of knowledge. Exam practice questions provide opportunities for assessment.

Did you know? boxes provide additional information

Activities provide opportunities for consolidation and practice

Written and visual sources support and enhance understanding

**Unit 2: Development of technology**  
The conversion of voyages of discovery into colonisation was made possible by the new navigation and firepower technologies.

**21 Development of military technology**  
The Renaissance was accompanied by a scientific revolution. Overseas expansion was made possible by developing new military technology including gunpowder and guns. The European explorers used new powerful guns. Gunpowder was used to shoot bullets from guns and cannonballs from cannons – from long distances and at high speed. The people the Europeans conquered did not have these weapons at the time.

**22 Naval advances**  
There were advances in ship-building and in technology that aided navigation while sailing on the open seas. These advances made it possible for European explorers to navigate on the oceans.

**Progress in ship-building**  
At the start of the 15th century, European ships were inferior to those used by Arab and Chinese traders; but within 200 years, they were building the best ships in the world. These ships were able to change direction quickly, were suited for long journeys and could sail in dangerous winds. The combination of light, well-controlled ships with the firepower of iron cannons gave European colonisers a distinct advantage when they landed on foreign shores.

**Other advances that aided navigation**  
Naval technology was enhanced by other advances including the compass, the discovery that the earth was round, new maps, the telescope and the Mariner's Astrolabe.

**Did you know?**  
The Arabs produced the first known working gun in 1304. Europeans got information about gunpowder through the writings of Arab scholars.

**Source E:** The ships of European explorers were able to carry big, good-quality cannons. Trained gunners were capable of destroying opponents with these weapons.

**Source F:** A compass has a magnetic steel needle attached to a disk. The point of the needle always points north. The compass, a navigational instrument for determining direction, greatly improved the safety and efficiency of ocean travel. The compass made it possible for sailors to take their ships further out into the open sea instead of always staying close to the land. Once they were out in the sea, they were able to use these new instruments to find out where they were and where to go.

**Source G:** Renaissance scientists proved that the earth is round, and not flat. Understanding that the earth is round opened the way for European navigators and explorers to sail more confidently across the sea.

**Source H:** Cannons are weapons that used gunpowder to shoot a heavy iron cannonball at a target.

**Source I:** The travel by explorers to continents they had never seen before created a new interest in the study of geography in Europe. Europeans created new maps that helped their navigators and explorers.

**Source J:** Telescopes are instruments specially built for looking at distant objects. The astronomical telescope was invented and used to study the moon, sun and stars.

**Source K:** The Mariner's Astrolabe was used to determine the latitude of a ship at sea by making complicated measurements. The astrolabe is an astronomical instrument for solving problems relating to the time of day and the position of the sun and stars in the sky. It was introduced to Europeans through Arabs.

**Activity 3: Extracting information from sources about how European technologies made expansion possible**

1. New and borrowed inventions, and advances in science and geography made the European voyages of exploration possible. Use the sources H to M to work out which inventions sailors needed for each of the following tasks on a journey. There may be more than one invention or advance for each task.
  - 1.1 Sailors could sail out of sight from land without getting lost.
  - 1.2 Sailors were certain that their ships would not fall off the edge of the world.
  - 1.3 Ships could change direction quickly, were suited for long journeys and could sail in dangerous winds.
  - 1.4 Sailors could kill people who got in their way at sea.
2. How would you describe the sailors who went on these long ocean journeys? Choose from the following list, and add your own words as well. Use a dictionary to look up the words that you may not understand.
 

rough, greedy, uncivilised, powerful, spirited, gallant, brave, chivalrous, courageous, determined, adventurous, curious, desperate

42 Chapter 1: The reasons why European expansion was possible

Unit 2: Development of technology 43

Focus History Grade 10 Learner's Book

# Spot On History

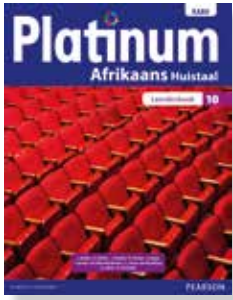


- Simple explanations help learners to understand and remember content.
- Timelines help learners' to understand the order of historical events and identify trends.
- Activities develop learners' ability to extract and interpret information.
- *Tip* features and written and visual sources provide additional information and enhance learners' understanding.





# Languages



# Platinum Afrikaans Huistaal

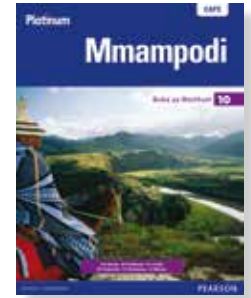


- 'n Duidelike en voorspelbare struktuur bevorder die bemeestering van verskillende taalvaardighede: Luister en Praat, Lees en Kyk, Begrip en Letterkunde, Skryf en Aanbied asook Taalstrukture en -konvensies.
- Die Leerderboek bevat 'n verskeidenheid interessante leestekste soos kortverhale, koerantberigte, advertensies, verslae, gedigte, prente en foto's wat die leerder se verwysingsraamwerk verbreed.
- Die Spel dit só-raampie bevat moeilike woorde wat leerders moet kan spel.
- Al die leestekste bevat spesiale annotasies of byskrifte om elemente van die teks uit te lig.
- Die Leerderboek bevat 'n omvattende taalafdeling met taalreëls en ekstra inskerpingoefeninge.
- Voorbeeldtaalvraestelle gee leerders nuttige oefening wat hulle sal help om vir die eksamen voor te berei.

- Insluiting van tematies-relevante idiome
- Annotasies om die tekstenmerke uit te lig
- Fokus op die proesesbenadering
- Verklarings van moeilike woorde in die teks
- Verduideliking van leesstrategieë

Platinum Afrikaans Huistaal Graad 10 Leerderboek

# Platinum Mmampodi



- Sebopelo se hlakileng se dupehang se kgothaletsa maikutlo a ho ithuta a maemong.
- Ditlhaloso tse bobebe di thusa baithuti ho utlwisisa le ho hoopla.
- Dithuto le ditema tsa mehleng ena di etsa hore dikateng di nepahale haholo ho baithuti ba Afrika Borwa.
- Mefutafuta ya mesebetsi e neha baithuti menyetla ya ho tseba mekgwa e fapaneng ya bokgoni.
- Mesebetsi ya boikgopotso mafelong a kgaolo ka nngwe e matlafatsa tsebo ya baithuti.
- Mantswe a boima le a matjha a hlalosa ho bopa tlotlontswa ya baithuti.

E akaretsa ditshebetso tsohle tsa bokgoni ba puo

Mehlala ya ditema

Ditshwantsho tse mebalabala leqepheng ka leng di tsoa thahasello

Mesebetsi le ditlhakiso tsa boikgopotso di etsa baithuti ba kgone ho matlafatsa tsebo le ho lekola bokgoni ba bona ba puo

Platinum Mmampodi Kereite 10 Buka ya Moithuti

## Other Platinum Home Language Grade 11 titles available



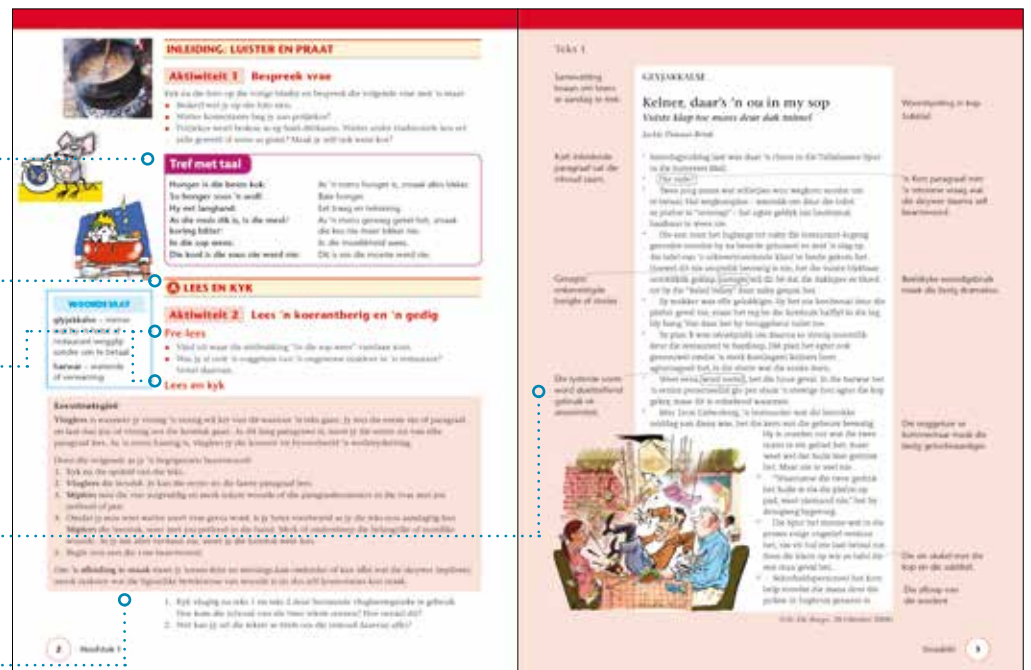


# Platinum Afrikaans Huistaal



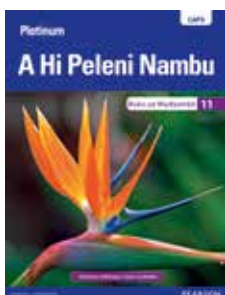
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- Insluiting van tematies-relevante idioeme
- Kernvaardighede duidelik uitgelig
- Fokus op die proesesbenadering
- Annotasies om die tekstenmerke uit te lig
- Verduideliking van leesstrategieë

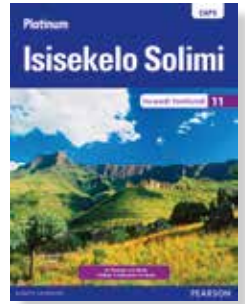


Platinum Afrikaans Huistaal Graad 11 Leerderboek

## Other Platinum Home Language Grade 11 titles available



# Platinum Isisekelo Solimi



- Isakhiwo esicacile nesiqagulekayo sithuthukisa ukufunda into ethile esimweni esithile.
- Izincazelo ezilula zisiza izingane ukuba ziqonde zibuye zikhumbule.
- Izindikimba kanye nemibhalo yamanje kubaluleke kakhulu kubafundi baseNingizimu Afrika.
- Imisebenzi eyahlukahlukeni ihlinzeka abafundi ngamakhono ahlukahlukene.
- Imisebenzi yokubuyekeza ekugcineni kwaleso naleso sahluko ihlanganisa ulwazi lomfundi.
- Amagama alukhuni nalawo amasha achazwe ukuze andise ulwazi lomfundi.

**Imibuzo**

- Thabatha amabali angaxaxa ongapheleli ngqo amabali ayikho?
- Engenambali nokugqibela abafundisi kwi eThandeka eKhasa? Tsho ngqo!
- Ukuqinisekisa, ubaniye oye abafundisi ngqo?
- Ukuba ngqo ngqobani abafundisi abafundisi ngqobani?
- Ukuba abafundisi abafundisi ngqobani ngqobani? Chaza.

**Imibuzo ezimbini abafundisi abafundisi abafundisi**

Abafundisi abafundisi abafundisi abafundisi. Ukuqinisekisa abafundisi abafundisi abafundisi abafundisi.

**3. Ngemva kokufunda**

**Abafundisi abafundisi abafundisi abafundisi.**

- Ngemva ngqo ukufunda abafundisi abafundisi abafundisi?
- Ngemva ngqo ukufunda abafundisi abafundisi abafundisi?
- Ngemva ngqo ukufunda abafundisi abafundisi abafundisi?
- Ngemva ngqo ukufunda abafundisi abafundisi abafundisi?
- Ngemva ngqo ukufunda abafundisi abafundisi abafundisi?

**URUFUNDA NOKUBURELA**

**1. Ngaphambi kokufunda**

**Ukuqinisekisa abafundisi abafundisi abafundisi**

Ngemva ngqo ukufunda abafundisi abafundisi abafundisi abafundisi.

**Imibuzo**

- Ukuba ngqo ukufunda abafundisi abafundisi abafundisi abafundisi?
- Ukuba ngqo ukufunda abafundisi abafundisi abafundisi abafundisi?
- Ukuba ngqo ukufunda abafundisi abafundisi abafundisi abafundisi?
- Ukuba ngqo ukufunda abafundisi abafundisi abafundisi abafundisi?
- Ukuba ngqo ukufunda abafundisi abafundisi abafundisi abafundisi?

**2. Ngemva kokufunda**

Ngemva ngqo ukufunda abafundisi abafundisi abafundisi abafundisi.

**Fundisi le mbuzo ngqobani abafundisi abafundisi abafundisi.**

Ukuqinisekisa abafundisi abafundisi abafundisi abafundisi abafundisi.

Imisebenzi eyenza abafundi baqondise abakufundile

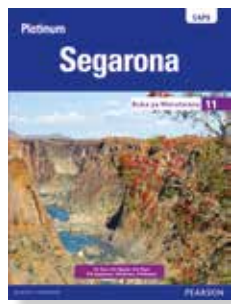
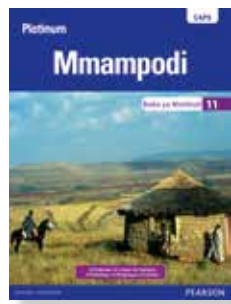
Imifanekiso ekhangayo ezovuselela ugqozi kubafundi

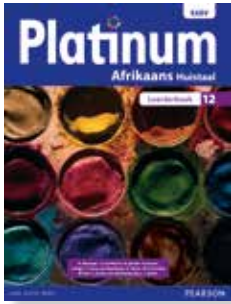
Izibonelo zezicashunwa ezinhlobonhlobo

Iqokethe zonke izinhlelo zokufundisa amakhono olimi

Platinum Isisekelo Solimi Ibanga 11 Incwadi Yomfundi

## Other Platinum Home Language Grade 11 titles available



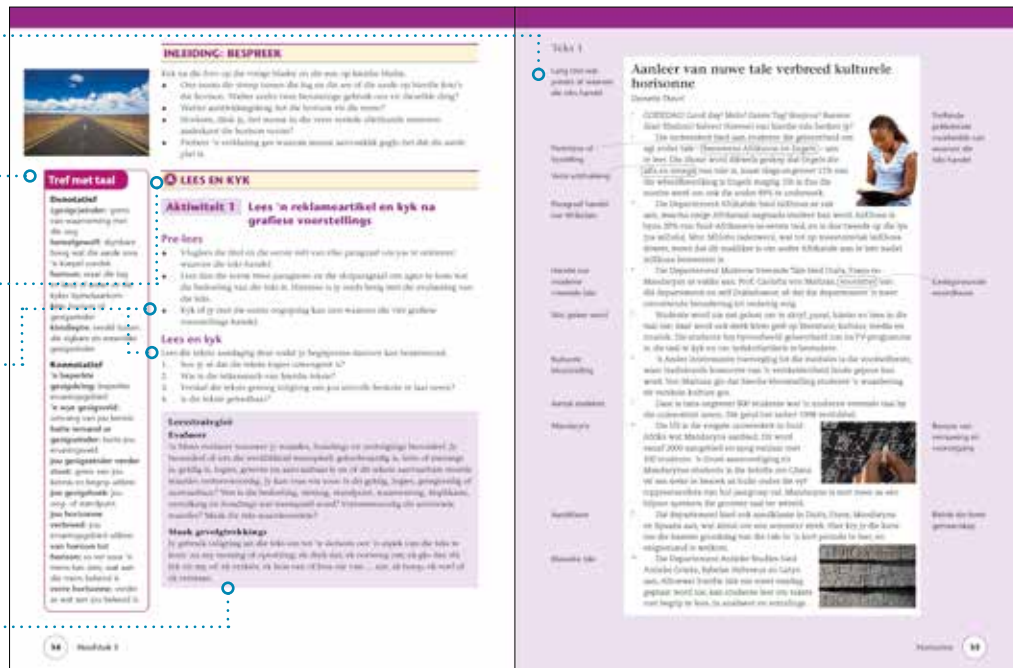


# Platinum Afrikaans Huistaal



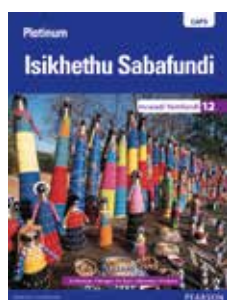
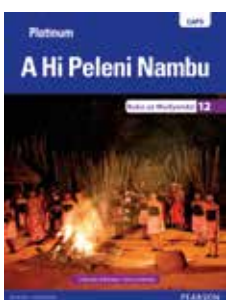
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- Kernvaardighede duidelik uitgelig
- Fokus op die proesesbenadering
- Verduideliking van leesstrategieë



Platinum Afrikaans Huistaal Graad 11 Leerderboek

## Other Platinum Home Language Grade 12 titles available



# Platinum Masikhanyise



- Isakhiwo esicacileyo nesiqikelelweyo siphicula iingqiqo zokufunda kwimeko.
- Iingcaciso ezilula zinceda abafundi ukuba baqonde kwaye bakhumbule.
- Imixholo nezicatshulwa zeli xesha zenza umxholo ube semxholweni kakhulu kuMzantsi Afrika. Imisebenzi eyahlukeneyo inika amathuba kubafundi ukuba babe nobuchule bezakhono ezahlukeneyo.
- Imisebenzi yohlaziyo ekupheleni kwesahluko ngasinye kuzinzisa ulwazi lwabafundi.
- Amagama amatsha nanzima achaziwe ukwakha isigama sabafundi.



Iquka zonke iinkqubo zezakhono zolwimi

Imifanekiso eqaqambileyo kwiphepha ngalinye evuselela umdla

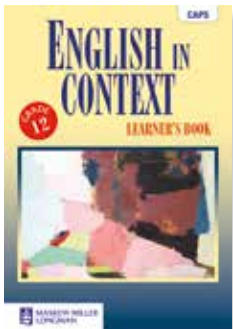
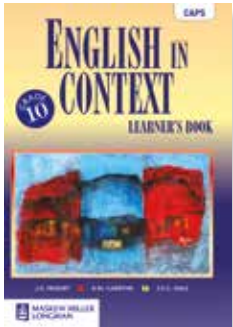
Imisebenzi eyenza abafundi bazinzise ulwazi nokuvavanya izakhono zabo zolwimi

Imizekelo yazo zonke iinhlobo zeyicatshulwa

Platinum Masikhanyise Grade 12 Learner's Book

## Other Platinum Home Language Grade 12 titles available





## English in Context

- Content provides learners with many opportunities to use English in an integrated way.
- Carefully selected material ensures relevance in the southern African context.

Integration of language and literary skills across other subjects

Activities extend vocabulary use and understanding of language structures

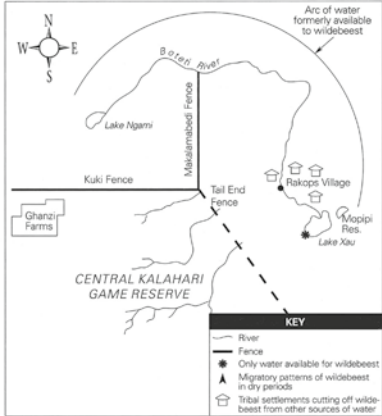
Wide range of literary and non-literary texts develop proficiency in reading and viewing

**ON YOUR OWN**

**Completing a map**

One way of summarising information is to use a chart, map or diagram. Sketch the map below into your workbook and then complete it to show the change in the migration patterns of the wildebeest described in the excerpt from *Cry of the Kalahari*. (The symbols you will need to show the migration patterns of the wildebeest have been provided in the key.)

Once you have completed the activity, think of a strongly emotive heading for the map.



18 Chapter 1: The 'green' scene

**FOCUS ON LANGUAGE**

**Connotations of emotive language**


Consider how the use of emotive language in these two advertisements evokes very different responses from the reader:

**Sighting of Rare Leopard**

**Wildlife Supporters**

The sight of a leopard in the wild is one to stir the blood. Unhappily, it's a sight that is fast becoming rare. The main reason why the leopard, the elephant and the gorilla are some endangered species is because too many hunters have them in their sights; rare leopards are being slaughtered for their skins.

The World Wildlife Fund desperately needs your support in its efforts to prevent trade in endangered species. Trade in skins, ivory, even live animals, has brought many species to the verge of extinction. It's not just the leopard – over 1 000 different kinds of animals are under threat, right now. Among them are the elephant, the rhino and the polar bear.

**Please help us to save the leopard and other threatened species.** 

1. List all the emotive words used in the World Wildlife Fund (WWF) advertisement.
2. What impact do these words have on the reader?
3. Choose three emotive words from the text and discuss their connotations.
4. What is the intention of the WWF in this advertisement?
5. How does the picture of the leopard create a pun when it is considered together with the title?

**Gowaydilang Wonderland**

**Unique GOWAYDILANG – Africa's jewel**

- rich leopard country
- spectacular game
- game reserves and reserves
- beautiful mountains
- unspoiled, fascinating scenery

Overlooking Lake Nani, one of GOWAYDILANG's lakes

**Hunter Beware!**  
Only you to discover unspoiled, magical GOWAYDILANG with us!

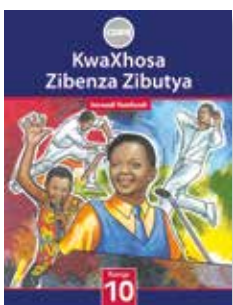
**Wildlife:**

- SOLO RESERVATION
- DORNBACH RESERVE
- GOWAYDILANG RESERVATION
- GAME DRIVE
- BOMBAY CAMP
- RISE CAMP
- SANDY TERRACE CAMP
- MOMBASA HOUSE

6. What is the intention of the Gowaydilang Lodge advertisement?
7. Write down the words that give a contrasting view of the world from the one presented in the WWF advertisement.
8. What is the impact of the photographs on the reader?
9. In what way does this advertisement promise the prospective customer the best of both worlds? Discuss the connotations of the words used to create this impression.

Examining issues 19

English in Context Grade 10 Learner's Book

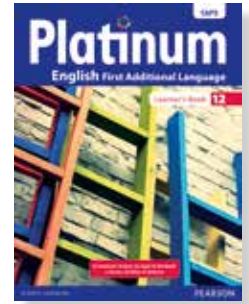


## KwaXhosa Zibenza Zibutya isiXhosa Home Language

- Khetha... Incwadi yolwimi egxininisa kakhulu kwigrama.
- Khetha... Incwadi yolwimi egxininisa ekwakhiweni kwezakhono zolwimi.
- Khetha... Incwadi yolwimi nezezicatshulwa zokufundwayo ezongezelelweyo.
- Khetha uKwaXhosa Zibenza Zibutya, enkqenqkeza phambili yabo bonke otitshala.



# Platinum English First Additional Language



- Chapters each contain the work learners need to cover during a full two-week cycle.
- A range of texts support learners' study of English literature. Grammar focus sections provide learners with easy-to-understand explanations and practice opportunities.
- *Glossary* margin features help learners with new words.
- Varied activities allow learners to focus on key content and master different skills.
- Revision activities at the end of each chapter consolidate learners' knowledge.

A wide range of activities provides opportunities for consolidation and practice

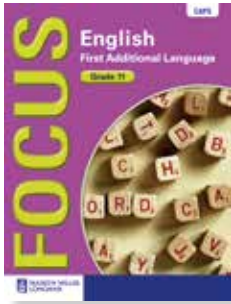
Annotations explain the features and structures of different English texts

Words you can use feature helps build learners' English vocabulary

**78 Chapter 3**

**79 Reading the World While You Read**

Platinum English First Additional Language Grade 12 Learner's Book



## Focus English First Additional Language



- Each chapter covers a two-week period for easy planning. A clear, scaffolded approach to concept development makes learning easy.
- A language reference section provides easy-to-understand grammar explanations and examples. A glossary of language and literature terms helps learners with their study of English.
- A wide range of activities enables learners to master different skills. Revision activities at the end of each chapter strengthen and consolidate learners' knowledge.

Annotations explain the features and structures of different English texts

Activities provide opportunities for consolidation and practice

Word power features build learners' English vocabulary

**Unit 2 Reading and viewing: Informative text**

**Read a feature article**

You are going to read about another impressive young South African scientist. Before you read the text, read the title and the caption to the photograph. What information do these give you?

**While you read,** pay attention to all the words that give readers a positive impression of Kuzo. Make a list of these in your personal dictionary.

**After you have read,** write answers to the questions in Activity 3.

**South African reaching for the stars!**

1. Spokeliso Kuzo is one of South Africa's most successful young scientists. His passion for science started when he was a six-year-old. He explains: 'One of my earliest memories of my childhood in Umtata in the Eastern Cape was seeing a plane flying overhead dropping plastic parachutes in 1994'. Kuzo was fascinated by the airplanes. From there he began to build robots in his mother's kitchen, and remembers once making the fuel incorrectly and having a mini-explosion which luckily caused no real damage but did create a mess!

2. From the Eastern Cape, Kuzo's family moved to Johannesburg, where he was given a scholarship to attend St. John's College. There he developed his love for science, especially aerodynamics. With the guidance of teachers, he built the Phoenix, a rocket which reached the height of 120 metres. This was done in 2002. He was 16 at the time and with this achievement he won an award at the Ekurhuleni National Science Expo as well as breaking the South African *Amavelo Athlende* Record.

3. When Kuzo was in Matric, at the age of 18, he had already started to achieve success as a young scientist. That year he attended the International Youth Science Fair in Sweden, and he won two grand awards at the Intel International Science and Engineering Fair which was held in New Mexico, in the United States. His awards were in the Energy and Transportation category.

4. His project was a revolutionary cheaper rocket fuel. He explained that when he found out that rocket fuels were very expensive, he thought that the money could be better spent on other projects such as research into AIDS and HIV. So he decided to develop a way to make rocket fuels cheaper.

5. One of his more unusual projects is a planet that is named after him! The NASA-affiliated Lincoln Laboratory named a minor planet after him. Planet 32162 was discovered in 2002 – the same time that Kuzo was becoming serious about robotics. It is now officially known as 32162 Kuzo.

6. After matriculating, Kuzo went on to study chemical engineering at the University of Cape Town, until he received the news that he had been granted a bursary to study at Harvard University in the USA.

**Notes about a person often start by giving information about their childhood, or about what started their interest in the subject.**

**Use correct class to write out after a word means. Aerodynamics is a type of science. They break the world down. Many means through the air. An aerodynamicist means the scientist of movement through the air.**

**This paragraph is important as it gives facts about his research, and why he is interested in his project.**

**There are two clues that this sentence will give extra information about Kuzo. The first is the word 'unusual'. The second is the exclamation mark.**

**7. His message to South African youth? 'The time to stop pessimism is now. Look beyond the problems in SA and the world. Be optimistic, innovative and dream. The future of SA is probably bright.'**

**Notice how the author starts writing about Kuzo and quoting his direct words. This keeps the writing style interesting.**

**Activity 3: Answer questions about a text**

1. Which of these statements best explains paragraph 1?

A. After seeing the aerial drop of plastic parachutes, Kuzo became interested in physics. (1)

B. After seeing the aerial drop of parachutes, Kuzo became interested in aerodynamics. (1)

C. After seeing the aerial drop of parachutes, Kuzo started to do aerodynamics. (1)

2. Which of these statements best describes Kuzo's early experience with rocket fuel?

A. He blew up his mother's kitchen. (1)

B. He was given an award for the successful fuel. (1)

C. He received a medal for an invention. (1)

3. How do you think he felt about rocket fuel?

A. He loved it. (1)

B. He was disappointed. (1)

4. What does the text tell us about Kuzo's interest in science?

A. He started to study science at the age of 18. (1)

B. Kuzo was interested in developing a cheaper rocket fuel. (1)

C. He was interested in aerodynamics. (1)

5. Suggest why it is unusual for a planet to be named after a person. (1)

6. Explain how the name of the planet was developed. (1)

7. Why do you think this award was given to Kuzo? (1)

8. Find synonyms from the last paragraph for:

11.1 essential 11.2 innovative 11.3 obscure **Total: 30 marks**

**Word power**

**passion** - intense interest  
**enthusiasm** - not professional, but strong and lasting interest  
**ambition** - the desire to achieve something, often a goal  
**NASA** - the American space agency  
**Lincoln Laboratory** - the name of one of the most famous laboratories in the world, named after Abraham Lincoln

Focus English First Additional Language Grade 11 Learner's Book



## Spot On English First Additional Language

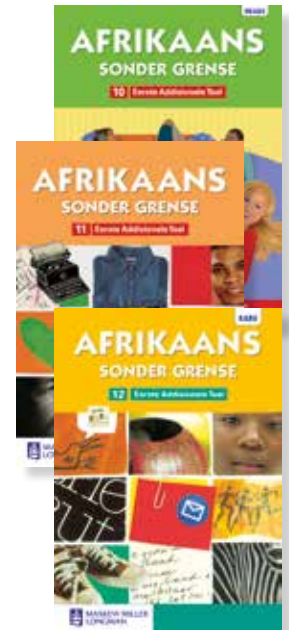


- Term and week breakdowns according to CAPS make planning easy.
- Activities provide learners with opportunities for consolidation and practice.
- A range of texts develops learners' proficiency in reading.

## Afrikaans sonder grense Eerste Addisionele Taal



- 'n Verskeidenheid interessante leestekste soos kortverhale, koerantberigte, gedigte, prente en foto's verbreed die leerder se verwysingsraamwerk en ontwikkel taalvaardighede.
- Die Leerderboek bevat 'n omvattende taalafdeling met taalreëls en ekstra inskerpingsoefeninge geskik vir die tweede addisionele taal-leerder.
- Die *Afrikaans sonder grense* Eerste Addisionele Taal Onderwysersgids sluit 'n **GRATIS** Eksamenbank CD-ROM in!



## Spot On Afrikaans Eerste Addisionele Taal



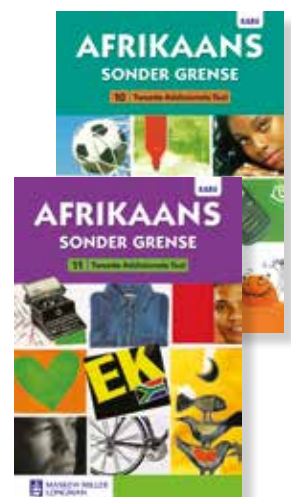
- Die Leerderboek bevat 'n omvattende taalafdeling met taalreëls en ekstra inskerpingsoefeninge geskik vir tweede-addisionele taal-leerders.
- Sterk fokus op taalstrukture en konvensies met baie oefeninge.
- Volledige instruksies vir aktiwiteite.



## Afrikaans sonder grense Tweede Addisionele Taal



- Sterk fokus op taalvaardighede soos Lees en kyk en Luister en praat.
- 'n Groot verskeidenheid interessante leestekste wat leerders se belangstelling sal prikkel.
- Die Afrikaans sonder grense Tweede Addisionele Taal Onderwysersgids sluit 'n **GRATIS** Kontroletoeetsboek en 'n Eksamenbank CD-ROM in!



# Aligned to the *way you teach*

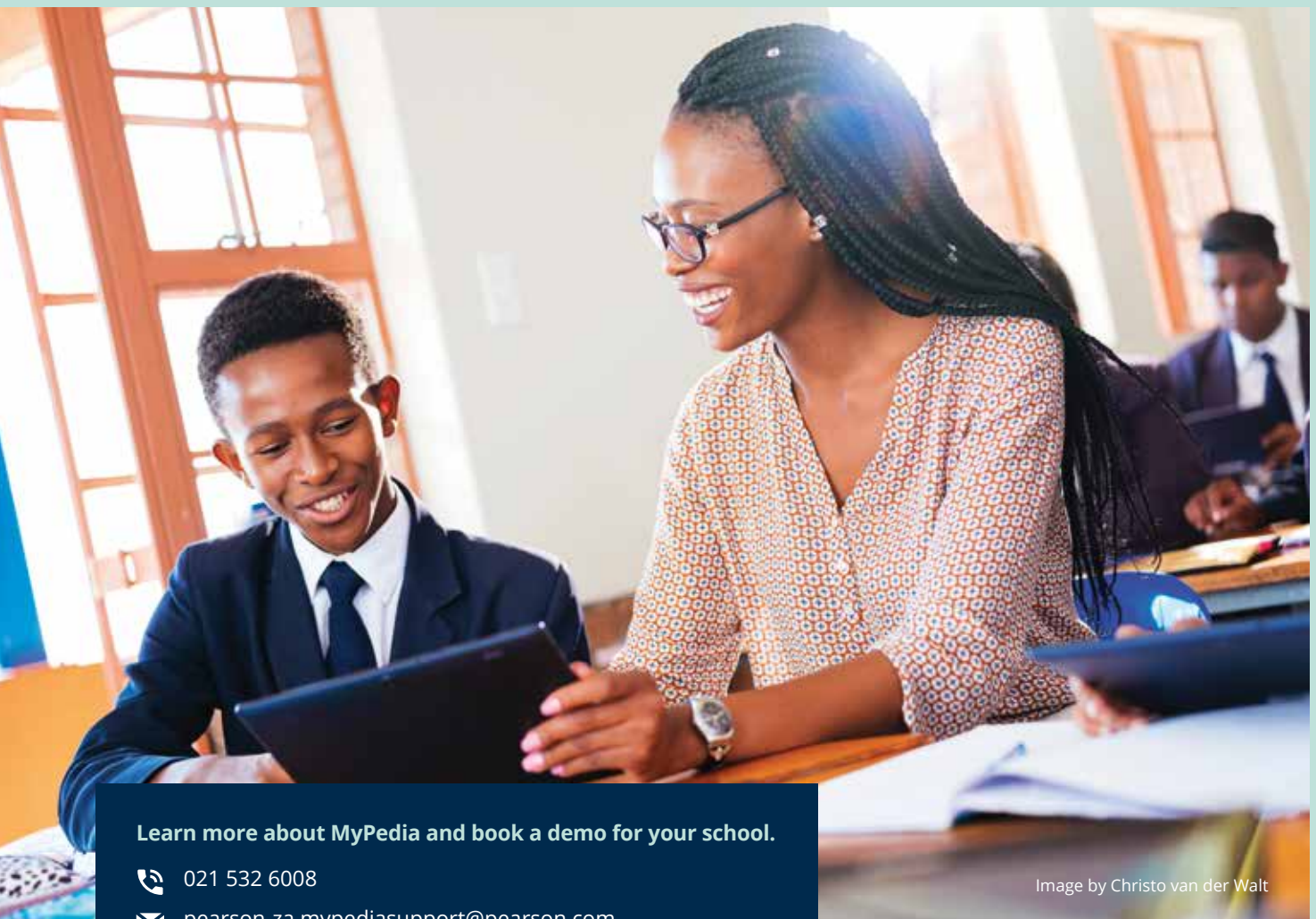
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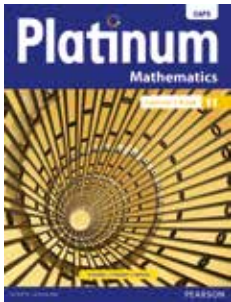
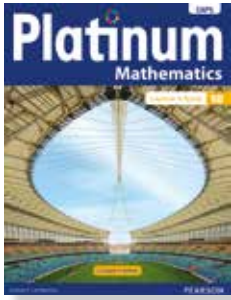
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Image by Christo van der Walt



# Mathematics



# Platinum Mathematics



- Content divided into topics and units provides comprehensive curriculum coverage.
- Accessible language written on an appropriate level ensures understanding.
- Summaries support the consolidation of Mathematics knowledge.
- Examination practice papers provide opportunities for exam revision and assessment.
- Comprehensive memoranda allow learners to check their revision and exam answers.
- Worked examples and solutions present learners with clear, visual learning support.
- Remember boxes and margin notes remind learners of concepts they need to apply.
- Colour diagrams support the learning of Mathematics concepts.

Difficult and new words are defined to build learners' vocabulary

Exercises focus on key Mathematics content to enable learners to master different skills

Margin notes provide additional information to enhance understanding

6

## Functions: Trigonometric graphs

**KEY WORDS**

**period** – the number of complete cycles of a wave pattern or cycle

**amplitude** – half the total distance between the maximum and minimum values

- always positive
- maximum (constant)

**Unit 1: Revision of trigonometric graphs using point-by-point plotting**

The three basic trigonometric graphs are:

- $y = \sin x$ ,  $y = \cos x$  and  $y = \tan x$

Trigonometric graphs covered in Grade 11 include:

- $y = a \sin kx + p$ ,  $y = a \cos kx + p$  and  $y = a \tan kx + p$

Use algebraic point-by-point plotting by substituting  $x$ -values into an equation to find the  $y$ -values.

Use the table function on your calculator to generate the table of points which you need to plot. (There are detailed calculator instructions in Unit 5 of this book.)

**WORKED EXAMPLE**

Use a calculator to complete the table for  $y = \sin 4x$ .

$x$	$0$	$15^\circ$	$30^\circ$	$45^\circ$	$60^\circ$	$75^\circ$	$90^\circ$
$y = \sin 4x$	0	0,342	0,691	1,000	0,951	0,707	0

When plotting Table 1, you will have to work out the values in table using special triangles.

The range is  $y \in [-1; 1]$ .

Sketch the graph of  $y = \sin x$  by plotting the points from the table above the period of the graph.

Give the amplitude of the graph.

Describe how the graph  $y = \sin x$  must be shifted to become  $y = \cos x$ .

**SOLUTIONS**

$x$	$0$	$15^\circ$	$30^\circ$	$45^\circ$	$60^\circ$	$75^\circ$	$90^\circ$
$y = \sin 4x$	0	0,342	0,691	1,000	0,951	0,707	0

**EXERCISE 1**

1.1 Copy the table provided for the worked example and complete it for  $y = \sin 6x$ .

1.2 Give the range of  $y$ .

1.3 Sketch the graph of  $y = \sin x$  by plotting its points from the table.

1.4 Give the period of the graph.

1.5 Give the amplitude of the graph.

1.6 Describe the shift required for the graph  $y = \cos x$  to become  $y = \sin x$ .

2.1 Copy the table below and complete it for  $y = \sin x$ .

$x$	$0^\circ$	$15^\circ$	$30^\circ$	$45^\circ$	$60^\circ$	$75^\circ$	$90^\circ$
$\sin x$	0	0,2598	0,5000	0,7071	0,8660	0,9659	1,0000

2.2 For which values of  $x$  is  $\sin x$  undefined?

2.3  $x = \tan^{-1} a$  is undefined at  $a = \pm 90^\circ$ , which is one of the vertical asymptotes of the tan graph. Note the equations of these other vertical asymptotes of  $y = \tan x$  for  $x \in (-360^\circ; 360^\circ)$ .

2.4 Sketch  $y = \tan x$  for  $x \in (-360^\circ; 360^\circ)$ , indicating the asymptotes with the usual arrowheads.

2.5 Make the range and the amplitude of  $y = \tan x$ .

2.6 Give the period of  $y = \tan x$ .

**REMEMBER**

An asymptote is a line which cannot be crossed or crossed by the graph so what it is an asymptote.

118 Topic 6: Functions: Trigonometric graphs

Unit 1: Revision of trigonometric graphs using point-by-point plotting 119

Platinum Mathematics Grade 11 Learner's Book

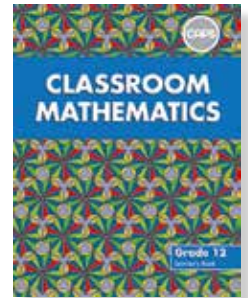
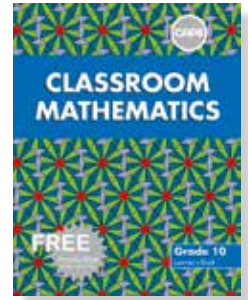
Platinum Mathematics is the **ONLY** CAPS Maths course that has been approved for all grades.



Classroom Mathematics



- Terms and weeks listed at the bottom of each page allow for easy planning.
- *Extend your skills* features allow learners to practise problem-solving skills.
- A wide range of activities allows learners to master different skills.
- Learner's Book includes a **FREE** Practice Book



Clear, step-by-step explanations enhance understanding

Additional information in *Notes* features supports learning

Worked examples and solutions explain difficult concepts

**The value of a derivative at a point**

To calculate the value of the derivative of  $f(x)$  at a specific point where  $x = a$ , either find  $f'(a)$  as above and then calculate  $f'(a)$  (substitute  $a$  for  $x$  in  $f'(x)$ ), or calculate  $\lim_{h \rightarrow 0} \frac{f(a+h) - f(a)}{h}$  directly.

**Example 1**  
If  $f(x) = 3x^2$ , find  $f'(2)$  using the definition of derivative.

**Solution**

<p><b>Method 1</b></p> $f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$ $= \lim_{h \rightarrow 0} \frac{3(x+h)^2 - 3x^2}{h}$ $= \lim_{h \rightarrow 0} \frac{3(x^2 + 2xh + h^2) - 3x^2}{h}$ $= \lim_{h \rightarrow 0} \frac{6xh + 3h^2}{h}$ $= \lim_{h \rightarrow 0} (6x + 3h)$ $= 6x + 3(0)$ $= 6x$ $\therefore f'(2) = 6 \times 2$ $= 12$	<p><b>Method 2</b></p> $f'(x) = \lim_{h \rightarrow 0} \frac{f(x+h) - f(x)}{h}$ $= \lim_{h \rightarrow 0} \frac{3(x+h)^2 - 3x^2}{h}$ $= \lim_{h \rightarrow 0} \frac{3x^2 + 6xh + 3h^2 - 3x^2}{h}$ $= \lim_{h \rightarrow 0} \frac{6xh + 3h^2}{h}$ $= \lim_{h \rightarrow 0} (6x + 3h)$ $= 6x + 3(0)$ $= 6x$ $\therefore f'(2) = 6 \times 2$ $= 12$
--	---

*Note: Method 1 is more algebraic than the one given in the solution.*

**Exercise 6.5**

1. Find the derivatives of the functions at the indicated points using the definition of derivative:

- $f(x) = 2x - 3$  at  $x = -2$ ,  $x = 0$  and  $x = 4$
- $g(x) = -3x^2$  at  $x = -3$ ,  $x = 0$  and  $x = 3$
- $p(x) = 5$  at  $x = -6$ ,  $x = 2$  and  $x = 3$
- $r(t) = t^2 - 3$  at  $t = -1$ ,  $t = 0$  and  $t = 2$
- $s(t) = 2t - 5t^2$  at  $t = 0$ ,  $t = 1$  and  $t = 2$
- $u(t) = 3t - t^2$  at  $t = -1$ ,  $t = 0$  and  $t = 1$

**Alternative notations**

- If  $f$  is a function of  $x$ , then instead of writing  $f'(x)$  for the derivative of  $f$  with respect to  $x$ , we could use the Leibnitz notation  $\frac{d}{dx}f(x)$  or  $\frac{df(x)}{dx}$  or  $\frac{dy}{dx}$  where  $y = f(x)$ .
- The  $\frac{d}{dx}$  or  $f'(x)$  indicates that the derivative is with respect to the variable  $x$ . So, if we have  $f(t) = t^2 - 3t$  (say), then we would write  $\frac{d}{dt}f(t)$  or  $\frac{df(t)}{dt}$  for the derivative which is now with respect to  $t$ .
- The notation  $D_x$  (the differential operator) is also used to denote a derivative. For example, from the previous exercise,  $D_x(3x^2) = 6x$  and  $D_x(2t - 7) = 2 - 2t'$ .
- $\frac{dy}{dx}$  is often written simply as  $y'$  when there is no chance of confusion. For example if  $y = -3x^2$  then  $y' = -6x$ .

We shall use all of the notations.

**Standard forms and rules for differentiation**

Instead of always using limits to find derivatives (which can be tedious), we can use rules that enable us to differentiate certain functions by inspection.

- The derivative of a constant is zero.  
If  $f(x) = k$ , a constant, then  $f'(x) = 0$ .
- The derivative of  $x^n$  is  $nx^{n-1}$  where  $n$  is a constant.  
If  $y = x^n$ , a constant, then  $\frac{dy}{dx} = nx^{n-1}$ .

**Example 1**  
Write down the derivatives with respect to  $x$  of the functions of  $x$ :

- $4$
- $-3$
- $0$

**Solution**

- $\frac{d}{dx} 4 = 0$
- $\frac{d}{dx} (-3) = 0$
- $\frac{d}{dx} 0 = 0$



## Platinum Mathematical Literacy



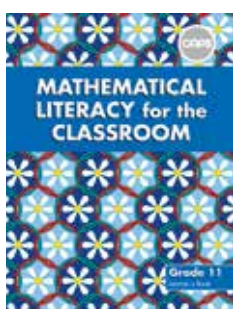
- Chapters and units structure the content into manageable lengths according to CAPS.
  - Worked examples and solutions explain difficult concepts, while a variety of exercises enable learners to master different skills.
  - Revision activities at the end of each chapter strengthen and consolidate learners' knowledge.
  - Visual support helps with understanding and stimulates learners' interest.
- 



## Spot On Mathematical Literacy



- A clear and predictable content structure enhances conceptual understanding.
  - Step-by-step guidance with detailed explanations and worked examples with solutions are provided to explain difficult concepts.
  - Activities are structured to develop the required skills.
  - *Notes* features provide additional information to assist in the learning process.
- 



## Mathematical Literacy for the Classroom

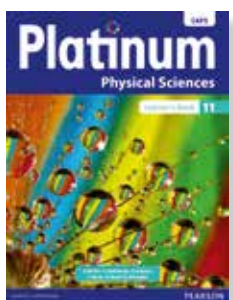


- The content is presented using clear and logical explanations.
- The Learner's Book includes plenty of worked examples and solutions to explain difficult concepts.
- Plenty of exercises that are structured to develop Mathematical Literacy skills are included.
- The Teacher's Guide includes a **FREE** Poster Pack.





# Sciences



# Platinum Physical Sciences



- Content divided into topics and units provides comprehensive curriculum coverage.
- Clear, step-by-step explanations build learners' confidence.
- Concise summaries at the end of each topic make revising easy.
- A glossary helps learners with new terms.
- Relevant case studies allow learners to apply Physical Sciences knowledge in real-life situations.
- Activities provide opportunities for consolidation and practice.
- Clear, labelled diagrams and illustrations support the learning process.

Detailed illustrations improve learners' understanding

Practical demonstrations facilitate understanding of concepts

Did you know? features provide interesting facts to support the text

## 12 Physical and Chemical Change

### Unit 1: Separation of particles in physical change and chemical change

**KEY WORDS**

**physical change** - rearrangement of particles without changing the gaps between them

**intermolecular forces** - the attractive forces between molecules

**chemical change** - transformation of one or more substances into one or more different substances

**macroscopic** - large enough to be seen by the naked eye

These increased vibrations act against the intermolecular forces of attraction and the molecules rearrange to the ice hexagonal structure. When the temperature of the solid starts to increase and the crystal ice structure breaks down and changes state from solid to liquid.

The energy changes involved in physical changes are small compared to those required for chemical changes. Only a small amount of energy is needed for ice molecules to vibrate enough to overcome the weak intermolecular forces of attraction between them and move far enough away from each other to change to a liquid state. More energy is needed for liquid molecules to vibrate enough to become separate molecules of water vapour. This is shown in Figure 12.2.

**Figure 12.1** Expansion of water

**Figure 12.2** The arrangement of water molecules in (a) ice, (b) liquid water, (c) water vapour

**Did you know?**

The energy released during a chemical reaction called combustion, is used to power most vehicles. A typical 1000 cc petrol engine has to run on liquid petrol (gasoline) instead of petrol gas (around 17% reduction in CO<sub>2</sub> emission, without seriously affecting performance). The first gas-fueled motor car launched in Cape Town by the South African government's company, Pekaer Afrika Gas.

**Practical Demonstration 5: DEMONSTRATION AND OBSERVATION OF THE MELTING OF ICE AND THE BOILING OF WATER**

Safety glasses should be worn when carrying out and observing the demonstration.

**Materials**

- 4 Bunsen burner, tripod, wire gauze, glass beaker, etc.

**Method**

1. Wash a 200 ml beaker with a glass beaker with ice and fill it about one-quarter full and then place it on a wire gauze on a tripod over the Bunsen burner, as shown in Figure 12.3.
2. Observe the macroscopic changes that you see. Discuss in your group what you think is happening to the water molecules.

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Chapter 12: Physical and Chemical Change 187

Platinum Physical Sciences Grade 10 Learner's Book

# Platinum

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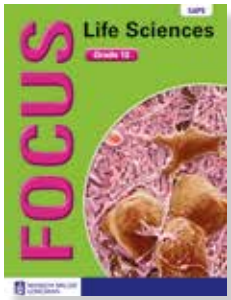
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- Content presented in a term-by-term structure ensures careful progression of learning.
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- Step-by-step guidance with detailed explanations enhance understanding.
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- Keyword features and a glossary help learners build their vocabulary.
- Detailed artwork stimulates interest and provides visual support for the learning process.

Key questions maintain focused learning

Clear, labelled illustrations and diagrams enhance understanding

Fact boxes provide extra information to make concepts clearer

### Unit 5: Blood vessels

**Unit 5: Key question**  
What is the difference between arteries, veins and capillaries?

**Key words**  
**Artery** – A blood vessel carrying blood from the heart to the tissues.  
**Endothelium** – Layer of epithelium lining the blood vessels.  
**Pulse** – The contraction and relaxation of arteries each time the heart beats.  
**Capillary** – A tiny blood vessel that links arterioles to venules.  
**Vein** – A blood vessel carrying blood from the tissues to the heart.

In a closed circulatory system, blood is carried around the body inside tubes called blood vessels. Blood vessels are named according to their structure, size and whether they are carrying blood away from or towards the heart. There are three types of blood vessels: arteries, veins and capillaries.

#### 5.1 Arteries

Arteries carry blood away from the heart.

The walls of an artery consist of three layers: an outer fibrous layer, a middle layer made of elastic and muscular tissue, and an inner layer called the **endothelium**. The endothelium is a thin layer of flattened epithelial cells.

The lumen, or inner cavity, of the artery is relatively small. The blood flows through the artery under high pressure. As the heart beats, the blood is forced into the artery, causing the elastic, muscular wall to stretch and bulge. The bulging of the artery is what we feel as a **pulse**. Most arteries carry oxygenated blood, with the exception of the pulmonary artery.

**Figure 7.13** Cross section through an artery

#### 5.2 Capillaries

Capillaries are microscopically small. The walls of a capillary consist of a single layer of endothelium. Capillaries form a network that branches between the cells of the body. Capillaries are so narrow that blood cells squeeze along them in single file. This slows down the rate of blood flow, allowing time for the exchange of substances between the blood and the surrounding tissue cells. Substances move across the walls of the capillaries. Oxygen and nutrients move from the blood into the cells. Carbon dioxide and waste products move from the body cells into the blood. White blood cells are able to squeeze out of the capillaries to destroy germs.

**Figure 7.14** Cross section through a capillary

**Fact box**

- If you took all of the blood vessels out of an average child and laid them out in one line, the line would be about 100 000 km long.
- Besides circulating blood, the blood vessels provide two important means of measuring vital health statistics: pulse and blood pressure.

#### 5.3 Veins

Veins carry blood to the heart. The walls of a vein consist of three layers: an outer fibrous layer, a middle layer made of elastic and muscular tissue, and an inner endothelium. The lumen, or inner cavity, of a vein is large. The blood flows through veins under low pressure. Valves are found inside veins to prevent the backflow of blood. Most veins carry deoxygenated blood, except for the pulmonary vein.

**Figure 7.15** Cross section through a vein

The different types of blood vessels are linked to the heart to form a circulatory system. Figure 7.16 shows that, during blood circulation, blood leaves the heart in arteries. The arteries divide to form **arterioles** and eventually tiny capillaries, which are found in the tissues of organs. The capillaries rejoin to form **venules** as they leave the tissues. The venules combine to form veins, which return blood to the heart.

**Figure 7.16** Simple layout of blood vessels

**Key words**  
**Arteriole** – A branch of an artery.  
**Venule** – A branch of a vein.

**Activity 6: Compare types of blood vessels**

Specific Aim 1: 1.1, 1.2, 1.3; Specific Aim 2: 2.3

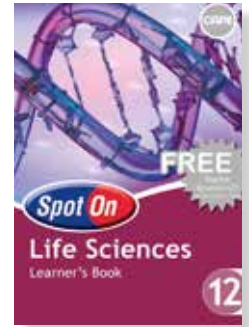
Work on your own.

The micrograph in Figures 7.17 shows a cross section through an artery, vein and capillary. Look at it carefully and do the following:

1. Draw a table to compare arteries, capillaries and veins.
2. Draw and label a scientific diagram showing a cross-section through an artery, a vein and a capillary. Use the micrograph and the illustrations to help you.

**Figure 7.17** Cross section of an artery and vein with adipose tissue, a specialised type of connective tissue

# Spot On Life Sciences



- Content breakdowns into terms and weeks according to CAPS make planning easy.
- Varied activities test learners' knowledge and their ability to apply new skills.
- Keywords feature help learners to understand new terms.
- Full-colour illustrations and photographs enhance learners' understanding.

Simple explanations make content easy to understand

Extension activities provide enrichment

Activities are structured to develop the required skills

**Term 2 Weeks 5-8** Receptors

### Unit 7 Sensory receptors

All sense organs are modified to detect stimuli from both the internal and external environment. Sensory receptors can be relatively basic in structure - like those found in the skin - or they can be part of complex sense organs, such as the eye or ear. Each sense organ is specifically suited to receive certain environmental stimuli.

Receptors detect a variety of stimuli, such as light, sound, touch, temperature, pressure, pain and chemicals. When receiving stimuli from the outside environment, receptors are used. These are sensory receptors in the body that react to stimuli from outside the body.

Interoceptors are sensory receptors that react to changes within the body. Some examples of such internal changes are pH (the degree of acidity or alkalinity) of a solution or the amount of salt in a cell and the concentration of glucose and oxygen in the blood. These receptors work to maintain a constant internal environment for the body. In this module, you will learn about the eye and the ear. You will learn about touch to illustrate it when the skin is discussed.

Form of sensory stimulus	Sense organ	Receptor	Signal in Body
Sound	Ear	Hair cells in cochlea	Nerve impulses
Light	Eye	Rod and cone cells	Nerve impulses
Pressure	Skin	Touch-sensitive nerve endings	Nerve impulses
Temperature	Skin	Heat-sensitive nerve endings	Nerve impulses
Pain	Skin	Pain-sensitive nerve endings	Nerve impulses
Chemicals	Receptors for specific chemicals		Nerve impulses

**Figure 6.26:** Receptors are sense organs that detect different kinds of stimuli from the environment.

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**Term 2 Weeks 5-8** Receptors

### Activity 7.1 Observe sensory receptors of animals

20 minutes

Study the pictures of the different animals. Read the list of animal sensory receptors and then match them to one or more of the animals in the pictures shown.

- Antennae covered with sensory hairs that are sensitive to the sex pheromones of the female (1)
- Eyes have a special reflective layer in the retina to help seeing in dim light (2)
- Enlarged ear flaps that gather and direct sound towards their super sensitive eardrums (2)
- Sends out high-frequency sound pulses to detect objects produced by prey (2)
- Body that is sensitive to vibration, which makes it possible to sense other animals approaching (2)
- Large eyes adapted for nocturnal vision; pupils contract so as to be almost invisible (2)
- Spinal cord lined with sensory cells to detect the smell of blood in water (2)
- A specialised tongue that "smells" the air to detect any changes which may indicate the presence of prey at the vicinity (2)

**Total: 16 marks**

**Figure 6.27:** These animals have specialised sensory receptors. (Clockwise from top left: Purplish loach, Bush baby, bat, animal fox)

**Extension**

Choose an animal (either one mentioned in Activity 7.1 or any other animal) and find out how their senses are structurally adapted to make them efficient hunters or to help them avoid predators. Make a poster to show your findings.

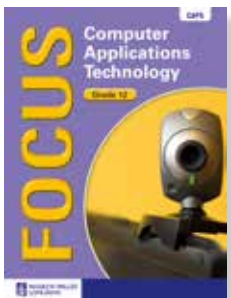
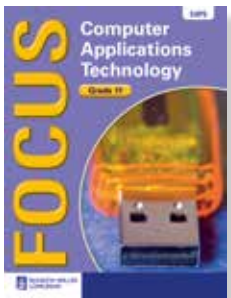
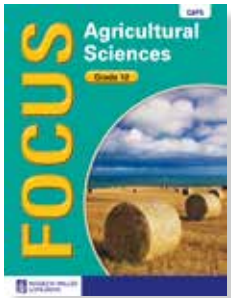
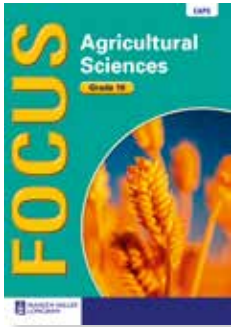
**Keywords**

**pheromone:** a substance secreted by an organism into the external environment that influences the behaviour of other members of the same species.

**retina:** a layer at the back of the eyeball containing cells that are sensitive to light.

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Spot On Life Sciences Grade 12 Learner's Book



## Focus Agricultural Sciences



- Each topic starts with a clear summary of what will be covered in the chapter.
- A summary at the end of each chapter recaps the key concepts taught and can be used as a quick revision guide.
- Practice questions enable learners to test themselves on the content that has been covered and build confidence with exam-style questions.
- The relevant assessments tasks are built in throughout the course at the correct time in the term.

## Focus Computer Applications Sciences



- Content is presented using clear and logical explanations.
- There are many varied activities with lots of opportunities for assessments.
- Includes screenshots and helpful tip boxes for easy learning.
- A useful index, a glossary and language support boxes help learners to understand content.
- **FREE** learner's CD included.

**Activity 14 Create a simple electronic form**

There is a requirement for a survey on the Junior Dance that is featured in the newsletter you have been working on. Assume that all the Grade 8 and 9 learners in your school have access to e-mail at school so that you can create an electronic survey form to ask them their opinion on several items.

Enter Item Name	Grade 8	Grade 9
Bring own food	<input type="checkbox"/>	<input type="checkbox"/>
Bring own food	<input type="checkbox"/>	<input type="checkbox"/>
Bring own food	<input type="checkbox"/>	<input type="checkbox"/>
Bring own food	<input type="checkbox"/>	<input type="checkbox"/>

1. Create a new template file.
2. Insert a table that has 4 columns and 4 rows. Type the text shown here in the first and third columns. Fill these cells with medium-grey shading. Make the text bold where shown.
3. Insert a Drop-down List Content Control for the each of the grade and class choices as shown in the example. Allow the learner to choose 8 or 9 for the grade and A to F for the classes. Change the instruction text as shown in the example.
4. Insert a Tick Box Content Control for the theme option as well as the two DJ options as shown in the example. Note that the tick boxes must display a tick mark when selected and a cross when not.
5. Insert a Rich Text Content Control for the field where you can enter a theme. Change the instruction text as shown in the example.
6. Insert a Combo Box control for the food choices. Change the instruction text as shown in the example. Allow the following options:  
Include in ticket price  
Buy at dance  
Bring own food
7. Insert a Date Picker Content Control so that the learner is able to select the date on which they complete the survey. Change the instruction text as shown in the example and change the date format to 12 March 2013.
8. Ensure that none of the controls in this form can be deleted.
9. Protect this form template so that only the fields can be edited. Use the password A3yG2.
10. Save this template as Ch\_2\_M\_Ans.docx. Complete a copy of this survey with your answers and save the completed form as Ch\_2\_M\_Completed Form.Ans.


**Unit 5 Templates and Help**

**5.1 Use templates**


In Grade 10 you learnt how to use some basic templates such as letters, faxes and reports that are provided with Microsoft Word. Remember that a template provides a pre-set document layout including a theme and interactive fields. Microsoft Word 2010 has many templates, many of them only available online. These templates are well worth exploring because they provide you with the guidelines to create professional looking documents and can save you a great deal of time.

**HOW TO: USE A TEMPLATE**

**Step 1:** To start, you click on the File button and select the New option.



**Step 2:** You can choose from the templates that have been installed on your computer or from the wider range available from Microsoft Office Online. You will need an Internet connection to use the online templates. Downloaded templates appear in the My Templates folder. To use templates installed on your computer, you click on the Sample Templates icon.



**Step 3:** You then choose whether to open the template as a document or another template, and click on the Create button to open it.

**Step 4:** You fill in the fields as prompted by the template. Once they've all been filled in, the document will become a normal document that you then save as your own.

**Unit 5 Key questions**

- Which useful templates can be used in the work environment?
- How can I get help when I don't have Internet access?
- What are my options for getting help when I do have Internet access?

**Hints and Tips**

When you save a Microsoft Word 2010 template as an earlier document version with a .doc extension, the automated functions in the fields disappear.

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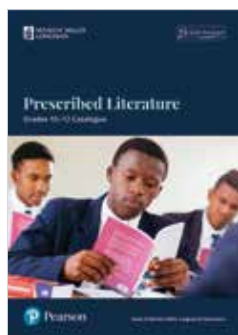
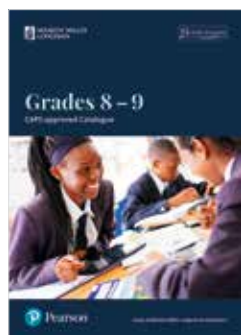
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