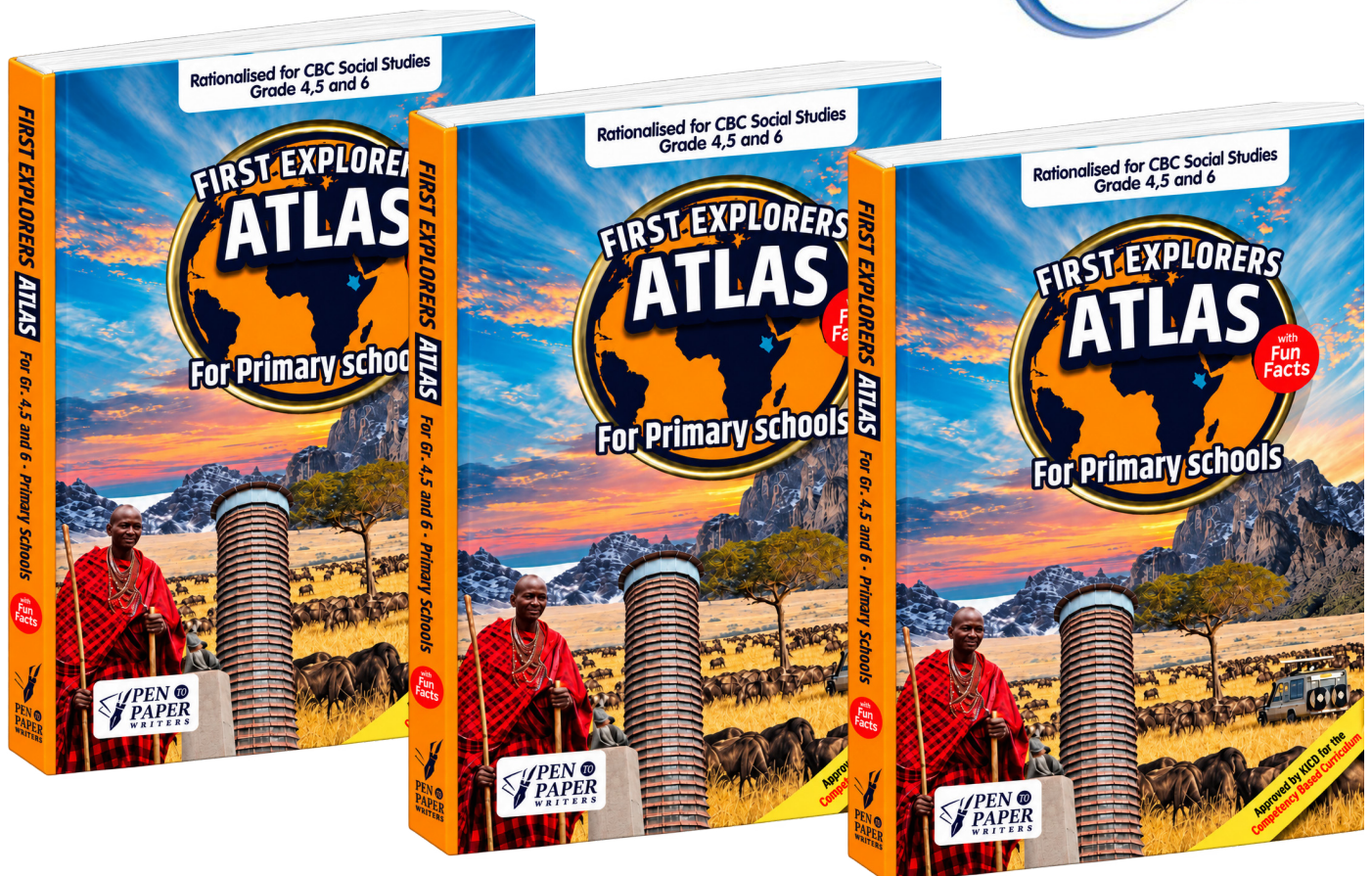


FIRST EXPLORERS ATLAS

FOR GRADE 4, 5 & 6

With Fun Facts

APPROVED BY THE KENYA INSTITUTE OF
CURRICULUM DEVELOPMENT



@ 1200.00 SHILLINGS

EXCL VAT

About us

Pen to Paper Writers Ltd. is a multidisciplinary publisher. We offer publishing, academic support, creative design and digital services. Our commitment is to empower learners, teachers, authors, institutions and entrepreneurs through personalised, high-quality learning materials.

Mission, vision & Mantra

Mission statement

Pen to Paper Writers Ltd exists to inspire, educate and empower individuals and institutions by providing professional writing, research, editing and publishing services. We are committed to nurturing talent, promoting literacy and delivering impactful content that meets the highest standards of integrity and creativity.

Vision statement

To become the global leading platform for transformative storytelling, educational excellence and creative empowerment through high-quality, accessible and innovative publishing solutions.

Mantra

Transforming the world through imagination.

Our services

Publishing and editing

- ✓ Book and article editing and publishing
- ✓ Video and text editing.

Writing

- ✓ Research and scientific writing.
- ✓ E-book writing.

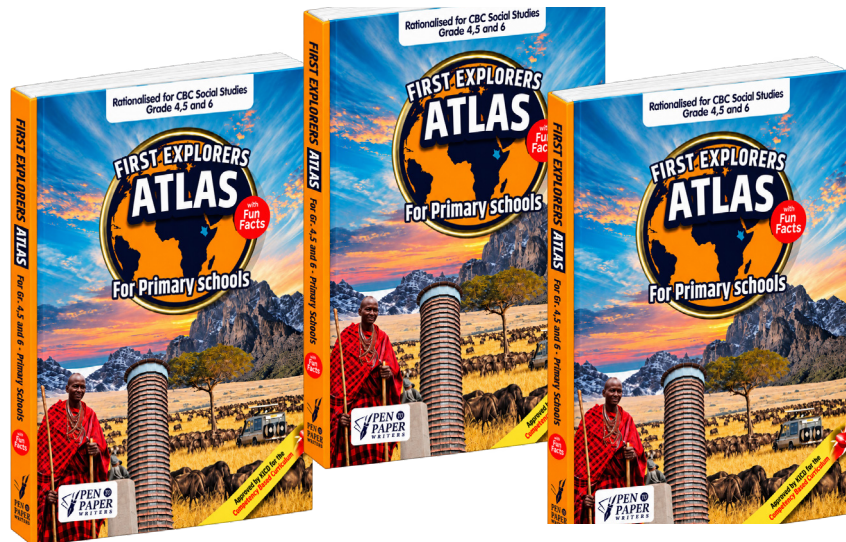
App and Web development

- ✓ Website and mobile application development.

Graphic design and printing

- ✓ Brand and book design.
- ✓ Book, Flyer and t-shirt printing.

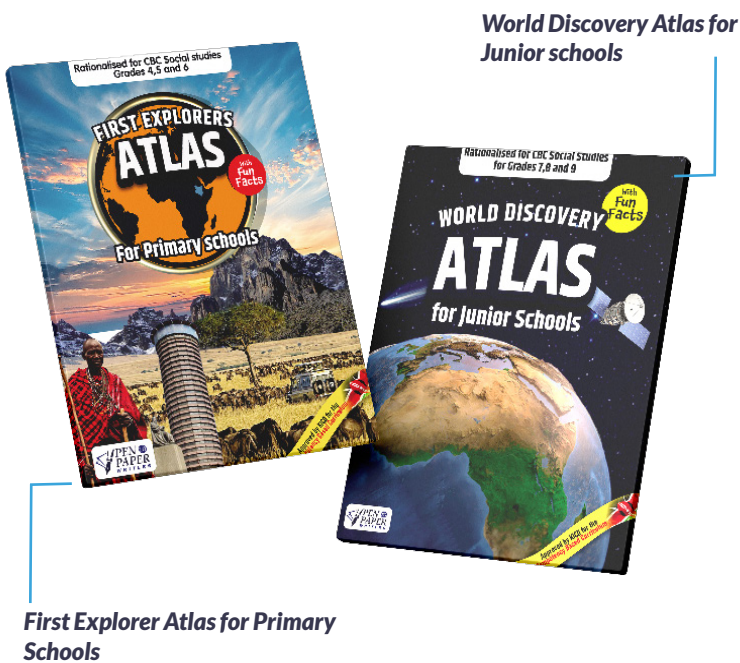
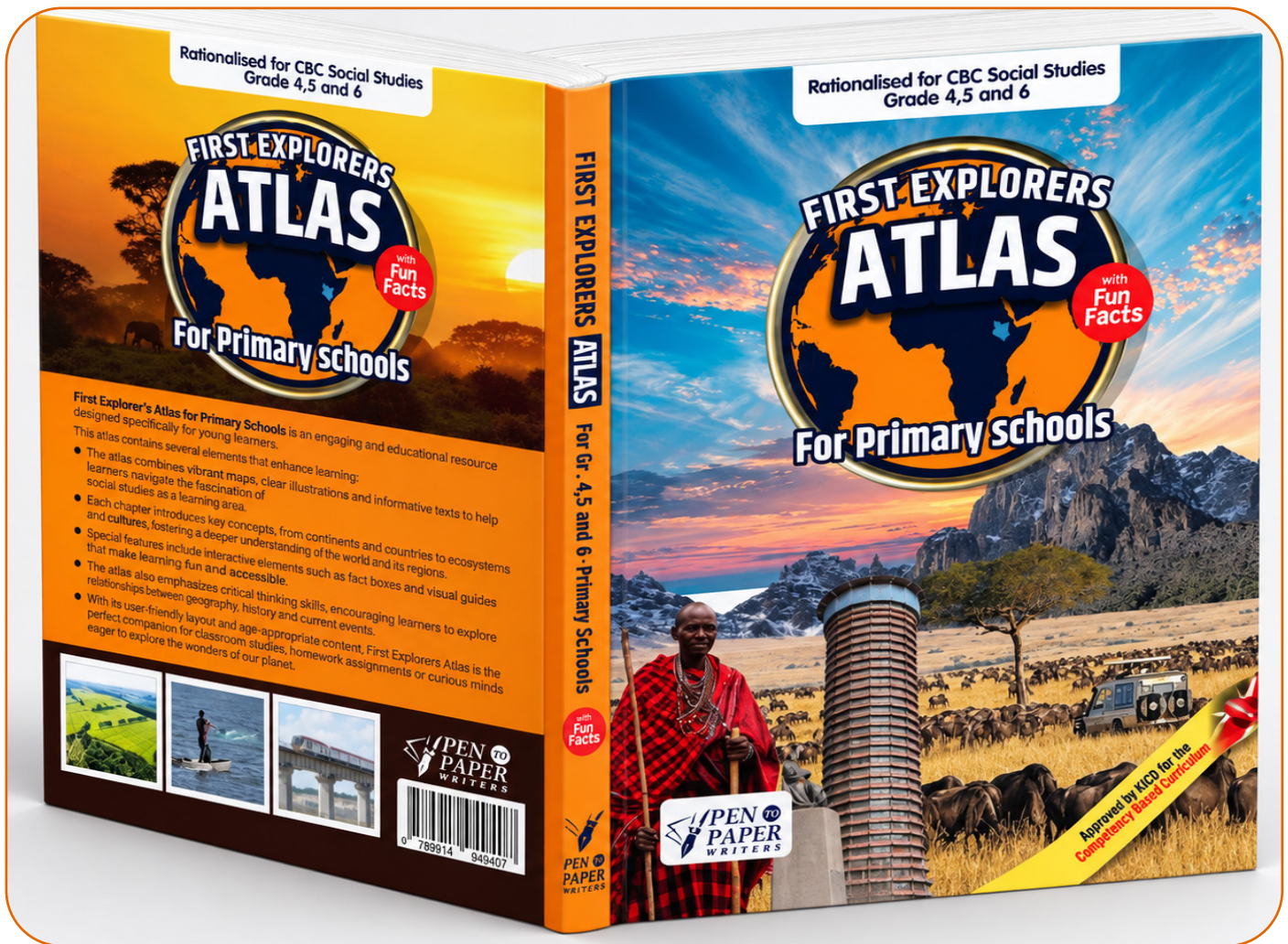
Latest release



Pen to Paper Publishers has developed the **First Explorers Atlas** for **Primary Schools** as a practical reference resource for learners in Grades 4, 5 and 6. The atlas has been carefully structured to align with the Social Studies curriculum designs and to support learners as they develop essential mapping, geographical and spatial skills. The Grade 4–6 Social Studies curriculum requires learners to work with maps and atlases in several areas. These include compass direction, elements of a map, location and position of places, population distribution, physical features, weather and climate, resources and economic activities, transport and communication, as well as the location, position and size of Kenya and countries in Eastern Africa.

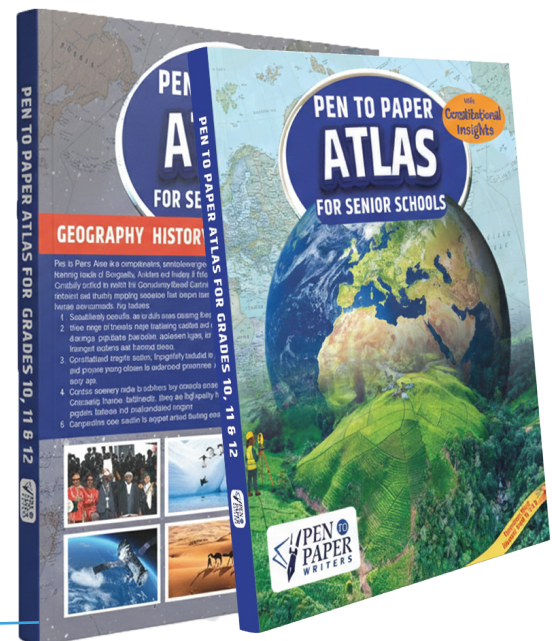
For example, the Grade 5 curriculum specifically includes *Elements of a Map, Location, Position and Size of Kenya and Main Physical Features in Kenya*, while Grade 6 requires learners to use atlases and maps to *locate countries in Eastern Africa using position, latitude and longitude and to identify major physical features*. The First Explorers Atlas brings these learning experiences together through clear, colourful and age-appropriate maps, illustrations and geographical information.

Designed with the needs of upper-primary learners and teachers in mind, the atlas provides a reliable resource for classroom activities, assignments, research, projects, revision and independent learning. Through accessible presentation, carefully selected content and engaging **Fun Facts**, the First Explorers Atlas seeks to make map work enjoyable while building the geographical understanding and curiosity learners need as they progress to Junior School.



First Explorer Atlas for Primary Schools

World Discovery Atlas for Junior schools



Pen to Paper Atlas for Senior School

PICTURE AND PLAN: Our classroom

A Picture

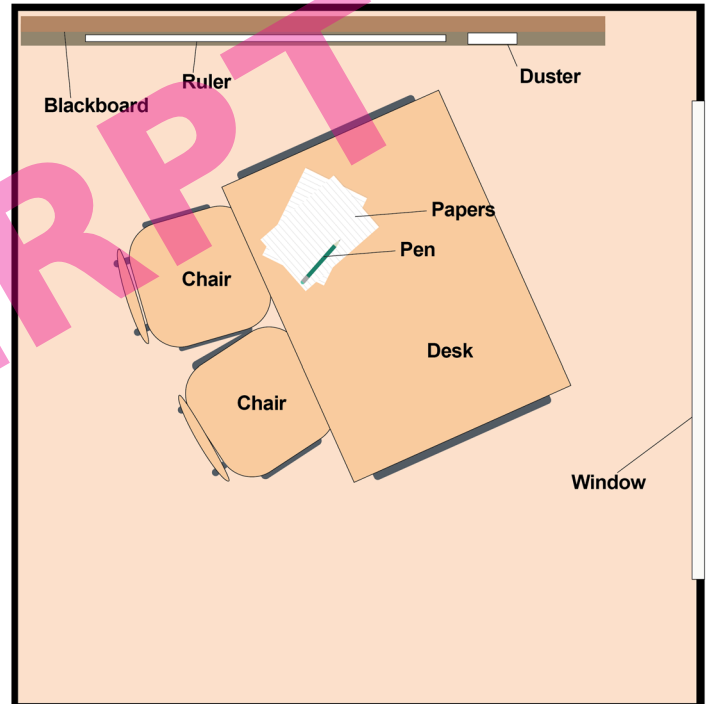
A picture is a representation of real life objects in three dimensions: length, width and height, with all features appearing as if they were real. The image below shows most features being visible and clear.



Picture of a desk in a classroom.

A Plan

A plan is a 2 dimensional (2D) representation of an object, focusing on its length and width. It is used to depict the object's appearance when viewed directly from above, as seen in the example provided below.

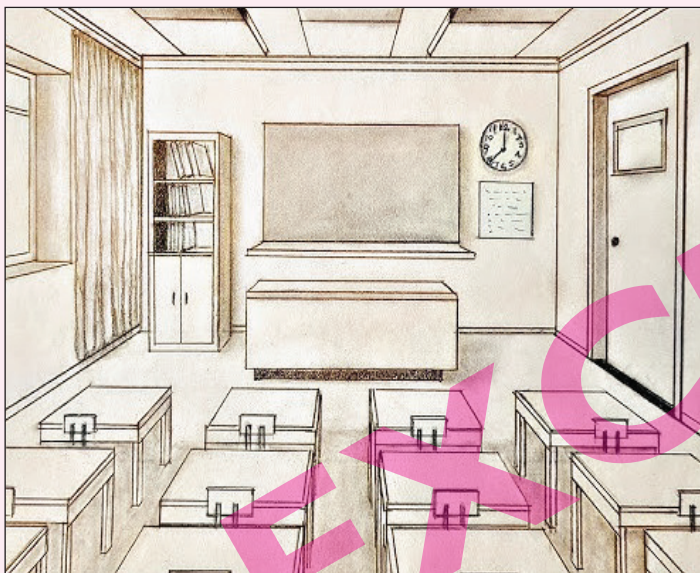


Plan of a desk in a classroom.

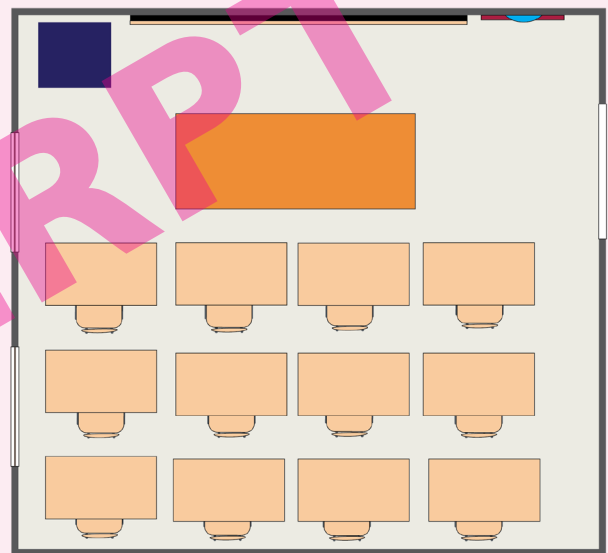


Drawing a plan of our classroom

Some pictures represent large areas and have more features which may not be seen clearly in the plan. For example, in the classroom, there are a lot of objects. We use symbols to help us understand and interpret the plan of a detailed picture. The symbols are usually explained in a key. Take a look at the classroom picture, its plan and the key shown below.



Picture of a classroom.



Plan of a classroom.

KEY



Teacher's desk



Classroom cupboard



Blackboard



Wall clock



Notice board



Learner's desk



Learner's chair



Window



Door



Wall



Do it yourself

You can use a digital device, like a smartphone, to take a picture of your classroom and later draw a plan. Make sure to also draw a key with symbols to help in interpreting the plan.

WEATHER MEASURING INSTRUMENTS

1

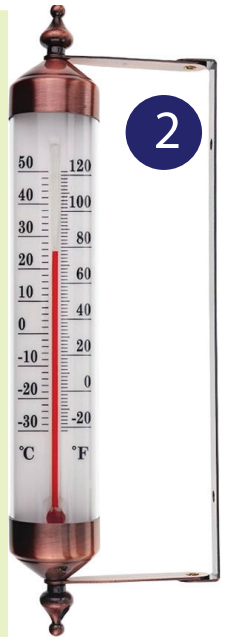
1. Barometer

A barometer is a weather instrument used to measure **atmospheric pressure**. The atmosphere is the layers of air wrapped around Earth. Air has a weight and presses against everything it touches as gravity pulls it to Earth. Barometres measure this pressure. An **atmosphere (atm)** is a unit of measurement in a barometer. The atmospheric pressure of a place drops as its altitude increases.



2. Thermometer

A weather thermometer is an instrument used to measure the air temperature and to measure the highs and lows of the day. Many countries including Kenya read thermometers in units called **degree centigrade** or **degrees celcius (°C)** while other countries use units called **Fahrenheit (°F)**.



2

3. Campbell Stokes Recorder

3

This is an instrument for recording hours of sunshine per day, consisting of a solid glass sphere that focuses rays of sunlight onto a **light-sensitive card** on which a line is burnt.



4. Raingauge

A **raingauge** is an equipment used by meteorologists and hydrologists to gather and measure the amount of rainfall in an area, over a period of time. There are many types of rain gauges which includes manual/ordinary type and also sensor based automatic weather stations. Rainfall is measured in **millimetres (mm)**.



6

6. The Stevenson Screen

This enclosure protects meteorological instruments like **thermometers**, **hygrometers** and **barometers** from weather and sun, allowing air to circulate freely around them.



7. Anemometer

An anemometer is an instrument that measures **wind speed**. This type of anemometer has a spinning wheel. The stronger the wind blows, the faster the wheel rotates. The anemometer counts the number of rotations, which is used to calculate wind speed.

5. Windsack

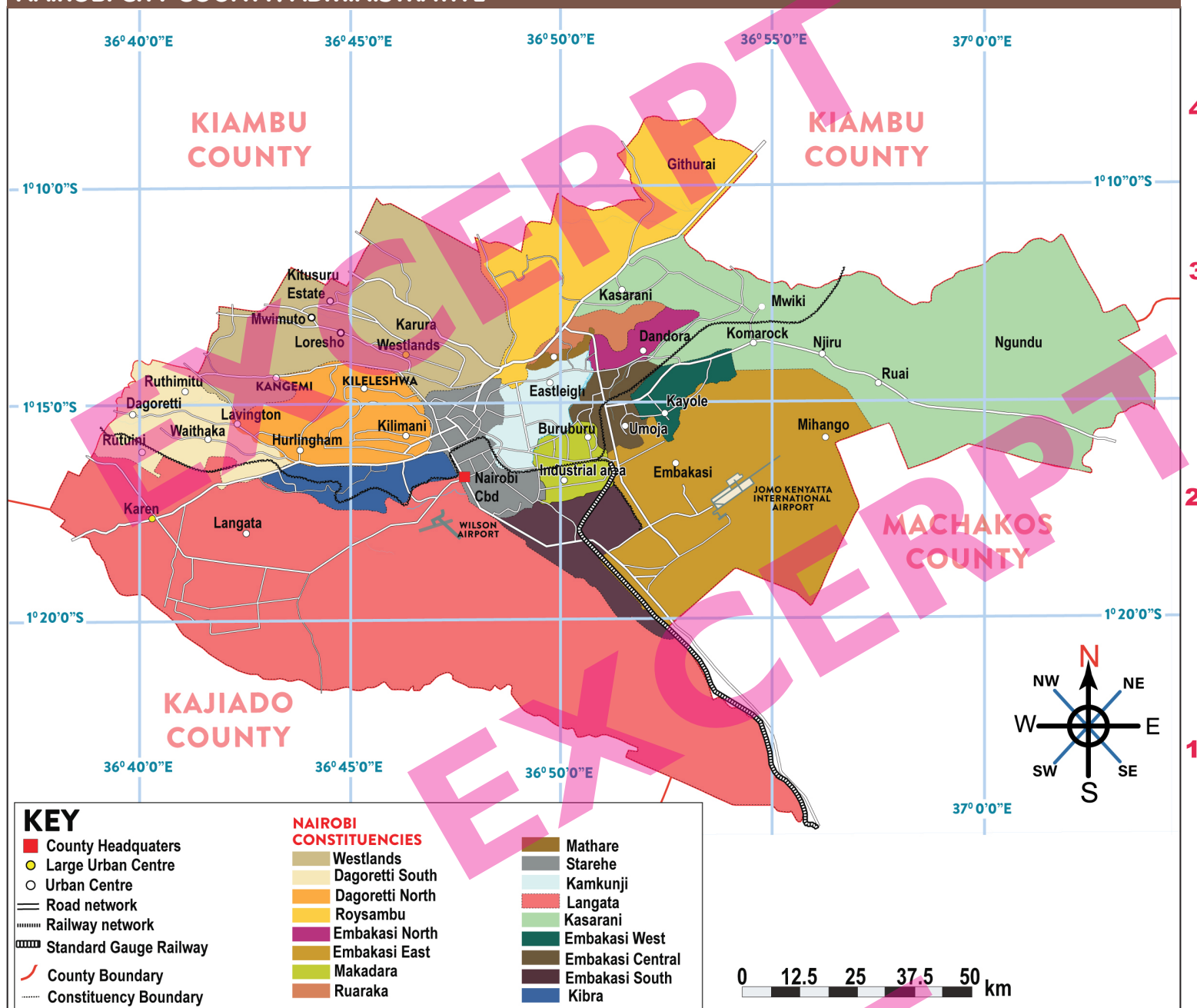
A windsack or wind cone, is a conical textile tube that resembles a giant sock. Windsacks can be used as a basic guide to **wind direction and speed**. At many airports, windsacks are lit at night, either by floodlights on top surrounding it or with one mounted on the pole shining inside it.



NAIROBI CITY COUNTY (047)



NAIROBI CITY COUNTY: ADMINISTRATIVE



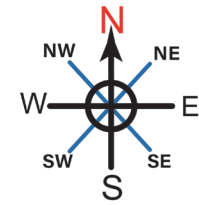
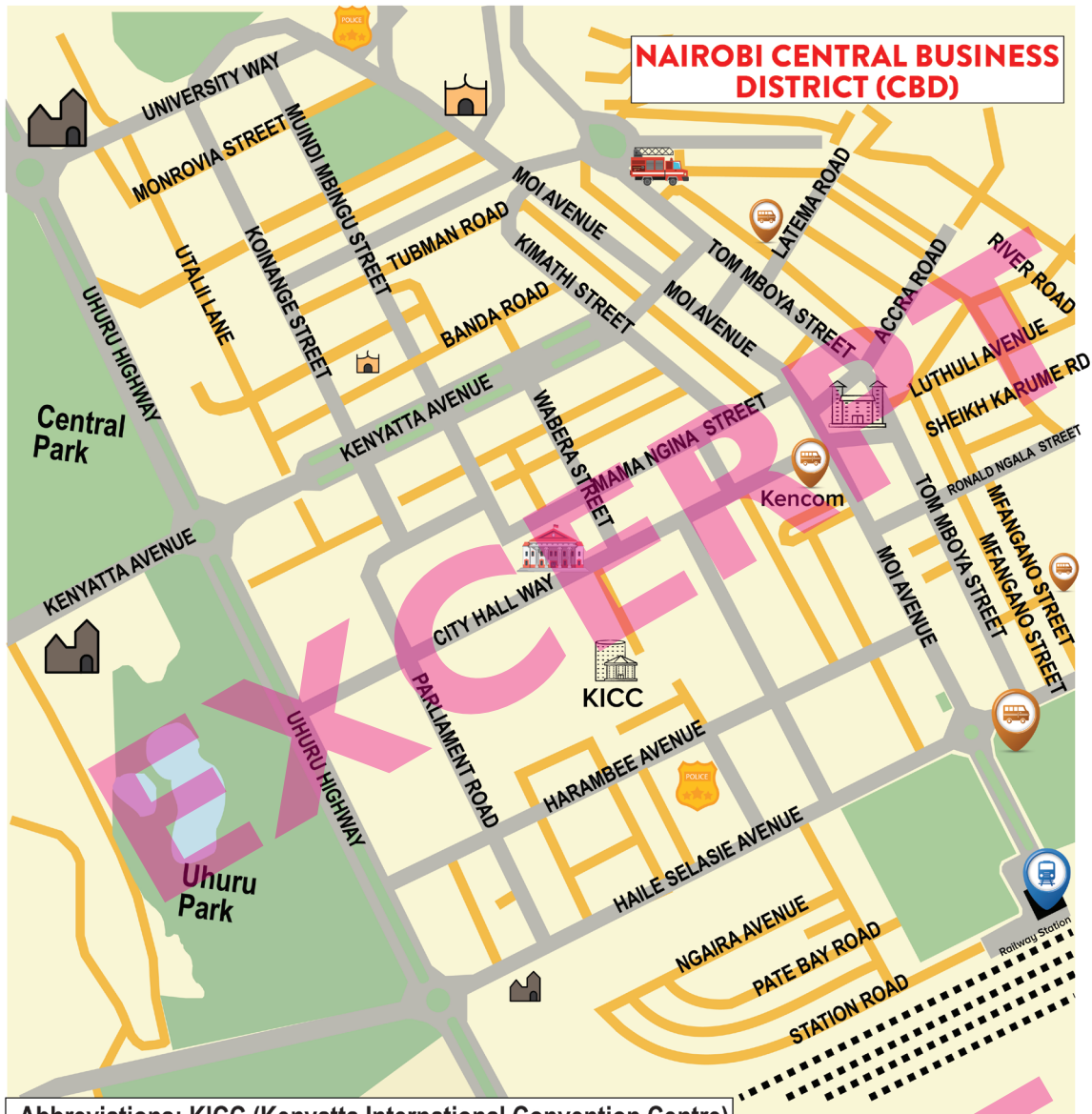
County	HQ	Area (km ²)	Total Population	Population density (People/Km ²)
Nairobi County	Nairobi City	694.9	4,397,073	6,328

Population data (2019 Population Census)

Subcounty	Sex			Total
	Male	Female	Intersex	
Dagoretti	217,651	216,526	31	434,208
Embakasi	492,476	496,270	62	988,808
Kamukunji	136,670	131,599	7	268,276
Kasarani	381,234	399,385	37	780,656
Kibra	94,199	91,569	9	185,777
Langata	96,698	100,774	17	197,489
Makadara	96,369	93,157	10	189,536
Mathare	106,522	100,028	14	206,564
Njiru	307,642	318,809	31	626,482
Starehe	109,173	101,238	12	210,423
Westlands	153,818	155,021	15	308,854
Total	2,192,452	2,204,376	245	4,397,073

Economic Activities

- Wildlife and Tourism:** Nairobi National Park, Nairobi National Museum, Bomas of Kenya, Karen Blixen Museum, Nairobi Animal Orphanage and Safari Walk as well as The Giraffe Centre.
- Industries:** Food processing, light engineering, vehicle assembly, leather tanning and steel works.
- Trade:** Nairobi is regarded as East Africa's economic powerhouse due to its central location in the country. It has access to key infrastructures such as the Standard Gauge Railway, Uganda-Kenya Railway, The Jomo Kenyatta International Airport, Thika Superhighway, The Nairobi Express Way, The Transnational Highway and The Kampala-Nairobi-Mombasa Highway. Most of Kenya's imported and exported goods pass through these key infrastructures.



KEY

-  Major road
-  Minor road
-  Railway network
-  Bus parks and station
-  Railway station
-  Archives and libraries
-  Firestation
-  Police station
-  Church or Temple
-  Mosque
-  Water park
-  Park, Memorial or Garden
-  City Hall
-  KICC

0 500 1000 m

Abbreviations: KICC (Kenyatta International Convention Centre)

Nairobi City

Nairobi is the capital and largest city in Kenya. Nairobi got its name from the Maasai phrase "Enkare Nairobi," meaning "cool water." The city was established in 1899 as a rail depot, connected to the Uganda-Kenya Railway.

Nairobi is where the Kenyan Parliament Buildings are located. As an economic powerhouse of East Africa, the city hosts many multinational companies and is home to many Kenyan businesses and important international organisations, like the United Nations Environment Programme (UNEP) and the United Nations Office Nairobi (UNON).



City Hall.



The Parliament Buildings



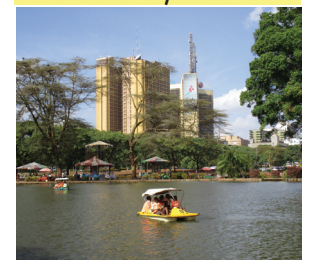
The Supreme Court of Kenya.



Kenya National Archives.



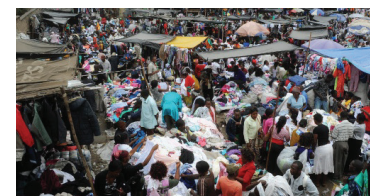
The KICC Building.



Uhuru Park.



Machakos Country Bus Station.



Gikomba Market.



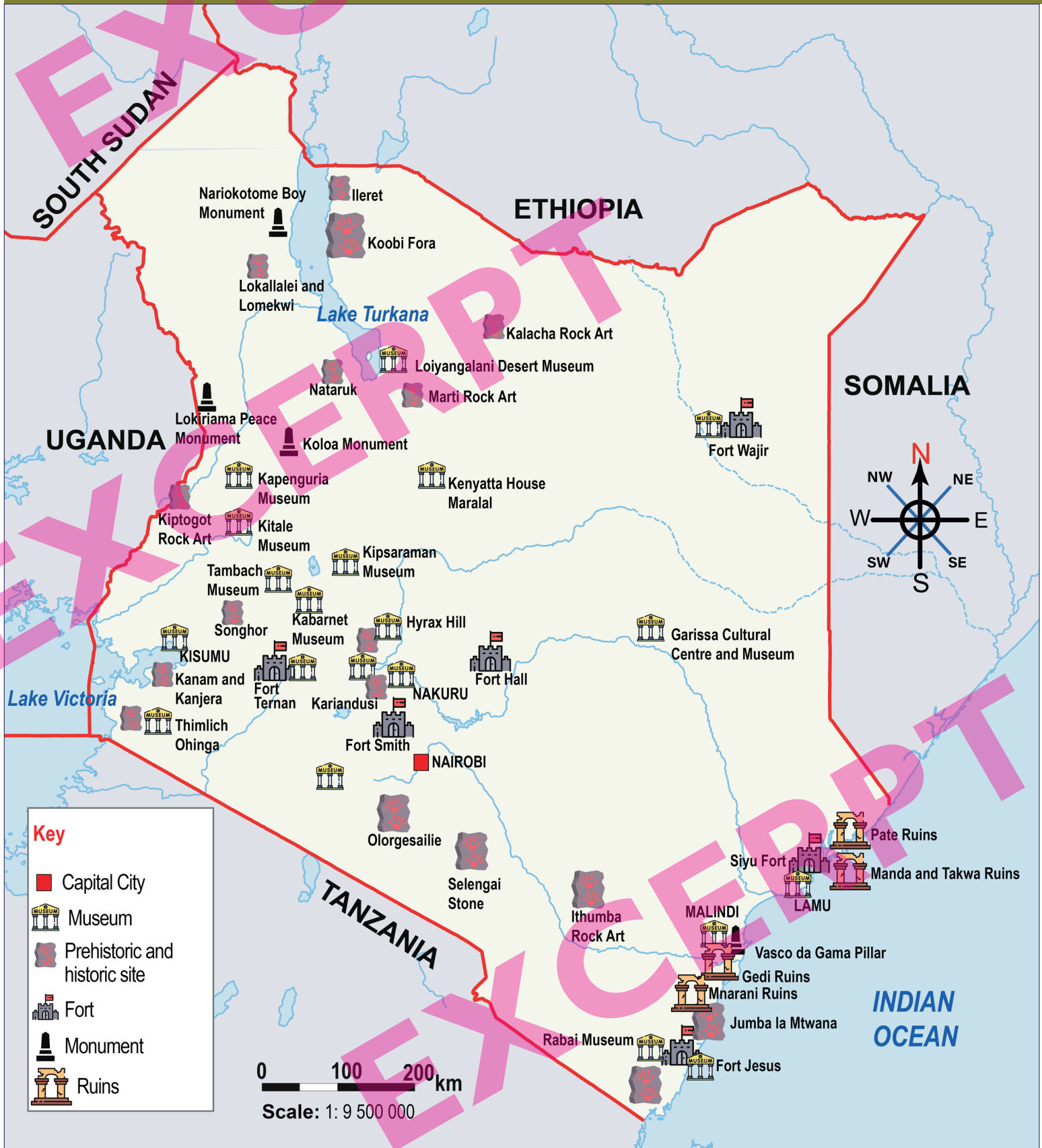
Nairobi Central Railway Station.

KENYA: Historic Built Environments and Pre-historic sites

Kenya's historic built environments include historic towns like Lamu and Gede, known for their Islamic and coastal architecture. Fort Jesus in Mombasa, built in the 16th century by the Portuguese, is a significant example of military architecture. Ancient ruins, such as Thimlich Ohinga in western Kenya and the Gede Ruins on the coast, represent historic settlements of the people of Kenya.

Prehistoric sites, such as Olorgesailie and the Koobi Fora region near Lake Turkana, provide evidence of early human activity and tool-making.

Historic Built Environments and Pre-historic sites



1 KOOBI FORA:

Kenya's Largest Prehistoric site

Koobi Fora is one of the world's leading pre-historic sites for study of the evolution of humankind. It is located on the eastern shores of Lake Turkana in Turkana County and covers a land area of 150km².



The main entrance of Koobi Fora archeological site.



Artifacts and remains in Koobi Fora.

The Koobi Fora site was excavated by the Leakey family. It has proved to be the richest trove of hominid remains anywhere in the world, yielding fossils of three species of Homo (Homo habilis, Homo rudolfensis and Homo erectus) and four australopiths (Australopithecus anamensis, Paranthropus boisei, Paranthropus aethiopicus and Kenyanthropus platyops).

2 SAIWA SWAMP:

Home to the rare and endangered animal species.

The Saiwa swamp National Park, located near Kitale, in Trans-Nzoia County, is a forested area filled with exotic flowers, trees and birds. It is also the habitat of the rare and endangered semi-aquatic Sitatunga antelope and the rare Da Brazza monkey.



The semi aquatic Sitatunga antelope.



The endangered Da Brazza Monkey.

3 HELL'S KITCHEN:

The most odd landmark in Kenya



The rugged terrain and caves of Hells' Kitchen.

Tucked away deep in Malindi, Marafa Hells Kitchen is a beauty to marvel at. This place is called "Hell's kitchen" because temperatures there tend to rise as high as 40 degrees Celsius during the day.

4 KARURU FALLS:

Kenya's tallest waterfall



Karuru falls, Aberdare's National Park, Nyandarua County.

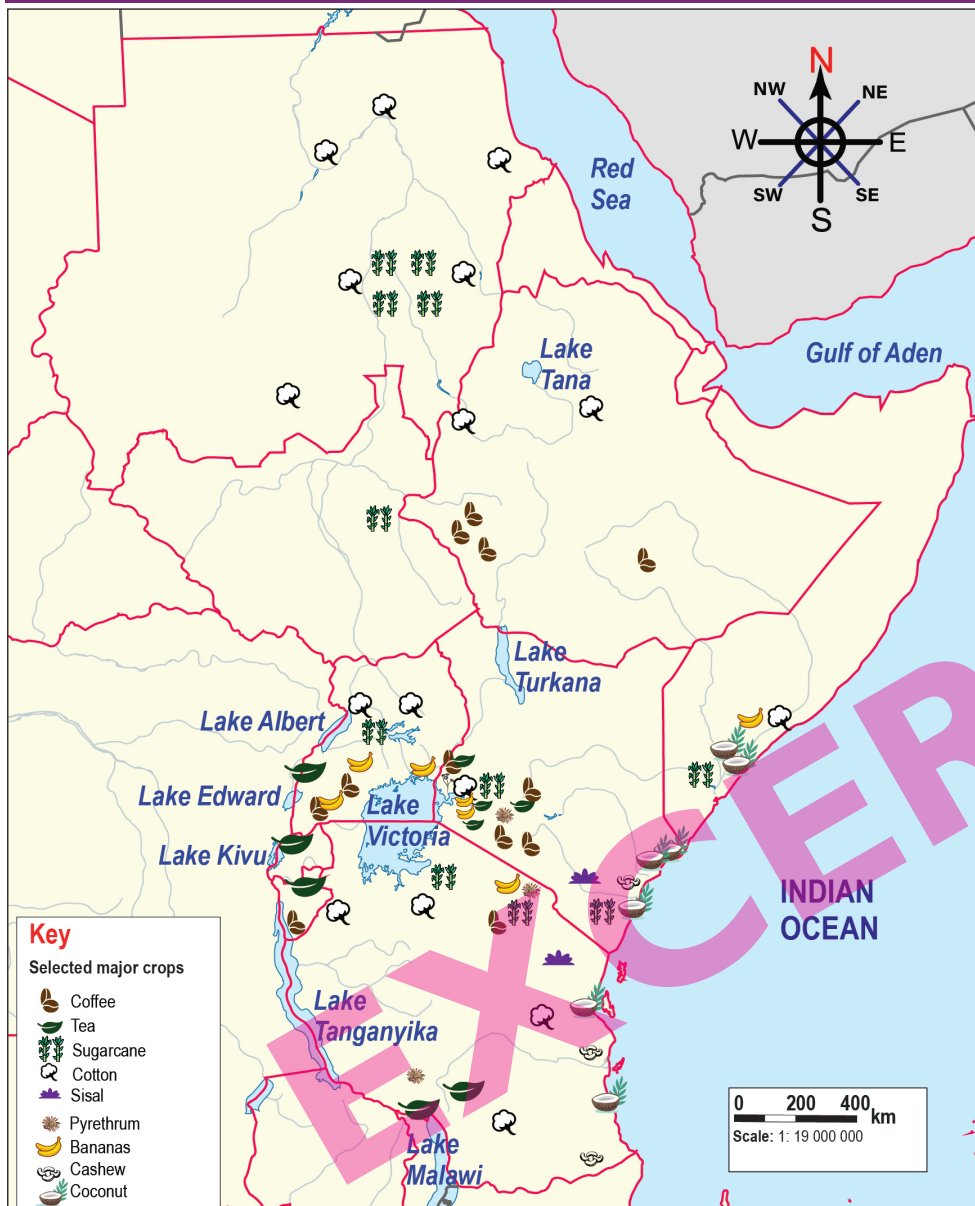
The Magnificent Karuru Falls is the tallest waterfall in Kenya. Karuru Falls in the Aberdares National Park, Nyandarua county plunges 273 metres below its viewing point. The Aberdare Range, where the falls are found, is a key ecological area with dense forests and abundant wildlife.

Important facts to remember

- 1 The most famous game reserve in the world: Maasai Mara National Reserve (Narok County).
- 2 The largest national park in Kenya: Tsavo East and Tsavo West combined (Taita Taveta County) – 22,812 km².
- 3 The most beautiful sand beach in Kenya: Diani beach (Kwale County).
- 4 Kenya's best scenic views: Lake Nakuru flamingos, Mt. Kenya peaks and The Great Rift Valley escarpments and many more.

EASTERN AFRICA: Agriculture

Major crops grown in Eastern Africa



Agriculture in Eastern Africa

Agriculture in Eastern Africa is mainly small-scale and heavily reliant on seasonal rainfall.

The main crops grown include maize, sorghum, millet, wheat, barley, coffee, tea, bananas and cassava. Additionally, cash crops such as coffee, sugarcane, tea and horticultural products are crucial for export markets.

Country	Major crops grown
Djibouti	Teff, sorghum, vegetables and fruits (limited).
Eritrea	Sorghum, barley, wheat and millet.
Ethiopia	Coffee, tea, maize, sorghum, barley and teff.
Kenya	Maize, tea, coffee and horticultural crops.
Rwanda	Beans, maize, potatoes, coffee and tea.
South Sudan	Sorghum, maize and millet.
Sudan	Sorghum, millet, sugarcane, wheat and cotton.
Tanzania	Maize, rice, coffee, tea, sisal and cashew nuts.
Uganda	Bananas, maize, coffee and beans.



A sugarcane farm in Sudan.



A banana farm in Uganda.



A coffee farm in Ethiopia.

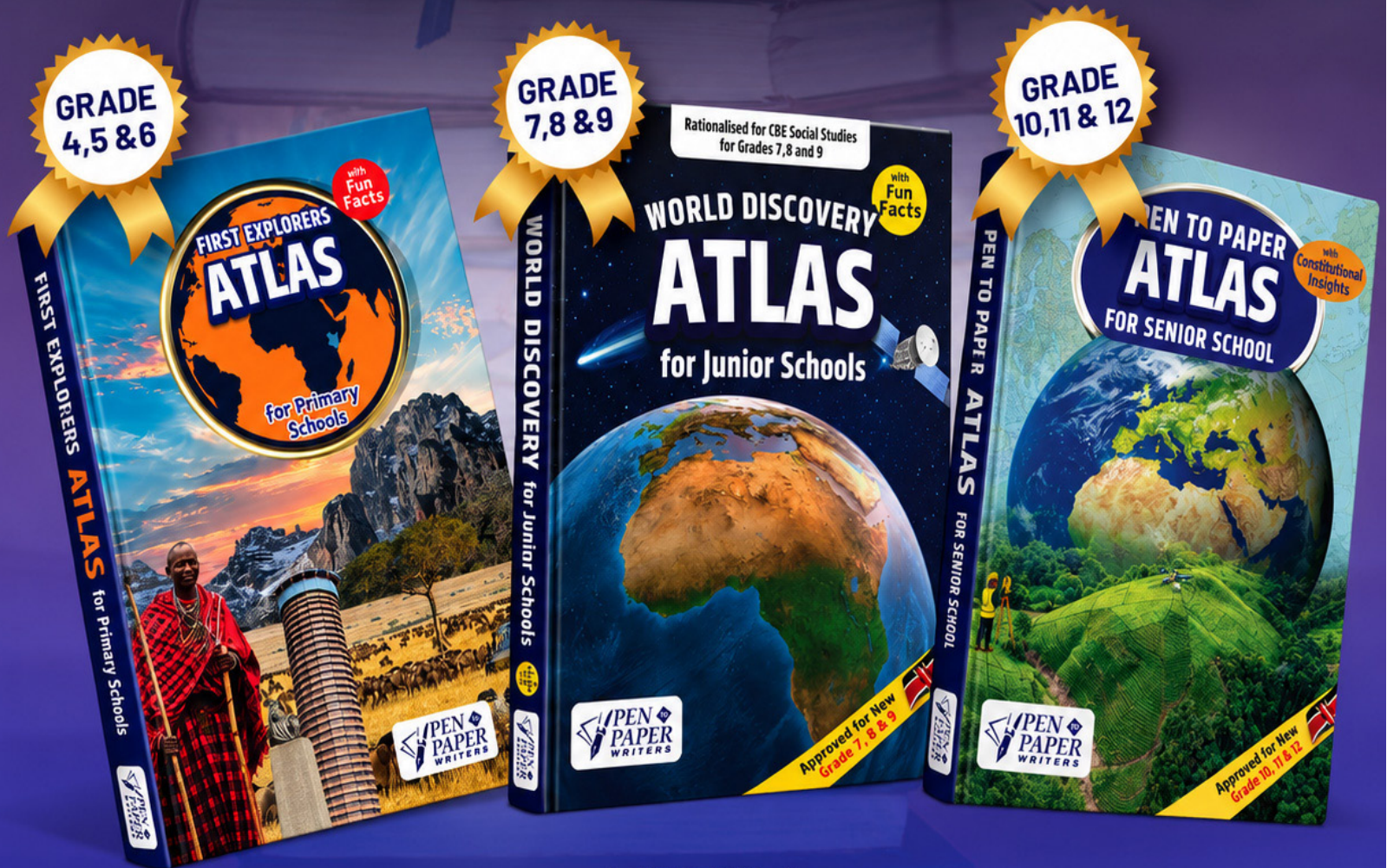
Flags of different african countries



Flags of major African trade blocs



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