



Social Studies Mining

Mining

Mining refers to the process of removing valuable minerals from the earth. These minerals can either be in solid or liquid form. Some of the minerals are found at, or near the ground surface, while others are found deep in the ground.

- Examples of minerals include gold, copper and petroleum.
- Most of the minerals in Kenya are found at or near the ground surface.

Minerals exist in three states namely

- Solid
- Liquid
- Gases

Distribution of Minerals in Kenya

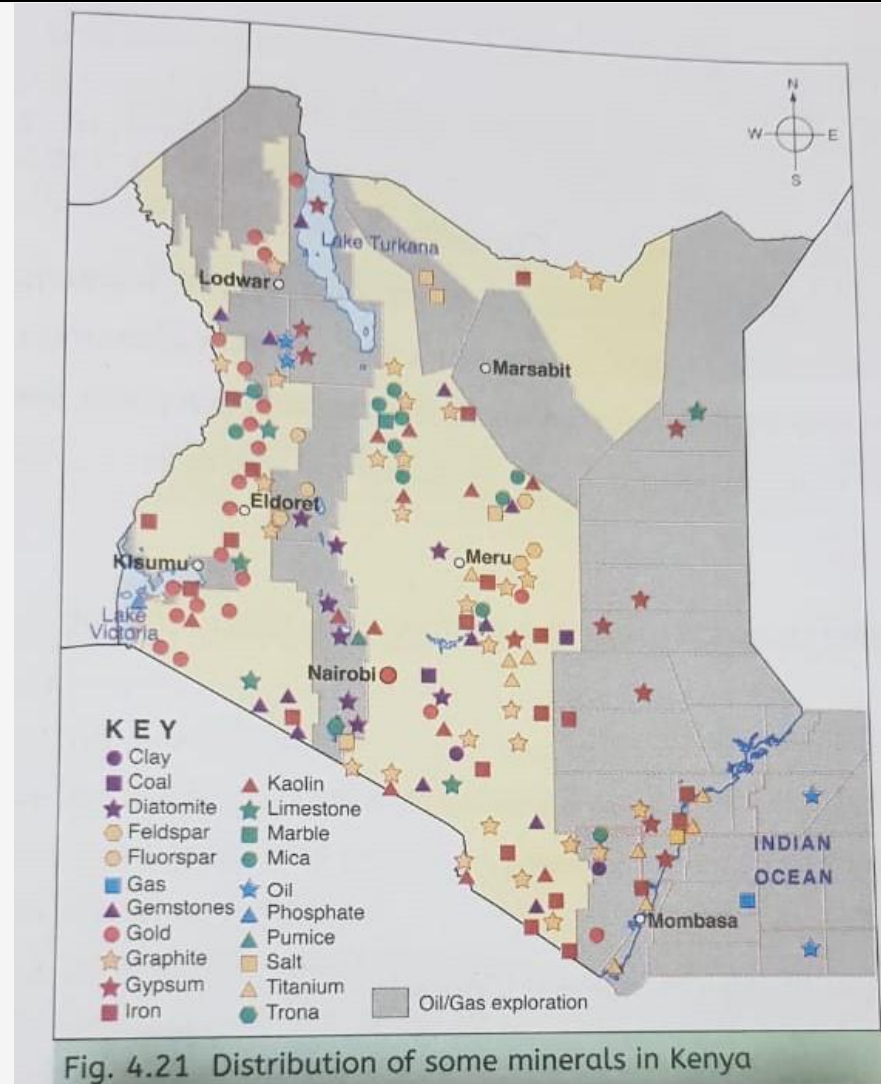
The main minerals found in Kenya are

- fluorspar,
- limestone,
- diatomite,
- gemstones,
- marble
- salt.

Others include

- soda ash,
- gold,
- petroleum,
- gypsum,
- soapstone,
- iron,
- graphite,
- titanium and sand.

Distribution of Minerals in Kenya



Fluorspar

Fluorspar is mainly mined at Kimwarer in the Kerio Valley, Elgeyo Marakwet County. It occurs in layers of rock.

Extraction

Opencast mining method is used to extract the rock using excavators. The mined rock is transported to a nearby factory where it is crushed into powder. The powder is then washed to remove impurities.

Uses

1. It is used in the iron and steel industry for strengthening steel.
2. It is used in the manufacture of cement.
3. Fluorspar is used in the production of toothpaste and sulphuric acid.
4. It is used to make cans for storing perfumes, insecticides and drinks.
5. It is used in the manufacture of non-stick cooking pots and pans.
6. It is used in making certain types of lenses for cameras and telescopes.

Fluorspar



Limestone

Limestone is mined in areas that have sedimentary rocks. The main mining areas in Kenya are:

- Bamburi in Mombasa County
- Athi River in Machakos County
- Sultan Hamud in Makueni County
- Homa Bay County
- Kerio Valley in Elgeyo Marakwet County
- Koru in Kisumu County
- Moroto in West Pokot County.

Extraction

Limestone rock is mined using opencast mining method. The rock is blasted, scooped and loaded onto huge trucks which transport it to the factory. In the factory, the rock is crushed into fine powder and then mixed with other substances, such as fluorspar, to make cement.

Uses

1. Limestone is used in the manufacture of cement, which is used in building and construction.
2. It is used in the manufacture of fertilizers and paint.
3. It is used in road construction.
4. Lime from the rock is used for water treatment.
5. It is also used in coating some building materials such as floor tiles. This is because it is resistant to heat and weathering.



Limestone



Diatomite

This is a chalk-like rock. It is formed from the remains of small organisms called diatoms that live in water. In Kenya, mining of diatomite is carried out at Kariandusi, near Gilgil in Nakuru County.

Extraction

The rock is mined using opencast mining method. Where the deposits lie a little deeper in the ground, shaft mining method is used. It is then transported to the factory where it is crushed into powder and packaged for use.

Uses

Diatomite is resistant to heat and water action.

1. It is used to make water filters.
2. It is used in the making of heat insulators for furnaces in factories.
3. It is used to make soap and paints.
4. It is used to preserve fertilizers.
5. Diatomite is used to dry-clean clothes.
6. It is used in pest control. It is used to kill insects such as cockroaches, ticks and termites.
7. It is used to clean up oil spills at home and in industries.

Diatomite



Kariadusi

Gemstone

Gemstones are also known as precious stones. They exist in small deposits in different parts of the country. The best known gemstones in Kenya are rubies, garnets and tourmalines, which are found near Voi and Mwatate in Taita-Taveta County.

Extraction

Gemstones are easy to identify because of their attractive colours. To extract gemstones, miners dig out the hard rock that bears them. The precious stones are then separated from ordinary rocks and washed with water. This is known as panning. The stones are then packaged.

Uses

1. Gemstones are used in making ornaments such as earrings, necklaces, rings and bangles.



Marble

Marble is a hard and smooth stone, It is usually white with dark lines the not regular in shape.

Extraction

Marble is dug from open pits. Explosives are sometimes used to remove the rock containing marble. The rock is then taken to a factory where it is cut, shock and polished, ready for sale. To polish is to rub something carefully in order make it smooth, bright and shiny.

Uses

1. Marble is used in buildings for decorative purposes and also for making statues.



Salt

Salt is mined on the surface of Lake Magadi in Kajiado County, and on the shores of the Indian Ocean in Kenya.

Extraction

The water in Lake Magadi is very salty. This water is pumped into ponds or evaporation pans. High temperatures in the area make the water evaporate, leaving behind salt crystals. The salt is placed in containers and taken to the factory. It is then cleaned, dried, crushed and packaged.

Along the Kenyan coast, salt is mined at Ngomeni near Malindi. The sea water, which contains salt, is pumped into evaporation ponds. After all the water has evaporated, salt crystals are left behind. These crystals are then processed.

Uses

1. Flavouring and preserving food
2. Preparation of soap, glass, chlorine and drugs in chemical industries
3. Flavouring animal feeds
4. Manufacturing of paper in paper industries

Salt

