## Unit 2

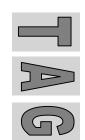
"Location / Geographical Positions"

# JEM/ENG Mesleki Yabancı Dil

(Professional English)

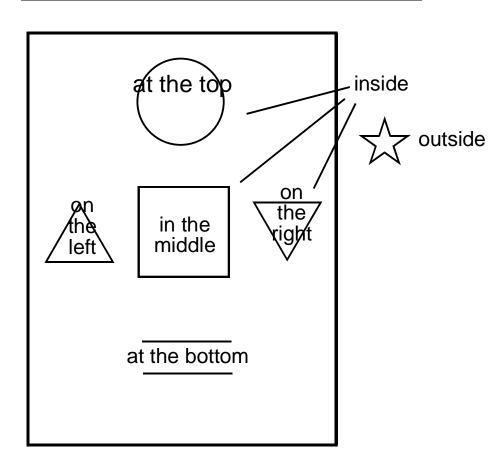
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Ankara Üviversitesi Mühendislik Fakültesi Jeoloji Mühendisliği Bölümü



#### **Location / Geographical Positions**

The words give the positions of the shapes in relation to the rectangle.



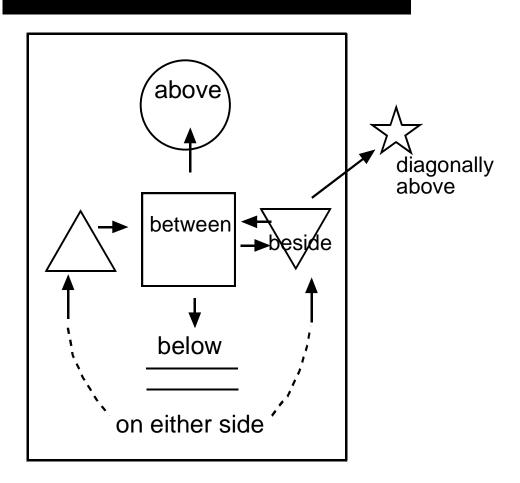
Make questions and answer like the following:

### Example:

What is there at the top of the rectangle?

There is a circle at the top of the rectangle.

The words give the positions of the shapes *in relation to the rectangle*.



Make questions and answer like the following:

Example:

Where is circle?

The circle is above the square.

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Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Copper	Zn
Scandium	Titanium	Vanadium	Chromium	Manganese	Iron	Cobalt	Nickel		Znc
Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd
Yttrium	Zirconium	Nobium	Molybdenum	Technetium	Ruthenium	Rhodium	Palladium	Silver	Cadmium
La	Hf	Ta	W	Re	Os	. Ir	Pt	Au	Hg
Lanthanum	Hafnium	Tantalum	Tungsten	Rhenium	Osmium	Indium	Platinum	Gold	Mercury

Give the positions of the following elements in relation to the whole table:

## Example:

Lanthanum is at the bottom, on the left.

Vanadium is in the third column from the left, at the top.

Cobalt is in the top row, near the middle.

Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Copper	Zn
Scandium	Titanium	Vanadium	Ohromium	Manganese	Iron	Cobalt	Nickel		Znc
Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd
Yttrium	Zirconium	Nobium	Molybdenum	Technetium	Ruthenium	Rhodium	Palladium	Silver	
La	Hf	Ta	W	Re	Os	. Ir	Pt	Au	Hg
Lanthanum	Hafnium	Tantalum	Tungsten	Rhenium	Osmium	Indium	Platinum	Gold	Mercury

Now give the positions of these elements in relation to others:

#### Example:

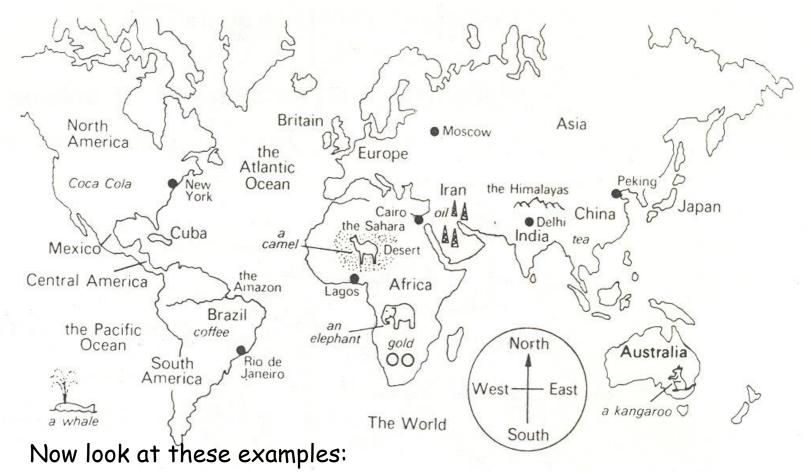
Osmium is beside and to the right of rhenium.

Cobalt in relation to nickel and iron. Niobium in relation to molybdenum Platinum and mercury in relation to gold Gold in relation to silver Iron in relation to rhodium Silver in relation to zinc

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Silver in relation to gold.

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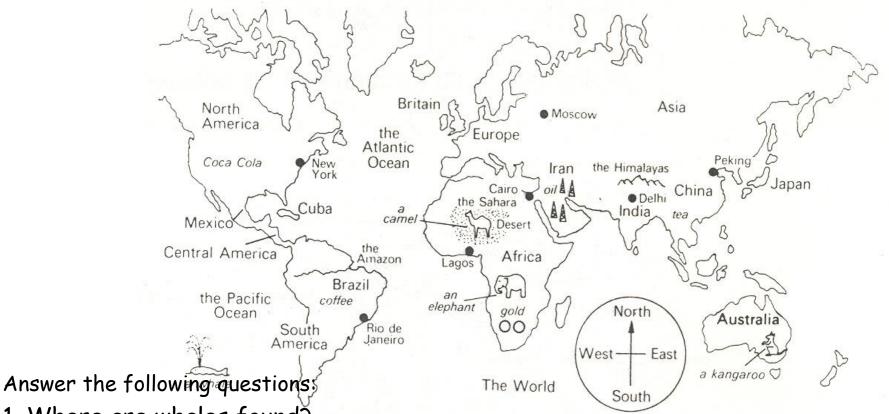
Mexico is situated in North America.

Central America is situated between North America and South America. Europe is situated to the west of Asia.

The Sahara Desert is located in Africa and to the south-west of Cairo. Gold is found in the south of Africa.

Kangaroos are found in Australia.

People are distributed throughout the world



- 1. Where are whales found?
- 2. Where is the River Amazon located?
- 3. Where is Lagos situated?
- 4. Where is the Atlantic Ocean in relation to Europe and North America?
- 5. Where are the Himalayas located in relation to China?
- 6. Where is tea found?
- 7. Where is Moscow situated to Delhi?
- 8. Where is India in relation to Asia?

#### Igneous rocks

There are two kinds of igneous rocks, extrusive and intrusive. Extrusive igneous rocks are rocks which come out of volcanoes or vents in the ground and form lava plateau.

Intrusive igneous rocks are rocks which have solidified in other rocks under the ground. After erosion of the overlying rocks, intrusive igneous rocks are seen on the surface.

Now say whether these statements are true and false.

Correct the false statements.

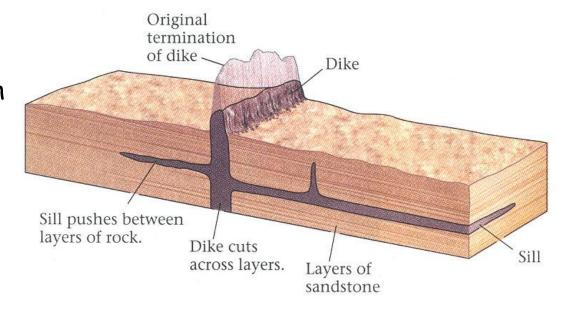
- a- There are two kinds of rocks, extrusive and intrusive.
- b- There are vents inside volcanoes.
- c- Lava plateau are found on the surface of the Earth.
- d- Intrusive igneous rocks can only be found under the ground.
- e- Intrusive igneous rocks consist of lava.

#### Examples of Intrusive Igneous Rocks

*Dykes:* Dykes are wall-shaped masses of igneous rock which cut across sedimentary strata. They are formed when magma is forced into cracks and joints in the rocks. Sometimes dykes are circular in shape.

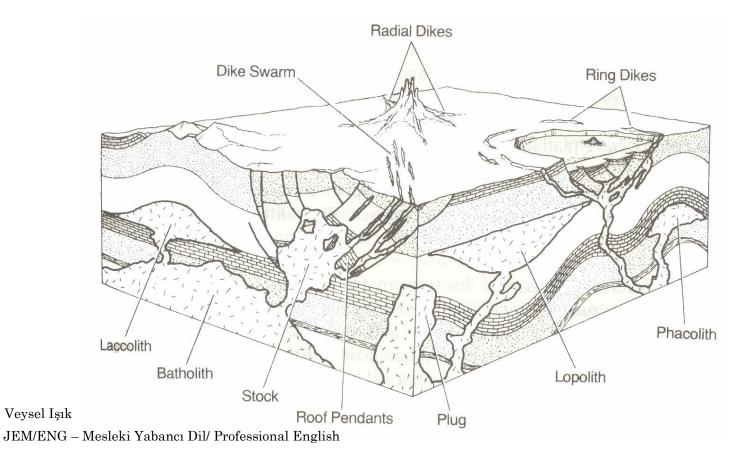
These are called ring dykes.

Sills: Sills are similar in shape to dykes, but they are formed of magma which is forced between strata and they lie parallel to the strata. The longitudinal section of a sill is constant along its length.

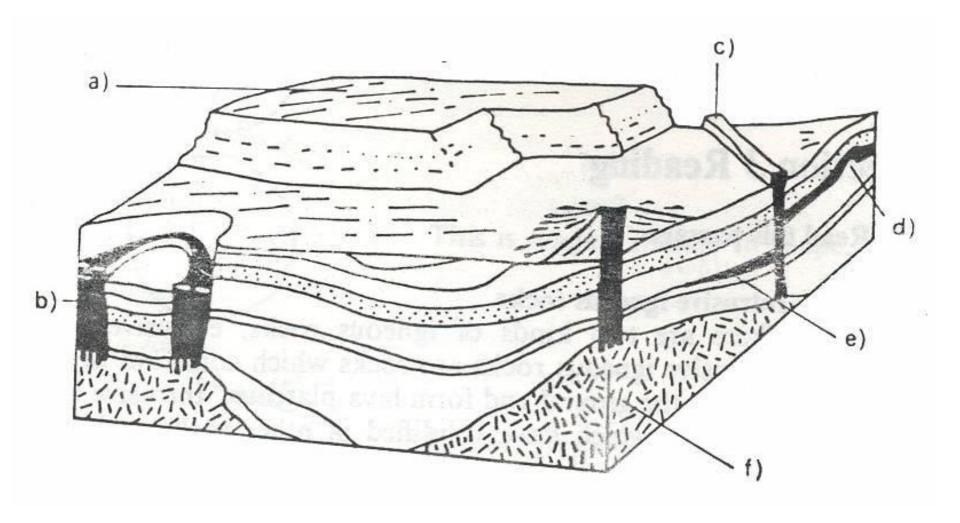


**Laccoliths:** Laccoliths are lens-shaped intrusions which lie parallel to the strata. The under surface is flat, but the upper surface is curved. They are therefore thicker in the center and thinner at the edges.

**Batholiths:** Batholiths are very large masses of igneous rock which have no regular shape and no bottom which can be found.



Label this diagram with the features mentioned in the passage:



#### **Reading Passage**

#### Latitude and Longitude

The position of places on the Earth's surface is given in latitude and longitude. These are imaginary circles running round the Earth. Lines of latitude run horizontally and parallel to the equator. Lines of longitude run vertically. They converge at the North and South Poles.

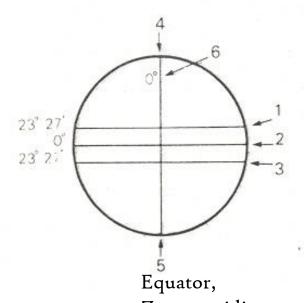
The position of Chicago is 42° N and 88° W. This means that it is situated at the point where latitude 42° crosses longitude 88°. "N" means north of the equator. "W" means east of the zero meridian. This is the line of longitude which passes through Greenwich.

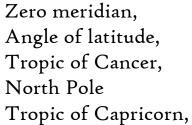
Positions are given degrees. Imagine a line from the center of the Earth to the equator and another line from the center of the Earth to Chicago. The angle between these lines is 42°. Similarly, the angular distance between the zero meridian and Chicago is 88°.

The earth is not right angles to its path round the sun. Therefore the position of the sun in relation to the Earth's surface changes during the year. Twice a year, on March 21st and September 21st, the sun is vertically over the equator. At other times it is vertically over other latitudes between the tropical zones. These lie between the Tropic of Cancer (23° 27' N) and the tropic Capricorn (23° 27' S). The sun is vertically over the Tropic of Cancer on June 21st and vertically over the Tropic of Capricorn on December 21st.

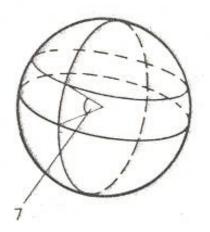
#### Now work through these exercises:

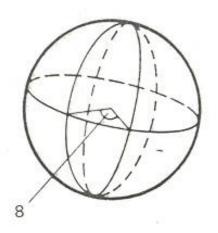
#### a. Label these diagrams:





Angle of longitude,





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South Pole