

# SOCIAL SCIENCE – UNIT 1: LOOKING AT EARTH

## PLANETS

There are four planets made of rock: (Hay cuatro planetas hechos de roca:

Mercury, Venus, Earth and Mars. Mercurio, Venus, la Tierra y Marte).

There are four planets made of gas: (Hay cuatro planetas hechos de gas:

Jupiter, Saturn, Uranus and Neptune. Júpiter, Saturno, Urano y Neptuno).

Saturn and Uranus have rings (dust and rock) around them that orbit the planet. (Saturno y Urano tienen anillos (polvo y roca) a su alrededor que orbitan al planeta).

## REPRESENTING THE EARTH (representación de la Tierra)

1. MAPS: (mapas) show the Earth as flat (representan la Tierra plana)

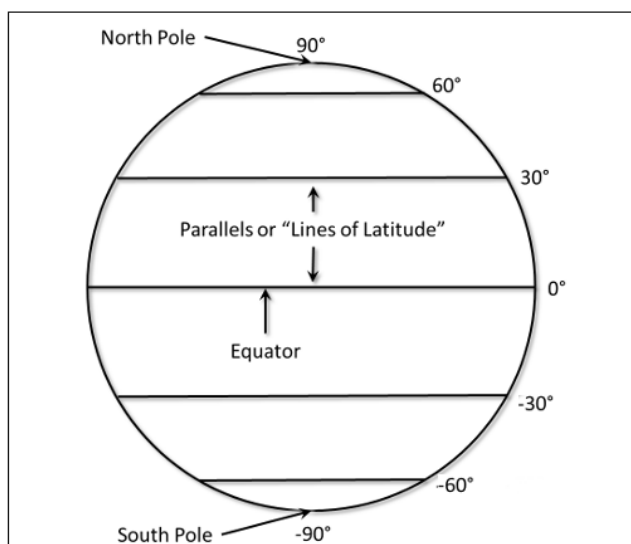
2. GLOBES: (Globos terráqueos) show the Earth as a sphere (representan la Tierra como una esfera)

## IMAGINARY LINES (PARALLELS AND MERIDIANS)

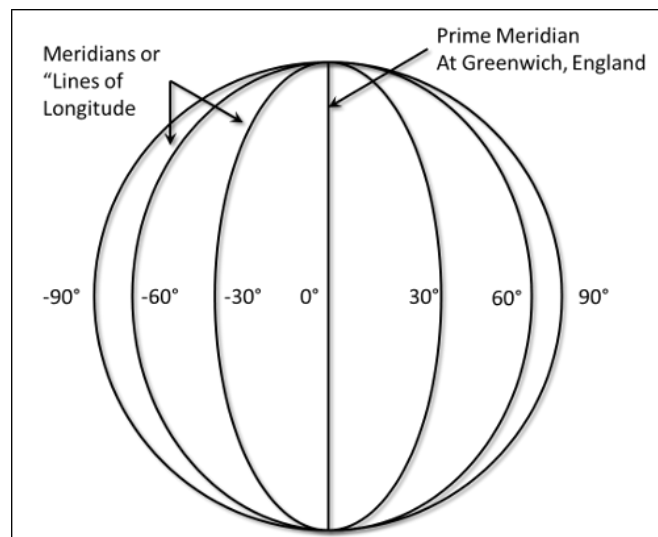
PARALLELS (paralelos) the horizontal lines or lines of latitude (líneas horizontales o líneas de latitud). The Equator is at zero degrees latitude (el Ecuador está a cero grados de latitud). It divides the Earth into the Northern and the Southern Hemisphere. (Divide la Tierra en Hemisferio Norte y Hemisferio Sur).

MERIDIANS (paralelos) the vertical lines or lines of longitude (líneas verticales o líneas de longitud). The Prime Meridian or Greenwich Meridian is at zero degrees longitude (el Primer Meridiano, Meridiano Cero o Meridiano de Greenwich está a cero grados de longitud). It divides the Earth into the Eastern and the Western Hemisphere. (Divide la Tierra en Hemisferio Este y Hemisferio Oeste).

## PARALLELS

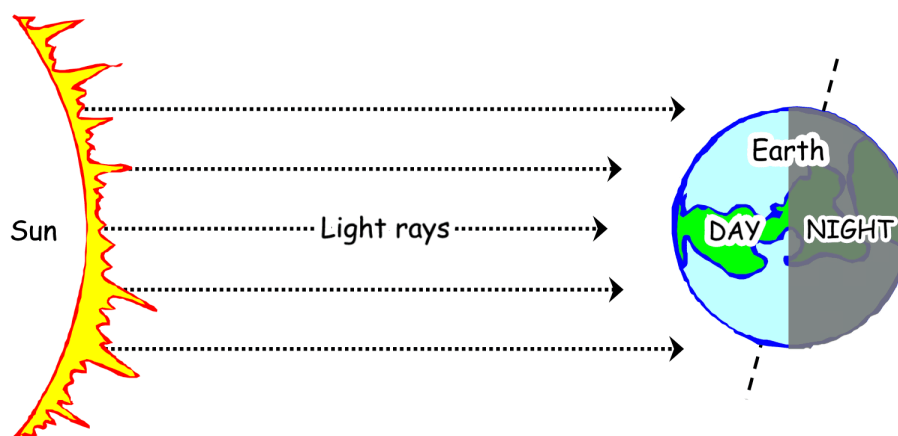


## MERIDIANS



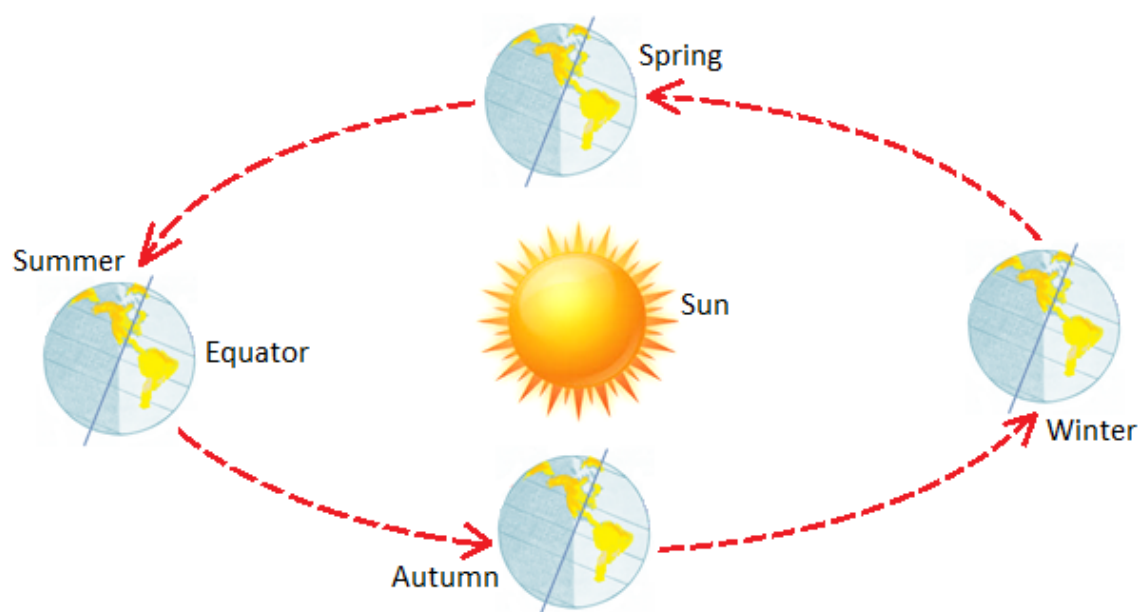
## THE EARTH'S ROTATION (La rotación de la Tierra)

- It is when the Earth rotates on its axis. (cuando la Tierra gira sobre su eje).
- The Earth's axis is tilted at an angle. (el eje de la Tierra está inclinado en un ángulo).
- One rotation takes 24 hours or 1 day. (una rotación dura 24 horas o 1 año).
- The rotation causes day and night. (la rotación causa el día y la noche).
- When the Earth is facing away from the Sun is night time. It is dark. (cuando la Tierra está de cara opuesta al Sol es de noche y está oscuro).
- When the Earth is facing the Sun is daytime. It is light. (cuando la Tierra está mirando al Sol es de día y hay luz).



## THE EARTH'S REVOLUTION (La traslación de la Tierra)

- It is when the Earth orbits around the Sun. (cuando la Tierra gira alrededor del Sol).
- One rotation takes 365 days or 1 year. (una rotación dura 365 días o 1 año).
- As the Earth revolves, its tilt doesn't change. (cuando la tierra gira, la inclinación no cambia)
- The revolution causes the four seasons: spring, summer, autumn and winter. (La traslación causa las cuatro estaciones: primavera, verano, otoño e invierno).



## HOW DO WE KNOW ABOUT THE UNIVERSE?

ASTRONOMERS study the universe. (Los astrónomos estudian el universo). People thought that the Earth was flat. Over 2,000 years ago, Greek astronomers observed that the Earth might be round. In 1522 a Spanish ship sailed all the way around the world. This expedition proved that the Earth is a sphere. (Antiguamente se pensaba que la Tierra era plana. Hace aproximadamente 2000 años, astrónomos griegos observaron que la tierra podía ser redonda. En 1522, Magallanes y Elcano viajaron alrededor del mundo. Esta expedición demostró que la Tierra era como una esfera).

TELESCOPES are used to see other planets and stars. (Los telescopios se usan para ver otros planetas y estrellas).

Galileo's telescope

Hubble Space Telescope

Gran Telescopio Canarias

## EXPLORING SPACE

- ASTRONAUTS are trained to travel into space. Some of them are sent to the *International Space Station (ISS)* for long periods. (Los astronautas son entrenados para ir al espacio. Algunos de ellos van a la Estación Espacial Internacional). There they look after the station and carry out research. (Allí, cuidan la estación y llevan a cabo investigaciones).

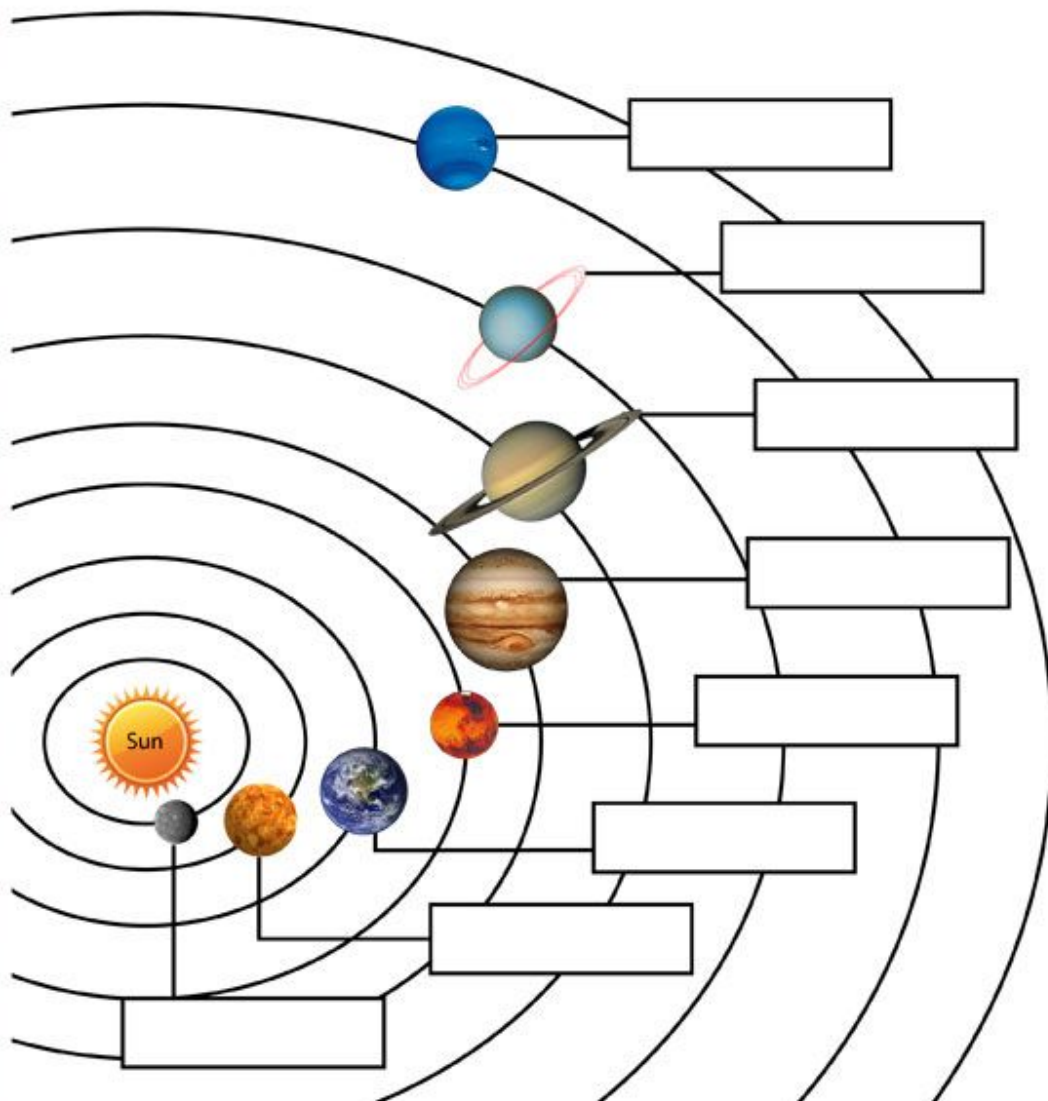
Astronauts create their own environment. (crean su propio entretenimiento).

They keep clean without using water. (se limpian sin usar agua).

They eat three meals a day. (comen tres veces al día).

### CHECK YOUR PROGRESS!

Write the name of the planets



## Match the characteristics

- The Earth spins on its own axis.
- It takes about 365 days.
- It causes the seasons.
- It takes 24 hours.
- It causes day and night.
- The Earth moves around the Sun.

REVOLUTION

ROTATION

## Use the words to complete the sentences

night- summer - 365 days - orbits - seasons - axis - rotate - day - winter

- a. The Earth rotates on its \_\_\_\_\_.
- b. The Earth takes 24 hours to \_\_\_\_\_ completely.
- c. On the part of the Earth facing the Sun, it is \_\_\_\_\_.
- d. On the part of the Earth facing away from the Sun, it is \_\_\_\_\_.
- e. The Earth \_\_\_\_\_ the Sun.
- f. The Earth takes \_\_\_\_\_ to complete its orbit.
- g. The Earth's movement around the Sun causes the \_\_\_\_\_.
- h. It is \_\_\_\_\_ on the part of the Earth which receives more sunlight.
- i. It is \_\_\_\_\_ on the part of the Earth which receives less sunlight.

# Label the diagram of the globe

North Pole South Pole parallel meridian equator ~~Prime Meridian~~

