



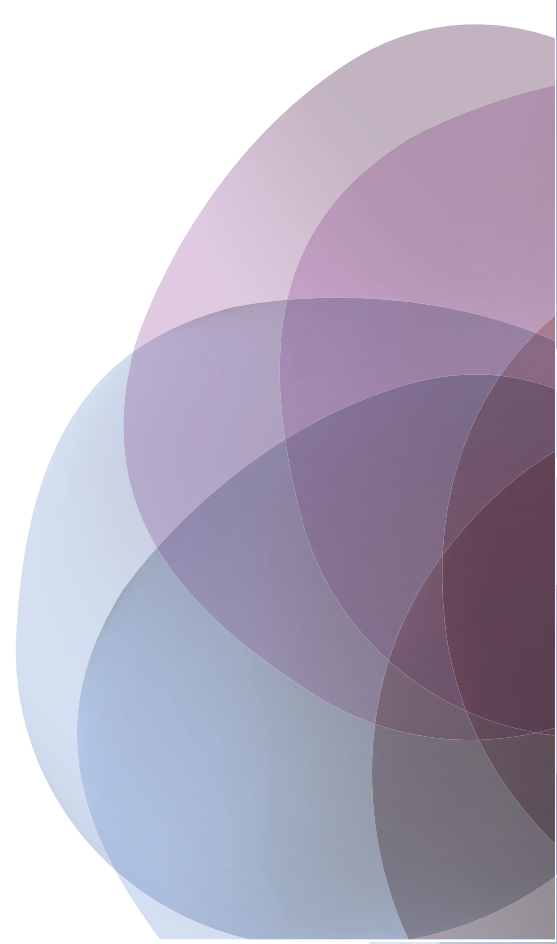
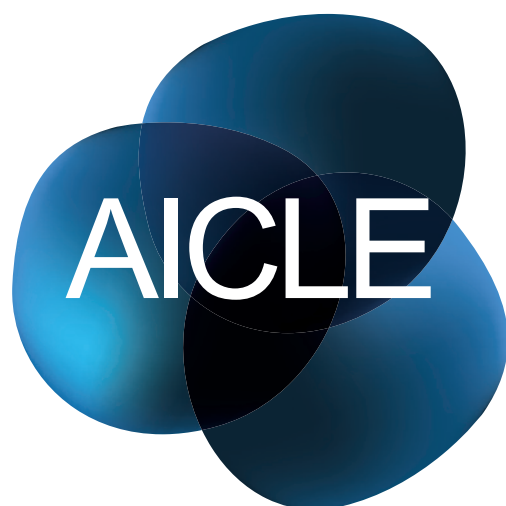
Ciencias naturales

Secundaria



JUNTA DE ANDALUCÍA

Inglés



TEACHER'S KEY

A.1.a)

1.	Planet	g.	A celestial body orbiting a star (eg. the Earth)
2.	Comet	b.	A celestial body orbiting the Sun on a very long trajectory
3.	Asteroids	a.	Rocky bodies which are smaller than planets, irregular in shape and which orbit around the Sun
4.	Star	f.	Celestial body which continuously radiates energy into the space around it. (eg. the Sun).
5.	Galaxy	c.	Group of stars (ten or hundreds or thousands). eg. the Milky Way
6.	Satellite	h	A natural body that revolves around a planet. (eg. the Moon)
7.	U.A.(Astronomical Unit)	d.	Approximately the mean distance between the Earth and the Sun
8.	Light-year	e.	The distance covered by light in a year. (=10 billion km).

A.1. b)

Planet - Comet	Asteroid - Planet	Planet -Satellite
Star – Galaxy	U.A – Light-year	Star - Planet

Planet- Comet: the difference is their orbits. A planet has a less eccentric one than a planet and the total orbit length in a comet is greater than the planet.

Asteroid-Planet: The difference is the size (planet bigger than asteroid) and the shape (asteroid more irregular)

Planet-Satellite: Planet revolves a star (e.g. the Sun) and the satellite revolves a planet.
Star-Galaxy: A galaxy contains lots of stars.

U.A.-Light-year: U.A is shorter than light-year. U.A. is used to measure lengths in the Solar system, while Light-Year is better for distances between stars and galaxies

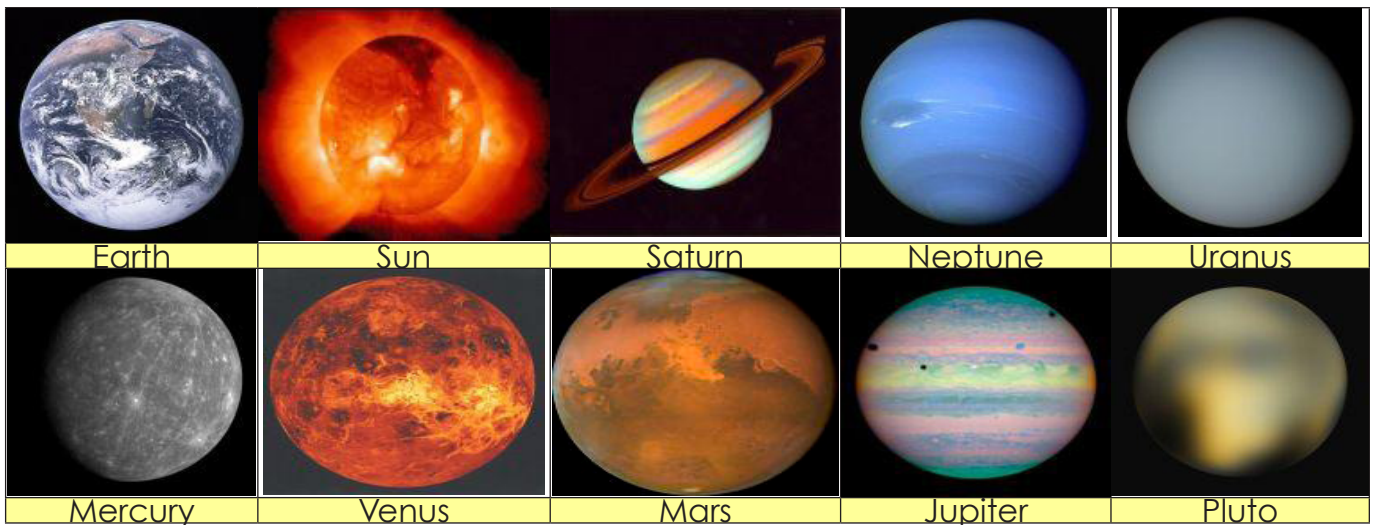
Star-Planet: Star emits its own radiation because nuclear reactions are occurring in it, while the planet doesn't emit radiation.

A.2. Se reproduce la tabla completa. Se marca en rojo la información que aparece como hueco.

Astronomic distances from the Earth	
Object	Distance
Space station	300 km
Meteorological satellite	<u>36,000 km</u>
The Moon	384,000 km
<u>The Sun</u>	<u>150,000.000 km</u>
Pluto	<u>6,000,000,000 km</u>
□ Centaury	4 light years
The Centre of the galaxy	<u>25,000 light years</u>
The galaxy Andromeda	2 million light years
The farthest <u>galaxies</u>	<u>10,000 million</u> light years

Questions:

- The closest is the Space station
- The farthest are the galaxies at the end of the chart.
- Obviously the light the came before is the Centaury one because Centaury is more distance than the Sun, so the light takes more time to come from there.



A.2. Comprehension questions:

- a. False. This tales is made up of gaseous substances
- b. False. They came from the outer solar system
- c. False. This asteroid is in the inner Solar system
- d. False. It's very difficult this, you need an instrument to see asteroids.

A.6. El párrafo podría ser:

The earth revolves around its own axis every 24 hours. When any part of the earth faces the sun, it is day; when it faces away from the sun, it is night.

A.6. Bis

Solución al Word-Search

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+ L + E + + + + + + + + + + D
+ + O + S E A S T E R N + + R
+ C + C + A + + + + + + + A
+ O + + A + E + + + + + M W
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+ V E N O I T A C O L N + + S
+ E + A + + + I + E D + Y + E
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(Over, Down, Direction)
BOUNDARY (6, 14, NE)
CONVENTION (2, 3, S)
COORDINATED (3, 11, E)
DECREASE (11, 8, NW)
EARTH (3, 6, SE)
EASTERN (6, 2, E)
LOCAL-TIME (2, 1, SE)
LOCATION (11, 6, W)
MANDATED (14, 4, SW)
WESTWARD (15, 8, N)
    
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Se reproduce el texto, marcándose en rojo las palabras perdidas.

A time zone is a region on Earth, more or less bounded by lines of longitude that has a uniform, legally mandated standard time, usually referred to as the local time. By convention, the 24 main time zones on Earth compute their local time as an offset from UTC (Coordinated Universal Time).

Local time in each time zone is UTC plus the current time zone offset for the location in question. In theory, the increase proceeds eastward from the eastern boundary of the UTC time zone centred on 0°, increasing by one hour for each 15°, up to the International Date Line (longitude 180°). A corresponding one hour decrease relative to UTC occurs every 15° heading westward from the western boundary of the UTC time zone, up to the International Date Line

Questions: (refer to Appendix II)

1. My friend's clock says 1 hour less, because London is in a different time zone to Spain.
2. Guatemala is in a time zone (-6 zone) with 7 hours less than here, (+1 zone) so It's day or night depending on the hour here.
3. NY is in the zone -5, so there are 6 hours less.
 - i) My watch will say 15:00 + 9 = 0:00
 - ii) The local hour is : 18:00

A.7.

Days and nights are caused by the rotation of the Earth.
Seasons are caused by the revolution around the Sun of the Earth.
The season in the Southern Hemisphere is winter.

** El dibujo es una actividad libre**

A.8.

Criss Cross.

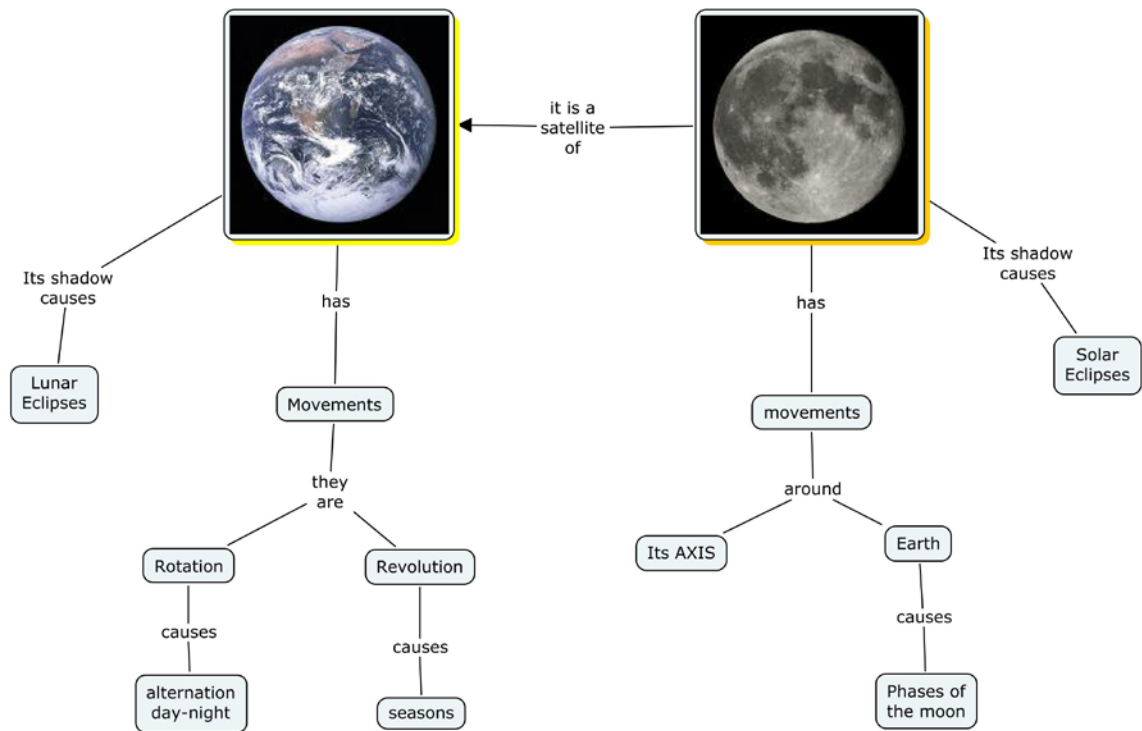
Across

2. Phases.
4. Revolution
5. Earth
6. Eclipse
7. Moon.

Down

1. Seasons
3. Axis
4. Rotation

b Una propuesta de C-map sería la siguiente:



Project.

Algunas A-Q modelo para las diferentes categorías podrían ser:

Distances in the Universe	Solar System	Earth Movements	Lunar Movements + Eclipses
Alpha Centaury is at 4.22 light years from the Sun	There are terrestrial, gas giants and dwarf planets	It's caused by the Earth's rotation	The diameter is $\frac{1}{4}$ the Earth
This distance is known as U.A.	It's Mercury	It causes the different temperature between Northern and Southern Hemispheres	It takes 27.3 days
It's equivalent to 10 trillion kilometres	It's considered a Dwarf planet since 2006	They're conventional regions of the Earth where legally time is the same	The moon passes between the Sun and the Earth
The meaning is that the light takes 2 million years to cover the distance	It's between Jupiter and Mars Orbit	It's the UTC	Because the Earth's shadow is bigger than the Lunar Shadow

Las Q correspondientes son las siguientes:

Distances in the Universe	Solar System	Earth Movements	Lunar Movements + Eclipses
How long is alpha Centaury from the Sun	What types of planets are there in the Solar system?	What causes the alternation day-night?	What is the diameter of the Moon?
The distance from Earth to Sun?	What is the closest planet to the Sun?	What causes the Earth's axis tilt?	How long is the movement of the moon around the earth?
How many kilometres is 1 light-year?	When was Pluto considered a dwarf planet?	What are the time zones?	What is a Solar eclipse?
What is the meaning of 2 million light-years	Where is the asteroid belt?	What is the abbreviation for Coordinated Universal Time?	Why can a lunar exclipse be observed in a larger area of land than the solar eclipse?

En el proyecto existe la posibilidad en vez de en tarjetas puede desarrollarse con una presentación de Power point. Se incluye como anexo el archivo Earth in the Universe final.ppt, y el funcionamiento del mismo es sencillo:

1. Inicias la presentación en la primera diapositiva.
2. Pulsas sobre alguno de los botones que tienen puntos.
3. Primero aparece la diapositiva con la respuesta. En este momento el grupo concursante debería decir la pregunta que le corresponde a esa respuesta. Si acierta se comprueba dando al botón Question y si no acierta antes de apretar ese botón hay oportunidad de rebote. (si estamos en las rondas iniciales)
4. Una vez vista la Question se vuelve a la pantalla inicial con el botón correspondiente y se ha eliminado el botón que se había elegido.
5. Así se seguiría hasta que todos los botones de la pantalla inicial sean elegidos por los concursantes.
6. La elección de los botones se hace de forma rotativa por los concursantes y pueden elegir el que quieran de entre los que están libres.