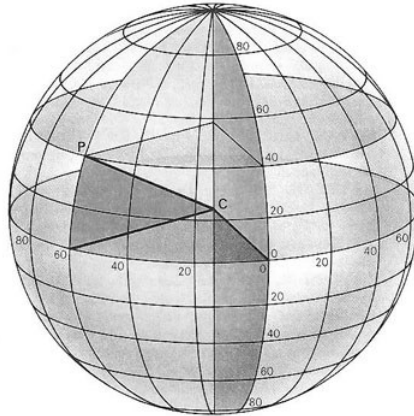


1. Draw and label the important points, lines and angles on the globe.



Compare and add more words after watching Latitude and Longitude:

<https://www.youtube.com/watch?v=swKBi6hHHMA> 0 – 2.43

2. Complete the gaps with pronunciation and translations

<i>term</i>	<i>pronunciation</i>	<i>translation</i>
surface	/ 'sɜ: fɪs /	<i>povrch</i>
equidistant		
perpendicular		<i>kolmý, kolmice</i>
measure		<i>měřit</i>
celestial	Br /sə'lestiəl/ Am /sə'lestʃl/	<i>nebeský, astronomický</i>
approximately		
equal	/ 'i: kwəl /	<i>stejný</i>
equator	/ i' kwei tər /	
equatorial	/ ,ɛkwə'tɔ: rɪəl /	
parallel		<i>rovnoběžka, rovnobežný</i>
axis, <i>pl</i> axes	/ 'æksɪs / / 'æksɪ: z /	<i>osa</i>
incline		<i>naklonit</i>
latitude		
longitude		

3. Determiners (articles, pronouns in front of a noun, they refer to something specific)

Either, neither: model use http://www.myenglishpages.com/site_php_files/grammar-lesson-either-or-neither-nor.php

Work in groups of three and try to find out something about each other. Include these points:

How many people in your group study Cartography & Geoinformatics?

have been to a subtropical country?

would like to do research on boreal forests?

are interested in paleoclimatology?

Report what you have found out to the class, use determiners such as:

All of us ..., Both Jan and Tom ..., None of us..., The only one who..., Neither Jana nor Lenka..., etc.

4. Read the passage and choose the right word for each gap.

1. A This
B Its
C It

3. A also
B like
C both

5. A and
B too
C or

7. A that
B this
C which

2. A any
B each
C every

4. A virtually
B respectively
C similarly

6. A even
B nor
C or

8. A all
B also
C every

The equator is located at zero degrees latitude. **1**_____ runs through Indonesia, Ecuador, northern Brazil, the Democratic Republic of the Congo, and Kenya, among other countries. It is 40,075.16 kilometres long. On the equator, the sun is directly overhead at noon on the two equinoxes - near March and September 21. The equator divides the planet into the Northern and Southern Hemispheres. On the equator, the length of day and night are equal every day of the year - day is always twelve hours long and night is always twelve hours long.

The Tropic of Cancer and the Tropic of Capricorn **2**_____ lie at 23.5 degrees latitude. The Tropic of Cancer is located at 23.5° North of the equator and runs through Mexico, the Bahamas, Egypt, Saudi Arabia, India, and southern China. The Tropic of Capricorn lies at 23.5° South of the equator and runs through Australia, Chile, southern Brazil (Brazil is the only country that passes through **3**_____ the equator and a tropic), and northern South Africa.

The tropics are the two lines where the sun is directly overhead at noon on the two solstices - near June and December 21. The sun is directly overhead at noon on the Tropic of Cancer on June 21 (the beginning of summer in the Northern Hemisphere and the beginning of winter in the Southern Hemisphere) and the sun is directly overhead at noon on the Tropic of Capricorn on December 21 (the beginning of winter in the Northern Hemisphere and the beginning of summer in the Southern Hemisphere).

The reason for the location of the Tropic of Cancer and the Tropic of Capricorn at 23.5° north and south **4**_____ is due to the axial tilt of the Earth. The Earth is tilted 23.5 degrees from the plane of the Earth's revolution around the sun each year. The tilt can be measured either between the Earth's rotational axis and its orbital axis **5**_____ , equivalently, between its equatorial plane and orbital plane.

The area bounded by the Tropic of Cancer on the north and Tropic of Capricorn on the south is known as the "tropics." This area experiences neither spring and summer **6**_____ autumn and winter because the sun is always high in the sky. Only higher latitudes, north of the Tropic of Cancer and south of the Tropic of Capricorn, experience significant seasonal variation in climate.

While the equator divides the Earth into Northern and Southern Hemispheres, it is the Prime Meridian at zero degrees longitude and the line of longitude opposite the Prime Meridian (near the International Date Line) at 180 degrees longitude **7**_____ divides the Earth into the Eastern and Western Hemispheres. The Eastern Hemisphere consists of Europe, Africa, Asia, and Australia while the Western Hemisphere includes North and South America. Some geographers place the boundaries between the hemispheres at 20° West and 160° East so as to not run through Europe and Africa. The Prime Meridian and **8**_____ lines of longitude are completely imaginary lines and have no significance with regard to the Earth or to its relationship with the sun.

Adapted from <https://www.thoughtco.com/equator-hemisphere-tropic-of-cancer-capricorn-1435089>

Find how the text explains:

- a) equinox
- b) tropics
- c) solstice
- d) Prime meridian

HOMEWORK

Read the definitions and find terms they describe; they are all in the text above.

Kelly, Keith: Geography, Macmillan

1.The imaginary great circle around the earth's surface, equidistant from the poles and perpendicular to the earth's axis of rotation.
2.The angular distance north or south of the earth's equator, measured in degrees.
3. Either of the two times during a year when the sun crosses the celestial equator and when the length of day and night are approximately equal.
4. Either the northern or southern half of the earth as divided by the equator or the eastern or western half as divided by a meridian.
5. Either of two parallels on the earth, one north of the equator and the other south of the equator, representing the points farthest north and south at which the sun can shine directly overhead.
6. Either of the two points on the ecliptic at which the sun is overhead at the tropic of Cancer or Capricorn.
7. The angle between an object's rotational axis and its orbital axis.
8. Orbital motion about a point, especially as distinguished from axial rotation.
9. One of the imaginary lines joining the north and south poles at right angles to the equator.
10. Angular distance on the earth's surface, measured east or west from the prime meridian at Greenwich, England, to the meridian passing through a position.

<https://www.youtube.com/watch?v=95TtXYjOEv4> Basics of geography