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Answer the following questions in your own words.

1. What are lines of latitude ? _____
2. Which is the longest line of latitude? _____
3. How far is each degree of latitude apart from each other ? _____
4. What latitude does the Tropic of Capricorn have ? _____
5. What latitude does the Tropic of Cancer have? _____
6. How long does daylight last north of the Arctic Circle in summer? _____

7. Which large city does the Prime Meridian go through ? _____
8. What happens when you cross the International Date Line ? _____

9. Where are degrees of longitude farthest apart from each other ? _____
10. How was early navigation different from the way we navigate today? _____

11. How long does it take for the Earth to rotate around its axis ? _____
12. Name a few countries that have more than one time zone ? _____

13. How many degrees, in theory, is each time zone ? _____
14. How does Daylight Saving Time (DST) work ? _____

15. What is the main aim of DST _____

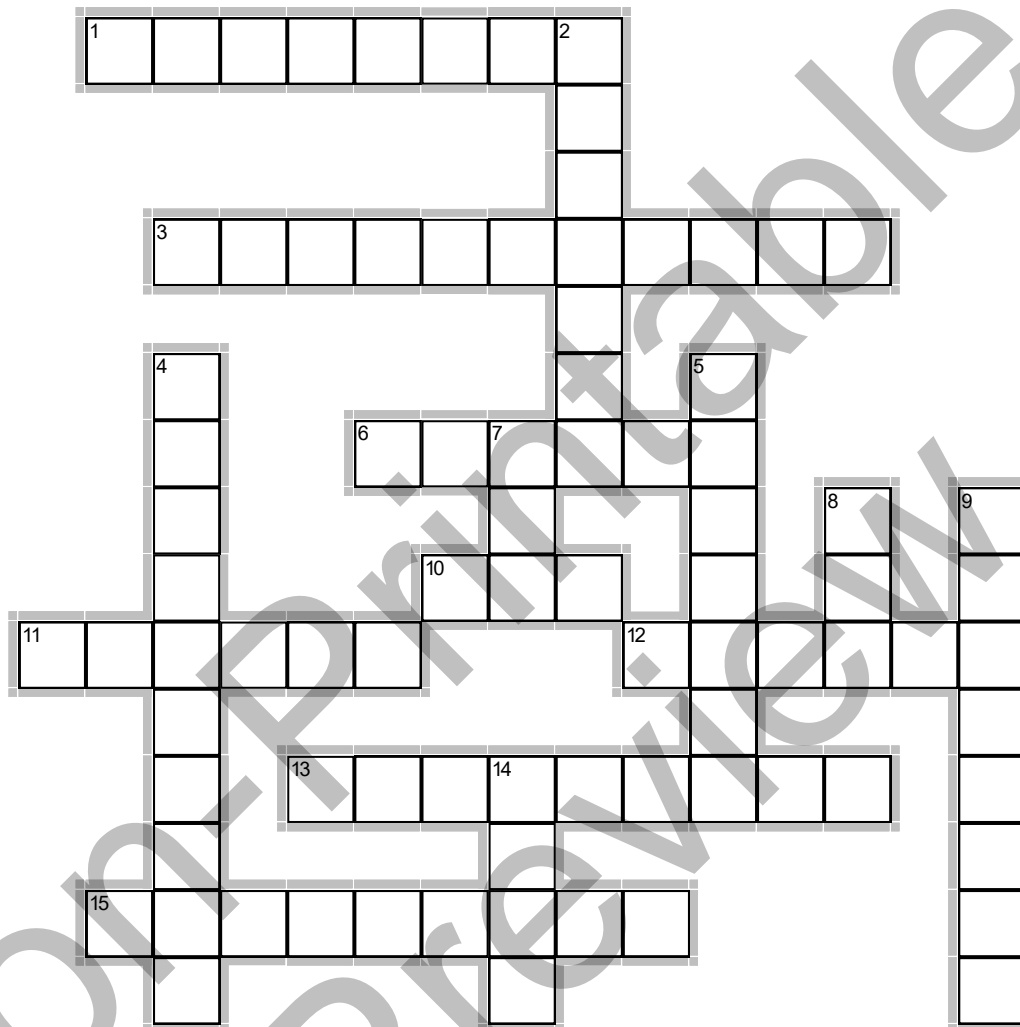
16. Where is DST mainly used? _____
17. Why don't countries around the equator use DST ? _____

LATITUDE, LONGITUDE AND TIME ZONES – EXERCISES

2

Match the words on the left with the definitions on the right.

A	imaginary			referring to a king or queen
B	pinpoint			half of the Earth
C	equator			leading, number one
D	hemisphere			power that is in wires and cables and which gives us light and makes machines work
E	axis			to show the exact location
F	observatory			something that you hope to achieve
G	dominant			something that is not real; it does not exist physically
H	degree			to move around an object in a circle
I	royal			tool for measuring angles between the stars in order to calculate the position of a ship or airplane
J	rotate			round building where you can watch the stars and the planets
K	sextant			officer on a ship who plans which way to go
L	navigator			unit around which lines around the Earth are measured
M	electricity			line around which the Earth rotates
N	goal			line around the middle of the Earth



Across

1. space from one place to another
3. round building from which you can watch the stars in the sky
6. measurement for longitude and latitude
10. Daylight Saving Time (short word)
11. country that has very many time zones
12. 23.5 degrees north is the Tropic of _____
13. south of the _____ Circle daylight lasts for 24 hours in December
15. small town near London which the Prime Meridian goes through

Down

2. imaginary line that goes around the middle of the Earth
4. half of the Earth
5. tool which uses the stars to determine your position
7. system that uses radio signals from satellites to show your exact position on Earth
8. world's standard time zone (short word)
9. line that runs from north to south through the poles
14. line around which the Earth spins

4

Complete the text with the words from the box. There are THREE words you will not need.

Lines of latitude and longitude **(1)** _____ the Earth. Latitude defines the location north and south of the **(2)** _____. Longitude are lines that go through both **(3)** _____. All lines are measured in **(4)** _____, seconds and minutes.

The equator divides the Earth into a northern and southern **(5)** _____. Any location along the equator has a latitude of 0°. Because the Earth tilts its **(6)** _____ when it revolves around the sun there are special lines of **(7)** _____. The sun is exactly over your head when you stand along the Tropic of Cancer and Capricorn in June and December. North of the Arctic Circle and south of the Antarctic Circle **(8)** _____ lasts for 24 hours during the summer months.

(9) _____ are lines that run through the poles. The starting point for this longitude system is the British Royal Observatory at Greenwich, England. It is also called the Prime Meridian. The International Date Line is on the **(10)** _____ side of the globe. Travellers who cross this dateline **(11)** _____ change to the following day.

The Earth is divided into 24 time zones because it **(12)** _____ around its axis every 24 hours. Although most countries only have one time zone, larger countries that **(13)** _____ thousands of kilometres, like the United States and Russia, are divided into several time zones. China, on the other hand, has been using only one time zone since the Communists took over after World War II.

axis
circle
daylight
degrees
eastwards
equator
hemisphere
kilometres
latitude
longitude
meridians
opposite
poles
rotates
span
westwards



LATITUDE, LONGITUDE AND TIME ZONES – EXERCISES

5

Find the cities with the following coordinates and put them into the map below.

City	Longitude	Latitude
	40°N	74°W
	49°N	2°E
	30°N	31°E
	23°S	43°W
	22°N	114°E
	55°N	37°E
	34°S	18°E
	34°N	118°W
	34°S	151°E
	0°	78°W
	19°N	99°W
	35°N	139°E



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LATITUDE, LONGITUDE AND TIME ZONES – EXERCISES

6

It's 12 o'clock noon in your home town.
What time is it in?

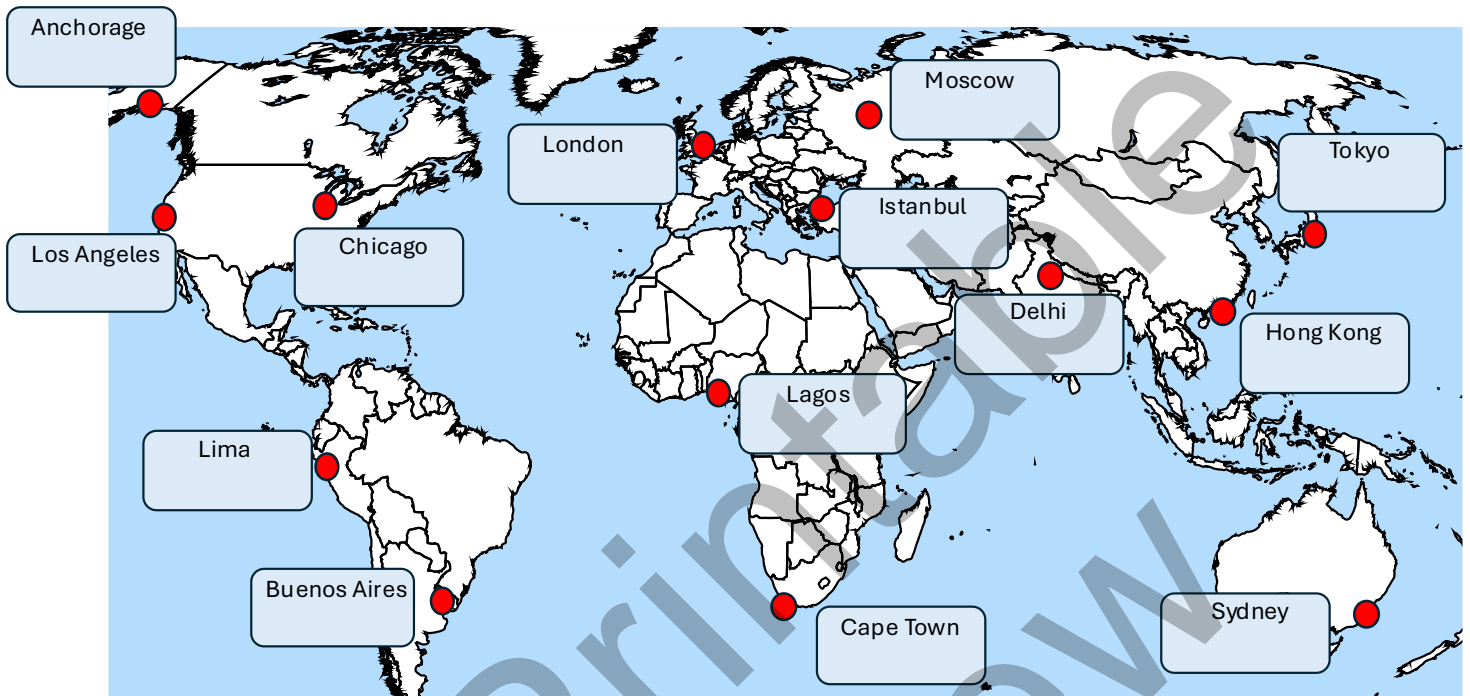


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