



**INDIAN SCHOOL MUSCAT  
DEPARTMENT OF SOCIAL SCIENCE  
MIDDLE SECTION  
GLOBE: LATITUDE AND LONGITUDE**



**WORKSHEET**

**NAME:** \_\_\_\_\_ **CLASS VI SEC:** \_\_\_ **ROLL NO:** \_\_\_ **DATE:** \_\_\_ /05/2018

**I. NAME THE FOLLOWING:**

16

1. A small spherical model of the Earth: \_\_\_\_\_
2. It is 0° latitude which divides the Earth into two equal parts : \_\_\_\_\_
3. The zone between Tropic of Cancer and Arctic Circle in the north and Tropic of Capricorn and Antarctic Circle in the south: \_\_\_\_\_
4. The zone between Arctic Circle and North Frigid zone and Antarctic Circle and South Frigid zone: \_\_\_\_\_
5. Lines of latitude and longitude form a network of lines: \_\_\_\_\_
6. It helps us to determine the time at a place: \_\_\_\_\_
7. The time followed all over India : \_\_\_\_\_
8. The shape of the earth is best described by the term geoids which means ' \_\_\_\_\_ , \_\_\_\_\_ '
9. The total number of lines of latitude in the northern hemisphere and in the southern hemisphere: \_\_\_\_\_
10. All lines of longitude meet at the: \_\_\_\_\_.
11. 90° North Latitude: \_\_\_\_\_.
12. Globes are often used to plan long distance sea and air routes called: \_\_\_\_\_.
13. GMT is now officially known as: \_\_\_\_\_
14. The longitude of 82°30 E (82 ½ ° E) is treated as: \_\_\_\_\_
15. India located east of Greenwich at 82°30 E is 5 hours and 30 minutes ahead of \_\_\_\_\_
16. If the time in India is 12:30 pm, then it is \_\_\_\_\_ in London.

**II MATCH THE FOLLOWING:**

6

S.No	Column A	S.No.	Column B	Responses
1.	Vertical rays of the sun	a	Southern Hemisphere	1. _____
2.	Slanting rays of the sun	b	Northern Hemisphere	2. _____
3.	Tropic of Cancer	c	Equator	3. _____
4.	South Frigid	d	Important latitude	4. _____
5.	Antarctic Circle	e	Poles	5. _____
6.	Arctic Circle	f	Heat zone	6. _____

**III. ANSWER THE FOLLOWING QUESTIONS IN TWO POINT EACH :**

- |  |   |
|--|---|
| 1. What is the true shape of the Earth?              | 2 |
| 2. What do you mean by latitude?                     | 2 |
| 3. What do you understand by longitudes?             | 2 |
| 4. What is the importance of longitudes?             | 2 |
| 5. Distinguish between local time and standard time. | 2 |

**IV ANSWER THE FOLLOWING QUESTIONS IN FOUR POINTS EACH :**

- |  |   |
|--|---|
| 1. Explain how time and date change when one crosses the International dateline. | 4 |
| 2. How is local time determined?   | 4 |
| 3. What is Standard Time?  | 4 |

**PORTION FOR PERIODIC TEST I:**

1. WHAT, WHERE, HOW AND WHEN?
2. THE EARTH IN THE SOLAR SYSTEM
3. UNDERSTANDING DIVERSITY + DIVERSITY AND DISCRIMINATION

**PLEASE NOTE:**

- REVISE ALL ANSWERS FROM THE NOTEBOOK, TEXTBOOK AND WORKSHEET
- READ THE TEXTBOOK THOROUGHLY
- REVISE THE TEXTBOOK EXERCISES

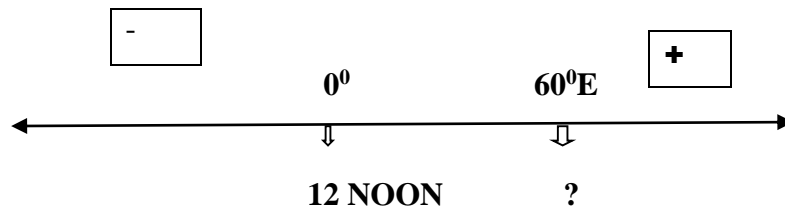
# FOR YOUR INFORMATION

## HOW TO CALCULATE TIME USING LONGITUDES???????

The time taken by earth for one Rotation is 24 hours  
In one Rotation, the Earth completes  $360^{\circ}$   
That means in 24 hours  $360^{\circ}$  are covered.  
So in one hour  $360^{\circ}/24 = 15^{\circ}$  are covered

**Note** : For countries that lies to the East of the Prime Meridian we have to add to the London time and for countries that lies to the West of the Prime Meridian we have to subtract from London time

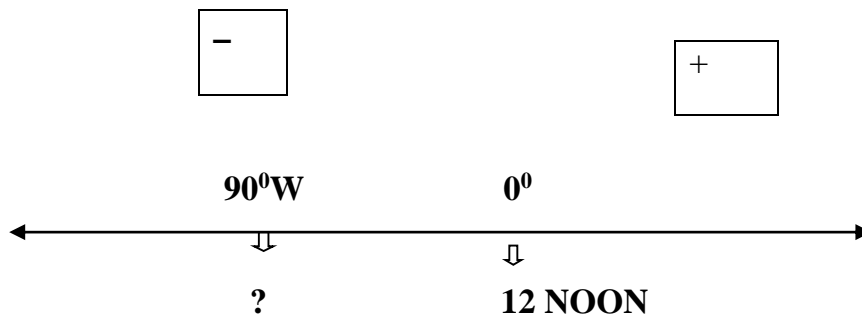
1) What is the time in Muscat ( $60^{\circ}\text{E}$ ) , when it is 12 Noon in London?



Longitude of London :  $0^{\circ}$   
Longitude of Muscat :  $60^{\circ}\text{E}$   
Difference in Longitude :  $60^{\circ}\text{E} - 0^{\circ} = 60^{\circ}$   
Difference in Time :  $60^{\circ}/15^{\circ} = 4$  hours (Why we are using 15? (See the box))

Time in Muscat : 12 NOON + 4 hours = 16:00 HOURS OR 4 PM

2) What is the time in Chicago ( $90^{\circ}\text{W}$ ) , when it is 12 Noon in London?



Longitude of London :  $0^{\circ}$   
Longitude of Chicago :  $90^{\circ}\text{W}$   
Difference in Longitude :  $90^{\circ}\text{W} - 0^{\circ} = 90^{\circ}$   
Difference in Time :  $90^{\circ}/15^{\circ} = 6$  hours (See the box)  
Time in Chicago : 12 NOON - 6 hours = 6 AM

## **FUN TIME ACTIVITY (NOT FOR TESTING)**

### **CALCULATE THE TIME OF THE FOLLOWING PLACES USING LONGITUDES:**

1) What is the time in Bridge town ( $60^{\circ}\text{W}$ ), when it is 12 Noon in London?

2) What is the time in Shanghai ( $120^{\circ}\text{E}$ ), when it is 12 Noon in London?