

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**TIME ZONE WHEEL**

1. On the *cutout map*, use a ruler to draw longitude lines halfway between the ones that are already there. All longitude meridians should be 15 degrees apart.

2. Label the following locations on the *cutout map*:

- a. **San Francisco**, California, U.S.A., North America: **37° 46' N, 122° 25' W**
- b. **New York City**, New York, U.S.A., North America: **40° 42' N, 74° 0' W**
- c. **Honolulu**, Hawaii, U.S.A., North America: **21° 18' N, 157° 51' W**
- d. **Freetown**, Sierra Leone, Africa: **8° 29' N, 13° 14' W**
- e. **Cairo**, Egypt, Africa: **29° 52' N, 31° 20' E**
- f. **New Delhi**, India, Asia: **28° 35' N, 77° 12' E**
- g. **Beijing**, China, Asia: **39° 55' N, 116° 23' E**
- h. **Tokyo**, Japan, Asia: **35° 41' N, 139° 46' E**

3. On the *back sheet*, at the edge of the map, label the times so that you will be able to see them when the cutout is attached. *Hint: Earth rotates counterclockwise, 15° every hour.*

4. Use your Time Zone Wheel to complete the following charts:

CITY	TIME
San Francisco	
New York City	
Honolulu	
Freetown	3:00 PM
Cairo	
New Delhi	
Beijing	
Tokyo	

CITY	TIME
San Francisco	
New York City	10:00 AM
Honolulu	
Freetown	
Cairo	
New Delhi	
Beijing	
Tokyo	

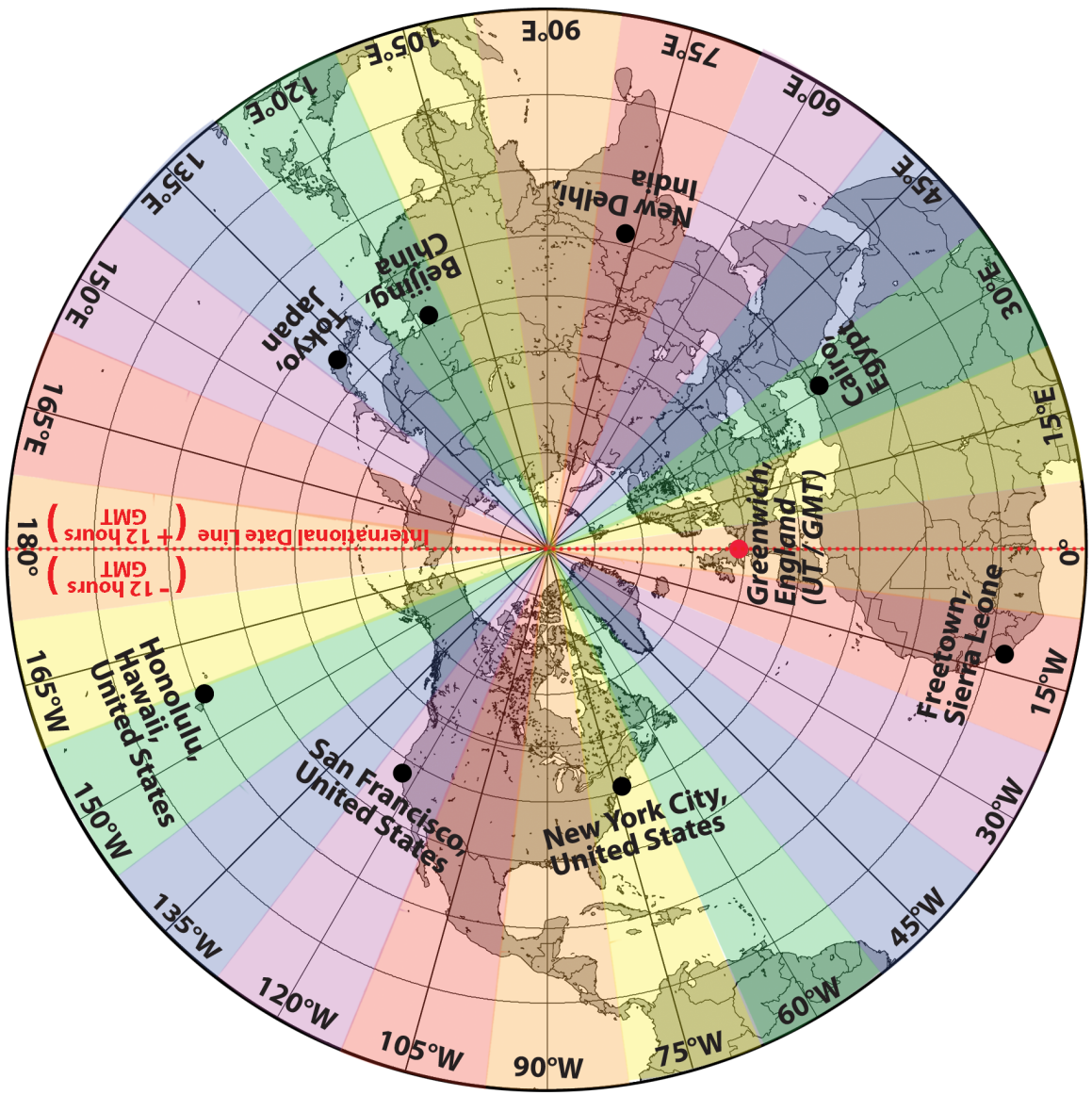
CITY	TIME
San Francisco	5:00 AM
New York City	
Honolulu	
Freetown	
Cairo	
New Delhi	
Beijing	
Tokyo	

CITY	TIME
San Francisco	
New York City	
Honolulu	
Freetown	
Cairo	
New Delhi	
Beijing	
Tokyo	12:00 PM

5. If Earth rotates 15° each hour, how long does it take to rotate 1°? Show your work.

6. How many degrees does Earth rotate in one minute? Show your work.

7. Give two reasons why this Time Zone Wheel may not be exactly accurate in real life.



**S D N**

