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	5:00 AM
New York City	
Honolulu	
Freetown	
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	
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.



