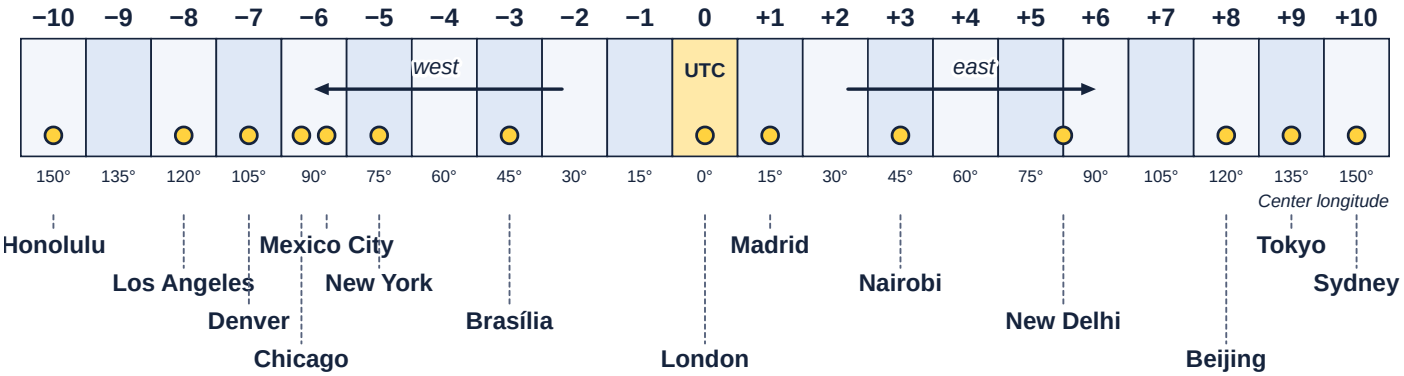
 Name _____ Date _____

Time zones: what time is it there?

For students: Earth turns once in about 24 hours. Each standard time zone is about 15 degrees of longitude wide, and the time changes by one hour from one zone to the next. The numbers on the chart show how many hours each zone is ahead of (+) or behind (−) the time at the prime meridian (UTC).

Standard time zones (hours from UTC)



When it is 12:00 noon in London, what time is it in each city?

	City	Hours from UTC	Time
1	New York		
2	Los Angeles		
3	Mexico City		
4	Brasília		
5	Nairobi		
6	New Delhi		
7	Tokyo		

This sheet uses standard time. In some places, clocks move one hour ahead in summer (daylight saving time). Real time zone borders follow country and state lines, so they are not straight.

Sources: National Geographic Society, Time zones (media.nationalgeographic.org/assets/file/Time_Zones.pdf); U.S. Naval Observatory, U.S. time zones (aa.usno.navy.mil/faq/us_tzones); U.S. Naval Observatory, Time zone map of the world (aa.usno.navy.mil/downloads/TimeZoneMap_2021.pdf).

Time zones: what time is it there?

Answer the questions

1. Earth turns 360 degrees in 24 hours. How many degrees does it turn in 1 hour?

_____

2. How many standard time zones fit around Earth? _____

3. As you travel east from London, do clocks show earlier or later times? _____

4. It is 3:00 p.m. in Chicago. What time is it in New York? _____

5. It is 9:00 a.m. in Los Angeles. What time is it in Honolulu? _____

6. A plane leaves New York at 6:00 p.m. and flies for 7 hours to London. What time is it in London when it lands?

_____

7. It is 8:00 a.m. on Monday in Tokyo. What time and day is it in New York? _____

8. What is different about the time in New Delhi? _____

This sheet uses standard time. In some places, clocks move one hour ahead in summer (daylight saving time). Real time zone borders follow country and state lines, so they are not straight.

Sources: National Geographic Society, Time zones (media.nationalgeographic.org/assets/file/Time_Zones.pdf); U.S. Naval Observatory, U.S. time zones (aa.usno.navy.mil/faq/us_tzones); U.S. Naval Observatory, Time zone map of the world (aa.usno.navy.mil/downloads/TimeZoneMap_2021.pdf).

Answer key: time zones: what time is it there?

When it is 12:00 noon in London, what time is it in each city?

	City	Hours from UTC	Time
1	New York	**−5**	**7:00 a.m.**
2	Los Angeles	**−8**	**4:00 a.m.**
3	Mexico City	**−6**	**6:00 a.m.**
4	Brasília	**−3**	**9:00 a.m.**
5	Nairobi	**+3**	**3:00 p.m.**
6	New Delhi	**+5.5**	**5:30 p.m.**
7	Tokyo	**+9**	**9:00 p.m.**

Answer the questions

1. Earth turns 360 degrees in 24 hours. How many degrees does it turn in 1 hour?

15 degrees

2. How many standard time zones fit around Earth? **24 (24 x 15 = 360 degrees)**

3. As you travel east from London, do clocks show earlier or later times? **later times**

4. It is 3:00 p.m. in Chicago. What time is it in New York? **4:00 p.m.**

5. It is 9:00 a.m. in Los Angeles. What time is it in Honolulu? **7:00 a.m.**

6. A plane leaves New York at 6:00 p.m. and flies for 7 hours to London. What time is it in London when it lands?

6:00 a.m. the next day

7. It is 8:00 a.m. on Monday in Tokyo. What time and day is it in New York? **6:00 p.m. on Sunday**

8. What is different about the time in New Delhi?

It is 5 and a half hours ahead of UTC, so it is off by a half hour from the whole-hour zones.

Sources: National Geographic Society, Time zones (media.nationalgeographic.org/assets/file/Time_Zones.pdf); U.S. Naval Observatory, U.S. time zones (aa.usno.navy.mil/faq/us_tzones); U.S. Naval Observatory, Time zone map of the world (aa.usno.navy.mil/downloads/TimeZoneMap_2021.pdf).