## 11 ( 4 ) Time Zones



You know that the Earth is turning all the time. It makes one complete rotation or turn every 24 hours. Remember that the Earth gets its light from the sun. Only half of the Earth receives light at a time. As the Earth turns, one part of the Earth gets lighter while another part gets darker.
It is not the same time everywhere on Earth. The Earth is divided into 24 time zones. There is one time zone for each hour in the day.

Six of the world's 24 time zones are in the United States. Look at the time zone map above. The time in each zone is different by one hour from the zone next to it. Washington, D.C. is in the Eastern Time Zone. Chicago is in the Central Time Zone. When it is 8:00 A.m. in Washington, D.C., it is 7:00 a.m. in Chicago. In Denver, which is in the Mountain Time Zone, it is 6:00 A.m. In San Francisco, which is in the Pacific Time Zone, it is 5:00 A.m. In the Alaska Time Zone, it is 4:00 A.m. In the Hawaii-Aleutian Time Zone, it is 3:00 A.m.

- In which time zone do you live?
- How do you think the Pacific Time Zone got its name?
- What mountain range goes through the Mountain Time Zone?
- New York City is in which time zone?


If you know the time in one time zone, you can find the time in others. If you go east one time zone, add one hour to the time. If you go east two time zones, add two hours to the time. If you go west one time zone, subtract one hour from the time.
Look at the time zone map above. Put your finger on the Mountain Time Zone. Suppose it is 7:00 there. Move your finger one time zone east, to the Central Time Zone. Add one hour to the time. It is 8:00 Central time.
Move your finger back to the Mountain Time Zone. It is still 7:00. Now move your finger one time zone west to the Pacific Time Zone. Remember, you subtract one hour for each time zone you go west.

- What time is it in the Pacific Time Zone?
- Name two cities in each time zone.
- If it is 6:00 in Chicago, what time is it in Washington, D.C.?

What time is it in Phoenix?
What time is it in Seattle?

- If it is 12:00 noon in Chicago, what time is it in Washington, D.C.? What time is it in Honolulu?
What time is it in Juneau?


## Reading a Time Zone Map



1. Lightly color the time zones. Use a different color for each zone.

Notice that the lines are not always straight. Time zones often follow state boundaries or physical features.
2. In which time zone do you find these states?

## California

$\qquad$ Pennsylvania $\qquad$
Illinois
Hawaii
3. It is 10:00 A.m. in California. What time is it in Wyoming? $\qquad$
4. It is $5: 00$ P.M. in Georgia. What time is it in Alaska? $\qquad$
5. It is 12:00 noon in Illinois. What time is it in Virginia? $\qquad$
6. It is 4:00 P.M. in Massachusetts. What time is it in Oklahoma? $\qquad$
7. It is 12:00 midnight in Iowa. What time is it in New Mexico? $\qquad$
8. It is $4: 30$ A.m. in Colorado. What time is it in Washington state? $\qquad$

## Reading a Time Zone Map



1. It is 7:00 A.m. in Denver. What time is it in the cities listed below?

| Honolulu | $\square$ | Phoenix | $\square$ |
| :--- | :--- | :--- | :--- |
| Los Angeles | $\square$ | Miami |  |
| Detroit |  | New York City |  |

2. It is $12: 00$ noon in Chicago. What time is it in the cities listed below?

| Juneau |  | Seattle | $\square$ |
| :--- | :--- | :--- | :--- |
| Denver | $\square$ | Baltimore | $\square$ |
| Houston | San Francisco |  |  |

3. The first people to see the sunrise live in the $\qquad$ Time Zone.
4. The last people to see the sun set live in the $\qquad$ Time Zone.

## Reading a Time Zone Map



1. You will be traveling to several cities in the United States. Draw a line from Jacksonville to St. Louis. What direction will you be traveling? $\qquad$ When you arrive in St. Louis, it is 2:00 P.M. What time is it in Jacksonville? $\qquad$
2. From St. Louis, you will drive to Denver. Draw a line to connect these two cities. From St. Louis to Denver is about $\qquad$ miles. What direction will you be traveling? $\qquad$
3. You will drive from Denver to Los Angeles to visit friends. Draw a line connecting these two cities.
It is 7:00 A.M. in Los Angeles. What time is it in Denver? $\qquad$
What time is it in Jacksonville? $\qquad$

## Vocabulary Check

time zone

## Map Check



1. The Earth is divided into 24 $\qquad$ _.
2. Atlanta is in the $\qquad$ Time Zone.
3. Phoenix is in the $\qquad$ Time Zone.
4. It is 2:00 P.M. in St. Louis. What time is it in the following cities?

Denver $\qquad$ Seattle

Honolulu $\qquad$
5. It is 12:00 noon in Denver. What time is it in the following cities?

## Houston

$\qquad$ Juneau $\qquad$

Seattle $\qquad$
Washington, D.C. $\qquad$

