# TIME ZONES (United States) 

## MOUNTAIN STANDARD TIME ZONE

## GRADE <br> $1-3$ <br> Instructional Pages pages 3-4 <br> Activity Page pages 5-8 <br> Practice Page $~$ page 9 <br> Homework Page - page 10 <br> Answer Key - pages 11-12 <br> Teacher Guidelines pages 1-2

## Classroom Procedure:

1. Display the following using the current time of the lesson: (Example if in East)
a. Our time- 10:15 AM
c. Hawaii- $5: 15 \mathrm{AM}$
e. Texas- 9:15 AM
b. California- 7:15 AM
d. Utah- 8:15 AM
f. Alaska-6:15 AM
2. Ask students: What do these different times mean in other parts of the United States?
3. Allow for responses and discussion.
4. Ask: What is time? How is it measured?
5. Allow for responses and discussion. Introduce time zones and how the movement of the Earth is related to time in general.
6. Distribute Time Zones content pages. Read and review the information with the students. Use the map to focus the students on the changes in the time zones. If possible, display a large map while reviewing the content with the class. Use the additional resources to enhance understanding.
7. Distribute Activity page. Read and review the instructions. Explain to students they may start with any time zone and pick a random time, correctly setting the clocks in the other time zones. (You may also assign a "starting" time to each student.)
8. Distribute supplies. Remind students to display the time zones in order from West to East on the construction paper. When completed allow student volunteers to share completed work.
9. Distribute Practice page. Check and review the students' responses.
10. Distribute the Homework page. The next day, check and review the students' responses.
11. In closing, ask students if they think living in a different time zone would have an effect on people's lives. Why or why not?
12. Allow for responses and discussion. Explain to students that a time zone difference usually does not affect a person's life.

Approximate Grade Level: 1-3
Objectives: The students will be able to identify and give reasons for the time zones of the United States and become aware of the time zones across the world.

State Educational Standards*
LB.ELA-Literacy.RI.1.7
LB.ELA-Literacy.RI.2.7
LB.ELA-Literacy.RI.3.7
Class Sessions ( 45 minutes):
1-2 class sessions
Teaching Materials/Worksheets: Time Zones content pages (2), Activity pages (4), Practice Page, Homework Page

Students Supplies: scissors, glue/paste, construction paper, handouts

Prepare Ahead of Time: Large U.S./world map w/ time zones if possible for display. Scissors, glue/paste, colored construction paper for students. Copy handouts.

Options for Lesson: Prior to the day of the lesson, send a note home for parents asking for small clocks that may no longer work. use the clocks for the lesson, displaying the different times in the time zones of the U.S. Allow students to shade or color in the clocks using colored pencils. Extend the activity to time zones outside of the United States. For higher grade levels, introduce additional time zones, International Date Line, etc. Show the time on two or three actual clocks in the classroom, displaying other time zones in the U.S., occasionally referring to them during the day. Discuss jetlag with students and how traveling to different time zones causes a disruption in sleep schedule, etc. Introduce daylight saving time. use the lesson immediately following a basic lesson related to telling time.
*Lessons are aligned to meet the education objectives and goals of most states. For more information on your state objectives, contact your local Board of Education or Department of Education in your state.

The lesson introduces the students to time zones across the U.S. and their purpose, and reviews world time zones. The students may not need to memorize the time zones, but should understand there are different time zones in the United States. At the least, students also will be able to understand the time in the Western U.S. will be earlier than the East at any given moment. Additional resources are especially useful for this lesson.
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## U.S. Time Zones

When you wake up in the morning a kid just like you is going to sleep somewhere else in the world. When you are eating dinner, someone in the world is eating breakfast. Because the Earth rotates on its axis, the Sun is shining on one part of the Earth at a time. This means it cannot be the same time everywhere in the world or in the United States. In fact, there are 24 time zones across the world, and including Alaska and Hawaii, 6 of these time zones are in the United States.

In the United States, there is a 3-hour time difference between the East Coast and the West Coast. For example, if it is 6:00 AM in New York, then it is 3:00 AM in California. Many people in New York are getting out of bed, but most of the people in California are still snuggled in their beds. The Sun has not yet appeared in California, but is shining in New York.

There are two other time zones between the East Coast and the West Coast as well, plus one in Alaska and another one for Hawaii. The Sun cannot shine on the entire country at the same time. It rises in the East before it rises in the West because the Earth rotates on its axis, and daytime starts at different times throughout the country.



As you can see on the map, if you move from East to West you subtract hours from the current time, and from West to East you add hours to the time. The clocks show the 4 major time zones in the United States:


A student in Oregon is eating lunch, but a student in Ohio is ending the school day. In addition, since there are 24 different time zones across the world, in some places it is already the next day. However, no matter where a person lives, there are 24 hours in each day to live, work, and play.

What is name of the time zone where you live?
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## Instructions

1. Cut apart the clock hands. There are two extra pairs if needed.
2. Cut apart the clock faces and time zone labels.
3. Set each clock based on one of the six U.S. time zones by attaching the hands to the clocks.
4. Match the time zone labels to the clocks and glue/paste (in proper order) onto construction paper.

## Small Clock Hands



Big Clock Hands





Name
Date $\qquad$

## Use the map below to help you answer each of the questions

1. Including Hawaii and Alaska, how many time zones are there in the United States? $\qquad$
2. If it is 9:00 AM on the West coast, tell what time it is in other time zones (Use AM or PM):
a. Central $\qquad$ c. Alaska $\qquad$ e. Eastern $\qquad$
b. Hawaii $\qquad$ d. Mountain $\qquad$
3. If it is 1:00 PM in the Central time zone, tell what time it is in the other time zones (Use AM or PM):
a. Pacific $\qquad$ c. Alaska $\qquad$ e. Eastern $\qquad$
b. Hawaii $\qquad$ d. Mountain $\qquad$
4. If it is 5:00 AM on the East coast, tell what time it is in the other time zones (Use AM or PM):
a. Pacific $\qquad$ c. Alaska $\qquad$ e. Central $\qquad$
b. Hawaii $\qquad$ d. Mountain $\qquad$
5. If it is $8: 00$ PM in Hawaii, tell what time it is in the other time zones (Use AM or PM):
a. Pacific $\qquad$ c. Alaska $\qquad$ e. Central $\qquad$
b. Eastern $\qquad$ d. Mountain $\qquad$

$\qquad$

## Answer each question

1. Name the 4 major time zones in the United States?
2. How many different time zones are there in the world? $\qquad$
3. Explain why there are different time zones throughout the world:
4. How many total time zones are used in the United States? $\qquad$
5. If a person moves from East to West, they (add or subtract) hours.
6. If a person moves from West to East, they (add or subtract) hours.
7. If the time is $8: 00$ PM in Washington, D.C., what time is it in each state?

Washington $\qquad$ Utah $\qquad$
Hawaii $\qquad$ Texas $\qquad$
Alaska $\qquad$
8. If the time is $2: 00 \mathrm{AM}$ in New Mexico, what time is it in each state?

Hawaii $\qquad$
Oklahoma $\qquad$

Florida $\qquad$
California $\qquad$

Oregon $\qquad$
9. James lives in Maine. His friend, Isabella, lives in Hawaii. James wakes up at 7:00 AM. Should he call Isabella? Why or why not?
10. If the time in lowa is $1: 00 \mathrm{PM}$, what time is it in California? $\qquad$
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## Use the map below to help you answer each of the questions

1. Including Hawaii and Alaska, how many time zones are there in the United States? $\qquad$
2. If it is 9:00 AM on the West coast, tell what time it is in other time zones (Use AM or PM):
a. Central 11:00 AM
c. Alaska 8:00 AM
e. Eastern 12:00 PM
b. Hawaii 7:00 AM
d. Mountain 10:00 AM
3. If it is $1: 00 \mathrm{PM}$ in the Central time zone, tell what time it is in the other time zones (Use AM or PM):
a. Pacific 11: 00 AM
c. Alaska 10:00 AM
e. Eastern 2:00 PM
b. Hawaii 9:00 AM
d. Mountain 12:00 PM
4. If it is 5:00 AM on the East coast, tell what time it is in the other time zones (Use AM or PM):
a. Pacific 2:00 AM
c. Alaska 1:00 AM
e. Central 4:00 AM
b. Hawaii 12:00 AM
d. Mountain 3:00 AM
5. If it is $8: 00$ PM in Hawaii, tell what time it is in the other time zones (Use AM or PM):
a. Pacific $10: 00 \mathrm{PM}$
c. Alaska 9:00 PM
e. Central 12:00 AM
b. Eastern 1:00 AM
d. Mountain 11:00 PM

$\qquad$ Date $\qquad$

## Answer each question

1. Name the 4 major time zones in the United States?

## Pacific, Mountain, Central, Eastern

2. How many different time zones are there in the world? 24
3. Explain why there are different time zones throughout the world:

The Sun does not shine at the same time everywhere on Earth. Because the Earth rotates on its axis, the Sun is shining on one part of the Earth at a time.
4. How many total time zones are used in the United States? 24
5. If a person moves from East to West, they (add or subtract) hours.
6. If a person moves from West to East, they (add or subtract) hours.
7. If the time is $8: 00$ PM in Washington, D.C., what time is it in each state?

| Washington 5:00 PM | Utah 6:00 PM |
| :--- | :--- |
| Hawaii 3:00 PM | Texas 7:00 PM |

Alaska 4:00 PM
8. If the time is $2: 00 \mathrm{AM}$ in New Mexico, what time is it in each state?

Hawaii 11:00 AM
Oklahoma 3:00 AM
Oregon 1:00 AM

Florida 4:00 AM
Alaska 12:00 AM (Midnight)
9. James lives in Maine. His friend, Isabella, lives in Hawaii. James wakes up at 7:00 AM. Should he call Isabella? Why or why not?

No, he should not call Isabella. She is most likely asleep because in Hawaii, it is 5 hours earlier, meaning it is $2: 00 \mathrm{AM}$.
10. If the time in lowa is 1:00 PM, what time is it in California? 11:00 AM

