

Plan a Road Trip on U.S Interstates

by Shawnti Peachey

Teacher Planning Information

Overview: Using basic maps of the U.S. cities and interstates, students will plan road trips on U.S. Interstates while calculating distance (mileage) and time (hours/days).

Objectives: In completing this activity the student should be able to:

- Understand that odd numbered interstates run N/S and that even numbered interstates run W/E.
- Understand road-trip terminology such as *interstate*, *freeway*, *one-way*, *pit stop*, *cross-country*, and *round-trip*.
- Calculate distance and time of a road trip.
- Convert miles to hours.
- Convert hours to days.

Oregon Common Core for Math:

3.MD.G Solve problems involving **measurement and estimation of intervals of time**, liquid volumes, and masses of objects.

Oregon Geographic Content Standards:

3.8 Identify links of land, regions, river systems, and **interstate highways** between Oregon and other states.

Grade: 3-5

Time: 15-20 minutes

Materials:

- Pencils/Pens (15)
- Copies of maps (Do NOT change the scale of the map, colored copies not necessary but helpful if possible).
 - Page 5 (5 copies)
 - Page 6 (10 copies)
 - Page 7 (5 copies)
 - Page 8 (5 copies)

NOTE: Cut out the quarter maps from pages 7-8 and tape them together to make a larger map.

- Page 9 (2-3 copies) Do NOT change the scale of the rulers. Cut out the rulers, they are small but they are made to scale. If possible, print them on cardstock paper to make them sturdier.
- Pages 10-13 **Travel Card Pages** (1 copy of each page) Again, color copies not necessary but helpful for students. Cut out travel cards on dotted line.
- Pages 14-17 **Trip Calculator Worksheets** (enough copies so every student can have a minimum of 1 worksheet) **Note:** some students may do more than 1 worksheet, and many students will only do the **One Way Short Trip** Worksheet.
 - If you are unsure how many worksheets to print here is the suggested number:
 - **One Way Short Trip** Calculator Worksheet (30 copies)
 - **Cross Country Trip** Calculator Worksheet (20 copies)
 - **One-Way with Pit Stop City Trip** Calculator Worksheet (20 copies)
 - **Round Trip Challenge** Calculator Worksheet (10 copies)

Sources:

U.S. Interstate Highway System Image from: *Pitstops for Kids*.

<http://pitstopsforkids.com/interstate-directory/>

U.S. Major Cities Image from: *Printable Word Maps*.

<http://www.printableworldmaps.net/tag/u-s-major-cities-map>

Interstate Highway Sign Images from: *Road Traffic Signs*.

<http://www.roadtrafficsigns.com/signs/interstate-5-sign/sku-k-9218-5.aspx>

U.S. Cities and Interstates Map Image from: *Student Guide USA*.

<http://www.studentguideusa.com/usa/map.html>

Definitions from: *Merriam-Webster, Incorporated*. [http://www.merriam-](http://www.merriam-webster.com/dictionary/one%E2%80%93way)

[webster.com/dictionary/one%E2%80%93way](http://www.merriam-webster.com/dictionary/one%E2%80%93way)

How to do this activity

1. Work through the **Background Information** Page, answer the questions and discuss the vocabulary included on the sheet.
2. Make sure you read the **Fun Facts** at the bottom of the Background Information Page.
3. Look at and familiarize yourself with the **three different maps** of the United States
 - **U.S. Interstates Map**
 - **U.S. Major Cities Map**
 - **U.S. Interstates and Major Cities Map**
4. Look at and familiarize yourself with the **distance rulers** provided at the table (they are mini, but they are made to scale).

Activity Directions:

5. Draw one **Travel Card** at a time. Find a blank Trip Calculator Worksheet that matched your travel card.
6. Map a route on U.S. Interstates using the cities provided on the travel card. You will have to use the U.S. Interstates & Major Cities Map and your ruler.
7. Notice that the travel cards have different difficulty levels. As you get comfortable mapping the **One-Way Short Trip** travel cards, move on to the next level. Here are the levels in order of difficulty:
 - **One-Way Short Trip**
 - **Cross-Country**
 - **One-Way with Pit Stop City**
 - **Regional Round Trip Challenge Card**

Background Information Sheet

As a group consider and discuss the following questions:

1. Have you ever traveled on an interstate/freeway?
2. If so, what was your starting point? What was your ending point?
3. Have you ever traveled outside of Oregon? If so, where did you go?
4. Can you drive to Hawaii?
5. Can you drive to Alaska?

Definitions:

- Interstate (inter-state): *between states*
- Freeway: *a wide highway that is built for fast travel often “free” from traffic lights, stop signs, or tolls*
- One-Way Trip: *travel to a place but not back from the place*
- Cross Country Trip: *extending or moving across an entire country*
 - *Example: Portland to Washington D.C.*
- Pit Stop: *a short stop during a journey for rest or food or to use a bathroom*
- Round Trip: *a trip to a place and back often over the same or different routes*

Fun Facts:

Interstate 5  is the interstate that runs North and South through Oregon

Interstate 84  is the interstate that runs West and East through Oregon

Odd numbered Interstates *always* run North and South

Even numbered Interstates *always* run West and East

Map of U.S. Interstates

(Not including Alaska & Hawaii)



Map of U.S. Major Cities



Map of U.S. Interstates & Major Cities

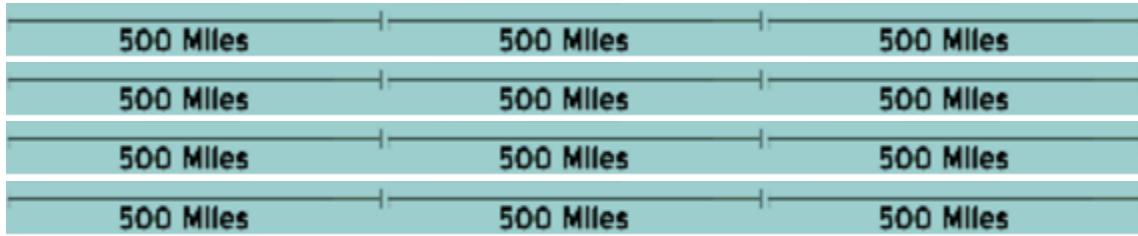




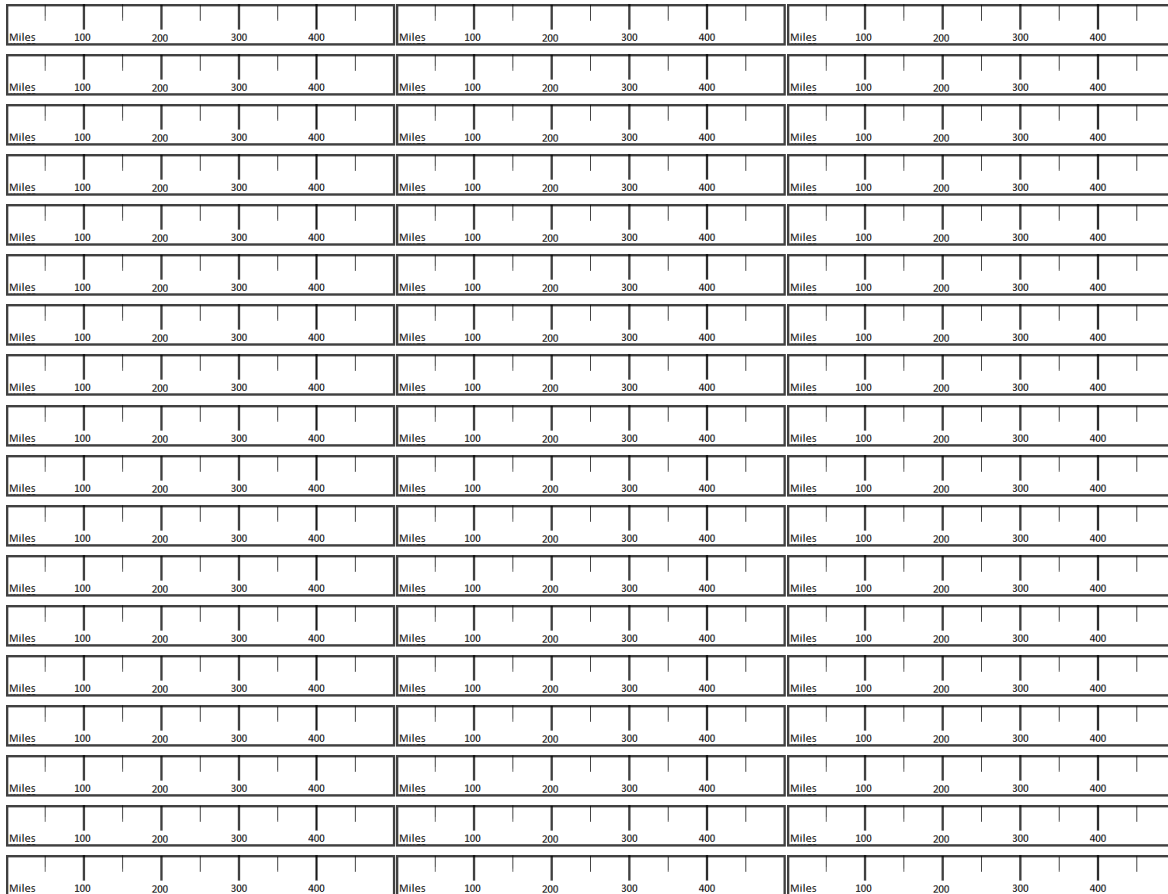


Rulers for Measurements

Rulers from map:



Rulers for measuring distance:



Travel Cards: **One-Way Short Trip**

<p>One-Way Short Trip</p> <p>City of Departure: <i>Portland, Oregon</i> City of Arrival: <i>Houston, Texas</i></p>	<p>One-Way Short Trip</p> <p>City of Departure: <i>Chicago, Illinois</i> City of Arrival: <i>Baton Rouge, Louisiana</i></p>
<p>One-Way Short Trip</p> <p>City of Departure: <i>Oklahoma City, Oklahoma</i> City of Arrival: <i>Los Angeles, California</i></p>	<p>One-Way Short Trip</p> <p>City of Departure: <i>New York City, New York</i> City of Arrival: <i>Chicago, Illinois</i></p>
<p>One-Way Short Trip</p> <p>City of Departure: <i>Portland, Oregon</i> City of Arrival: <i>Seattle, Washington</i></p>	<p>One-Way Short Trip</p> <p>City of Departure: <i>Fargo, North Dakota</i> City of Arrival: <i>Kansas City, Kansas</i></p>
<p>One-Way Short Trip</p> <p>City of Departure: <i>Nashville, Tennessee</i> City of Arrival: <i>Tucson, Arizona</i></p>	<p>One-Way Short Trip</p> <p>City of Departure: <i>San Francisco, California</i> City of Arrival: <i>Denver, Colorado</i></p>
<p>One-Way Short Trip</p> <p>City of Departure: <i>Seattle, Washington</i> City of Arrival: <i>Los Angeles, California</i></p>	<p>One-Way Short Trip</p> <p>City of Departure: <i>Dallas, Texas</i> City of Arrival: <i>Atlanta, Georgia</i></p>

Travel Cards: **Cross Country Trip**

<p>Cross Country</p> <p>City of Departure: <i>Portland, Oregon</i></p> <p>City of Arrival: <i>Orlando, Florida</i></p>	<p>Cross Country</p> <p>City of Departure: <i>Seattle, Washington</i></p> <p>City of Arrival: <i>New York City, New York</i></p>
<p>Cross Country</p> <p>City of Departure: <i>Columbia, South Carolina</i></p> <p>City of Arrival: <i>Los Angeles, California</i></p>	<p>Cross Country</p> <p>City of Departure: <i>Augusta, Maine</i></p> <p>City of Arrival: <i>Portland, Oregon</i></p>
<p>Cross Country</p> <p>City of Departure: <i>Miami, Florida</i></p> <p>City of Arrival: <i>Seattle, Washington</i></p>	<p>Cross Country</p> <p>City of Departure: <i>Washington D.C.</i></p> <p>City of Arrival: <i>San Francisco, California</i></p>

Travel Cards: **One-Way with Pit Stop City**

<p>One-Way with Pit Stop City</p> <p>City of Departure: <i>New York City, New York</i></p> <p>Travel Through/Pit Stop: <i>Chicago, Illinois</i></p> <p>City of Arrival: <i>Denver, Colorado</i></p>	<p>One-Way with Pit Stop City</p> <p>City of Departure: <i>Albuquerque, New Mexico</i></p> <p>Travel Through/Pit Stop: <i>Denver, Colorado</i></p> <p>City of Arrival: <i>Seattle, Washington</i></p>
<p>One-Way with Pit Stop City</p> <p>City of Departure: <i>Philadelphia, Pennsylvania</i></p> <p>Travel Through/Pit Stop: <i>Des Moines, Iowa</i></p> <p>City of Arrival: <i>Dallas, Texas</i></p>	<p>One-Way with Pit Stop City</p> <p>City of Departure: <i>Minneapolis, Minnesota</i></p> <p>Travel Through/Pit Stop: <i>Cheyenne, Wyoming</i></p> <p>City of Arrival: <i>El Paso, Texas</i></p>
<p>One-Way with Pit Stop City</p> <p>City of Departure: <i>Los Angeles, California</i></p> <p>Travel Through/Pit Stop: <i>Salt Lake City, Utah</i></p> <p>City of Arrival: <i>Seattle, Washington</i></p>	<p>One-Way with Pit Stop City</p> <p>City of Departure: <i>Boston, Massachusetts</i></p> <p>Travel Through/Pit Stop: <i>Washington D.C.</i></p> <p>City of Arrival: <i>Miami, Florida</i></p>

Travel Cards: **Round Trip**

Challenge Card **Western Round Trip**

City of Departure/Arrival: *Portland*
Travel Through #1: *Los Angeles*
Travel Through #2: *Las Vegas*
Travel Through #3: *Salt Lake City*
Travel Through #4: *Boise*
Arrival Back to: *Portland*

Challenge Card **Eastern Round Trip**

City of Departure/Arrival: *Washington D.C.*
Travel Through #1: *Philadelphia*
Travel Through #2: *Charleston*
Travel Through #3: *Columbia*
Arrival Back to: *Washington D.C.*

Challenge Card **Mid-West Round Trip**

City of Departure/Arrival: *Chicago*
Travel Through #1: *Des Moines*
Travel Through #2: *Kansas City*
Arrival Back to: *Chicago*

Challenge Card **New England Round Trip**

City of Departure/Arrival: *Augusta*
Travel Through #1: *Boston*
Travel Through #2: *Niagara Falls*
Arrival Back to: *Augusta*

Challenge Card **The South Round Trip**

City of Departure/Arrival: *Dallas*
Travel Through #1: *Jackson*
Travel Through #2: *New Orleans*
Travel Through #3: *El Paso*
Arrival Back to: *Dallas*

Extra Challenge Card **Entire Country Round Trip**

City of Departure/Arrival: *Portland*
Travel Through #1: *Chicago*
Travel Through #2: *New York City*
Travel Through #3: *Jacksonville*
Travel Through #4: *Houston*
Travel Through #5: *Phoenix*
Travel Through #6: *Los Angeles*
Arrival Back to: *Portland*

One-Way Short Trip Calculator Worksheet

City of Departure _____

City of Arrival _____

List of **Interstates** driven on: (There might only be 1 Interstate)

Interstate	Even or Odd Number?	North/South or East/West?
1.		
2.		
3.		

Use the distance ruler to measure:

Total distance (in miles) _____

Use the conversion 60 miles/1 hour to calculate:

Total time driving (in hours) _____

Use the conversion 24 hours/1 day to calculate:

Total days of travel (convert hours to days) _____

Cross Country Trip Calculator Worksheet

City of Departure _____

City of Arrival _____

List of **Interstates** driven on: (There might be more than 5 Interstates)

Interstate	Even or Odd Number?	North/South or East/West?
1.		
2.		
3.		
4.		
5.		

Use the distance ruler to measure:

Total distance (in miles) _____

Use the conversion 60 miles/1 hour to calculate:

Total time driving (in hours) _____

Use the conversion 24 hours/1 day to calculate:

Total days of travel (convert hours to days) _____

How would your total days of travel change if you were to stop to rest overnight for 10 hours every day?

One-Way with Pit Stop City Trip Calculator Worksheet

City of **Departure** _____

Travel Through/**Pit stop** City _____

City of **Arrival** _____

List of **Interstates** driven on: (There might be more than 7 Interstates)

Interstate	Even or Odd Number?	North/South or East/West?
1.		
2.		
3.		
4.		
5.		
6.		
7.		

Use the distance ruler to measure:

Total distance (in miles) _____

Use the conversion 60 miles/1 hour to calculate:

Total time driving (in hours) _____

Use the conversion 24 hours/1 day to calculate:

Total days of travel (convert hours to days) _____

Round Trip Challenge Calculator Worksheet

City of **Departure** _____

Travel Through:

#1 _____ #2 _____ #3 _____

#4 _____ #5 _____ #6 _____

Back to city of _____ **(Arrival)**

List of **Interstates** driven on: (There might be more than 7 Interstates)

Interstate	Even or Odd Number?	North/South or East/West Direction?
1.		
2.		
3.		
4.		
5.		
6.		
7.		

Use the distance ruler to measure:

Total distance (in miles) _____

Use the conversion 60 miles/1 hour to calculate:

Total time driving (in hours) _____

Use the conversion 24 hours/1 day to calculate:

Total days of travel (convert hours to days) _____