

I'M OUT OF HERE

Student/Class Goal

Students have been working on developing household budgets and would like to plan a vacation for their family this summer. They know they must plan ahead and begin to discuss what would be needed to cover their expenses.

Outcome *(lesson objective)*

Students will use a variety of resources to decide on a vacation destination. They will locate three points of interest, a hotel, and two restaurants. They will also obtain driving directions for their trip, set up a trip budget, and calculate the cost of each trip expense in categories.

Time Frame

1-2 hours

Standard *Use Math to Solve Problems and Communicate*

NRS EFL 3-5

Number Sense	Benchmarks	Geometry & Measurement	Benchmarks	Processes	Benchmarks
Words to numbers connection		Geometric figures		Word problems	
Calculation	3.2, 4.2, 5.1	Coordinate system		Problem solving strategies	
Order of operations		Perimeter/area/volume formulas		Solutions analysis	4.27, 5.27
Compare/order numbers		Graphing two-dimensional figures		Calculator	3.22, 4.28, 5.28
Estimation		Measurement relationships		Mathematical terminology/symbols	
Exponents/radical expressions		Pythagorean theorem		Logical progression	
Algebra & Patterns	Benchmarks	Measurement applications		Contextual situations	4.31, 5.31, 6.32
Patterns/sequences		Measurement conversions		Mathematical material	
Equations/expressions	3.15, 4.16	Rounding	3.13, 4.14, 5.14	Logical terms	
Linear/nonlinear representations		Data Analysis & Probability	Benchmarks	Accuracy/precision	3.26, 4.33, 5.34
Graphing		Data interpretation	3.16, 4.20	Real-life applications	3.27, 4.34, 5.35
Linear equations		Data displays construction	3.17, 4.21	Independence/range/fluency	3.28, 4.35, 5.36
Quadratic equations		Central tendency			
		Probabilities			
		Contextual probability			

Materials

Travel TripTik Instructions
 Sample Travel Budget
 Travel Budget Allowance Sheet
 Trip Planning Worksheet
 Calculating Miles Per Gallon Handout
 Internet, Travel Resources, Maps

Learner Prior Knowledge

Talk about going on vacation. Have students briefly share some of the vacations they have taken, including destination, transportation, favorite hotels, tourist attractions, and how they determined a vacation budget. Introduce the Travel TripTik to the group. Computer literacy necessary for finding online directions.

Instructional Activities

Step 1 - Pass out the *Sample Travel Budget* included as a handout with this lesson. Introduce the students to the pie chart and to the information this type of graph shows. Ask questions, such as "What trip budget category is the largest? The smallest?"

Then direct the group to also look at the table of expenses and talk about how the expenses are broken down into days. Discuss the major categories of a vacation budget. Was it easier to read the table or the pie chart to find out the largest expense category for

the sample trip budget?

Decide where you want to go on a driving vacation. To help you decide, you need to have a vacation budget. Write your total trip budget on the *Travel Budget Allowance* Sheet. You will also need resource materials to help you make your decision. Visit the library travel section or check out the Internet for information.

Step 2 - Pass out the *Trip Planning Worksheet*. Use the Internet to find out about the city that you want to visit. Students may choose to work individually or in pairs or triads to complete this activity. Work through these

- Find 3 attractions that you want to visit and information about each one.
- Find a hotel in the city you will be visiting that is the best value.
- Find 2 restaurants in the city where you would like to eat.
- Find out 3 things about the city that you didn't know before.

Step 3 – Go to your favorite Internet map site and print out the driving directions from your home to your vacation destination. You will need to know the origin of your trip (city and state where you live) and the destination of your trip (city and state where you are going on vacation).

Step 4 - The above programs will figure the trip time and distance. Based on this information, complete your travel budget and answer the following questions:

- a. How long will it take you to get to your vacation destination?
- b. Round to the nearest 100 the number of miles you will have traveled after four hours of driving. Where will you be? Do the same for miles traveled after six hours of driving.
- c. In which direction will you primarily be traveling on this trip?
- d. If you average 60 miles per hour for the entire trip, how many hours would it take you? What if you average 65 miles per hour?
- e. If your car gets 25 miles per gallon and gas costs an average of 1.70 per gallon, how much will the gas for your trip cost?

HINT Divide total trip mileage by 25 then multiply that answer times 1.70. For example, Carol's trip totals 800 miles. $800/25 = 32$. $32 \times 1.70 = \$54.40$. Refer to the *Calculating Miles per Gallon* handout included with this lesson.

Step 5 - Share your Travel TripTik with others in the group.

Assessment/Evidence *(based on outcome)*

Travel TripTik

Teacher Reflection/Lesson Evaluation

Not yet completed.

Next Steps

Technology Integration

Free Trip <http://www.freetrip.com>

Mapquest <http://www.mapquest.com>

Rand McNally <http://www.randmcnally.com>

Google Maps <http://maps.google.com/>

Purposeful/Transparent

Students would like to be able to afford a vacation, but are also financially concerned about meeting their family budgets.

Contextual

Creating this vacation budget provides a means for students to exhibit their procedural knowledge by collecting various pieces of data and using it correctly to create a TripTik. They are also applying or transferring skills developed earlier when they created a household budget.

Building Expertise

Students draw on their prior knowledge of household budgeting and past vacation experiences to complete this activity. Calculators can be used for scaffolding at the lower levels.

Travel TripTik Instructions

Acquaint Yourself with These Words



Origin is the starting point, the place where you live or the place where you will start driving for your vacation.

Destination is the city or location where you want to end up on your vacation.

Attractions are places to go and things to do. For example, Cedar Point is an attraction in Sandusky, Ohio.

Mile per Gallon is the number of miles your car can travel on one gallon of gas. Refer to the *Miles per Gallon* handout to calculate miles per gallon for your particular car.

URL stands for Uniform Resource Locator. This is the address of a web page on the Internet. Each page on the Internet has an address. For example, the URL for AltaVista is altavista.com. You can also say that AltaVista's address is altavista.com

Step 1 -- Travel Budget

Decide where you want to go on a driving vacation. To help you decide, you need to have a vacation budget. Write your total trip budget on the *Travel Budget Allowance* Sheet. You will also need resource materials to help you make your decision. Visit the library travel section or check out the Internet for information. Area Chambers of Commerce or the AAA can also provide resources.

A good place to start is **Yahoo Travel** Guides at <http://travel.yahoo.com>. Each state is listed along with most cities in each state. If you are visiting a smaller city, use a common search engine, such as **Google** at <http://www.google.com> or **Dogpile** at <http://www.dogpile.com> or **AltaVista** at <http://www.altavista.com>. Just type in the city and state that you plan to visit.

Suggestions on the best restaurants, tourist sites, and parking places are offered for major cities in the United State with links to area news, sports, shopping and the arts can be found at **CitySearch** at <http://sidewalk.citysearch.com>. **Expedia** offers many travel deals at <http://www.expedia.com/daily/home>.

Step 2 -- Trip Planning Worksheet

Use the Internet to find out about the city that you want to visit. Work through these questions:

- Find 3 attractions that you want to visit and information about each one.
- Find a hotel in the city you will be visiting that is the best value.
- Find 2 restaurants in the city where you would like to eat.
- Find out 3 things about the city that you didn't know before

Step 3 -- Driving Directions

Go to one of the following sites and print out the driving directions from your home to your vacation destination.

<http://www.mapquest.com> or <http://www.freetrip.com> or <http://www.randmcnally.com>

You will need to know the origin of your trip (city and state where you live) and the destination of your trip (city and state where you are going on vacation).

Happy Trails!!



Trip Planning Worksheet

Find 3 attractions that you want to visit and information about each one. Name the attractions.

Why do you want to visit these sites?

What did you learn about these sites?

What is the cost of admission for each one? The total cost for all 3?

Can you afford to go to all 3 attractions?

Find a hotel in the city you will be visiting that has the best value for your money.

What hotel did you pick and why?

What is the cost per night? The total cost per trip?

Are there additional charges such as a room tax? How much?

Be sure to add this into your hotel costs.

Find 2 restaurants in the city where you would like to eat. Name each one.

What is the average tab for each restaurant?

Could you afford to eat here every day?

Find out 3 things about the city that you didn't know before.

CALCULATING MILES PER GALLON



Gas mileage means the number of miles a vehicle will travel on one gallon of gas.

1. Write down the odometer reading when the gas tank is filled up.
2. The next time the gas tank is filled, write down how many gallons of gas it takes.
3. Then write down the odometer reading again.
4. Subtract the first odometer reading (step 1) from the second odometer reading (step 3).
This will tell you the number of miles traveled between the two fill-ups.
5. Divide the number of miles traveled (step 4) by the number of gallons of gas used (step 2).
This number equals the gas mileage of your car.

Mileage Math

First fill up:

_____ = A
(odometer reading)

Second fill up:

_____ = B
(gallons of gas)

_____ = C
(odometer reading)

Formula

$C - A = D$ (miles traveled)

$D/B = \text{MPG}$ (miles per gallon)

Travel Budget

Destination of trip:		
Goal of trip:		
Dates of trip:		
Number of nights:		
Number of days:		
Total trip allowance:		
Per day allowance:		
Breakdown of Expenses	Per Day	Total
Hotel		
Air fare		
Car rental		
Bus/Taxi		
Entertainment		
Gifts and souvenirs		
Meals		
Gasoline/Tolls		
Other		
Other		
Other		
TOTAL		

Sample Travel Budget

Destination of trip:		
Goal of trip:		
Dates of trip:		
Number of nights:		
Number of days:	7	
Total trip allowance:	1200	
Per day allowance:	171	
Breakdown of expenses	Per Day	Total
Hotel	75	525
Air fare		
Car rental		
Bus/Taxi		
Entertainment	20	140
Gifts and souvenirs	15	105
Meals	40	280
Gasoline/Tolls	25	175
Other:		
Other:		
Other:		
TOTAL	175	1225

Percent of Trip Budget

To determine what percentage of your trip budget each item represents, calculate the percent by multiplying each item by 100 and then dividing by your total trip budget.

For example, the sample hotel cost was $525 \times 100 = 52500$

$52500/1225 = 42.86\%$.

Formula

is/of = %/100

$525/1225 = \%/100$

525 is what percent of 1225?

Hotel	42.86%
Meals	22.84%
Gas/Tolls	14.29%
Entertainment	11.43%
Gifts/Souvenirs	8.57%

