My Dream Vehicle

8th Grade Team

Name ____________________________
You may not have your license yet, but I bet you can't wait until you have your own vehicle!

Your challenge is to find a used vehicle that you might actually be able to buy in a few years - either by yourself or with the help of a parent (and the bank of course)!

1) Browse through newspapers (Buy, Sell and Trade; Auto Trader, online papers etc.) and choose one ad for a vehicle that you may be interested in buying someday. Is a pick-up truck, a motorcycle, or a sports car your dream vehicle?

2) Cut the ad out and paste it on your assignment sheet.

3) Turn this vehicle into your dream vehicle. What'll it be? A new paint job? Dual exhaust? Chrome tips? Tinted windows? New stereo? Do some research online, in magazines or by asking a professional approximately how much these upgrades will cost.
4) Add up the costs of your upgrades (don't forget the taxes).

5) When you register a new used car, you need to pay taxes on it. Find the taxes on the purchase price of your vehicle and add THAT to the cost of the car. Use ___% for the taxes on your vehicle.

6) Assuming you need a loan to pay for the vehicle, how much will you need to ask the bank for (purchase price, + taxes + upgrades (including taxes))?

7) For vehicles $4000 or less, the most you can get is a 3 year loan. For vehicles greater than $4000, the most you can get is a 5 year loan.

The bank doesn't just give you money for free - they charge you interest. Let's assume that the interest rate on your loan is 7%.

Take the total amount that you need from the bank and find 7% of that number. This is how much the bank will require from you each year of your loan, for lending you the money. How much interest will you pay each year?
8) Add up the total that you're asking the bank for + the interest for each year of the loan. What will the vehicle cost you in total, by the time you pay off your loan? How much will you pay each year? How much will your monthly payments be?
How do I figure out the interest???

Banks calculate interest differently. For this challenge, imagine that the bank will charge you 7% interest on the total of your vehicle for every year of your loan.

Example: If the vehicle costs $5000, 7% of $5000 is $350. You need to pay an extra $350 a year in interest to the bank, on top of the $5000 that they're giving you for the vehicle.

If you have a loan for 5 years, that means you'll be paying back the $5000 plus $350 for each of the 5 years for a total of $350 x 5 yrs = $1750 (this is just the interest!) + your loan of $5000 giving you a grand total of $6750 for the vehicle.

- You always need to change a percent to a decimal before you do your calculations.
- To change a percent to a decimal, move the decimal 2 places to the left.
- Ex: 5% = 0.05
- Then, multiply the decimal by your amount. If you were trying to find 5% interest on $1200...

5% of $1200

0.05 x $1200 = $60 ($60 in interest)

Interest: a charge made by a bank for the use of money deposited in an account (a loan)
Name: __________________________  Date: __________

*My Dream Vehicle...*

**Paste Your Ad Here!!!**

Price of Vehicle: __________

Taxes on Vehicle (show your work, round to the nearest dollar)
What would you do...and how much will it cost???

<table>
<thead>
<tr>
<th>Upgrade and Source</th>
<th>Cost</th>
<th>Taxes (you may be getting parts from a friend - and not have to pay taxes)</th>
<th>Cost x Taxes (taxes in decimal form)</th>
<th>Cost + Taxes</th>
<th>Total for upgrades</th>
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Choose three to five upgrades that you'd like to make to your vehicle.

You can show visuals (photos or drawings) of these upgrades as well if you like: The paint color you'd choose, chrome wheels or exhaust, etc. The "Source" is the website, store, person etc. where you found your information.
So, how much is this beast going to cost you each month?

Show your calculations. Round to the nearest hundredth.

1. Take the cost of the vehicle and add the taxes.

2. Add your total upgrades to the cost and taxes of the vehicle. This will give you the total that you need to borrow from the bank.

3. The bank will charge you 7% interest on this amount for each year that you have your loan. How much is 7% of the total cost of your vehicle?

4. How many years will your loan be for? ______________

5. How many months is this? ______________
6. What will your monthly payment be (STOP: Make sure that you've included the price of the vehicle, plus taxes, plus upgrades, plus the interest for each year of the loan)?

7. Now, let's assume that you've saved $1000 as a down payment for your vehicle. What will your monthly payment be, if you can come up with $1000 to begin with?
Optional Extensions:

**Math**

- Find Gas Mileage (I've included this one for you)
- Assuming you make minimum wage - how many hours (after taxes) will you have to work to pay for your vehicle?

**Writing**

- Write a descriptive paragraph describing your vehicle (included)
- Imagine that you're selling your vehicle - create an ad to persuade buyers to give you a call
- Create an action plan for how you can get started saving some money for your future vehicle
- Create a resume to help you get a job, to get one step closer to your dream vehicle
What's your gas mileage?

Driving a vehicle is so expensive these days with the current price of fuel.

When you get your own vehicle, you'll probably be curious about what gas mileage you're getting.

Time to practice! Choose three adults who drive three different types of vehicles and ask if you can calculate their gas mileage for them. (If this is not possible - I have another option). Follow these steps.

1) Next time they fill up, tell them to re-set the odometer. They just need to push one button and it will record how many miles they travel until they fill up again.

2) When they fill up with gas, they need to remember to record how many gallons the tank took and how far they went. (You need the # of miles and # of gallons.)

3) You need to take the number of miles that they drove and divide it by the number of gallons that it took to fill their vehicle. This simple calculation will give you the MPG (miles per gallon) or the "gas mileage" for their car.

Calculations for finding gas mileage (Round to tenths):

Car #1:  

Car #2:  

Car #3:  

Which vehicle has the best gas mileage?  

Created by Krystal Mills Copyright ©2011  
http://www.teacherspayteachers.com/Store/Krystal-Mills/Products
What's your gas mileage?

Driving a vehicle is so expensive these days with the current price of fuel.

When you get your own vehicle, you'll probably be curious about what gas mileage you're getting.

Time to practice! Imagine that you have the choice of three vehicles. You'd like to choose the one with the best gas mileage.

| Car#1: 334 miles and 13 gallons | Car#2: 250 miles and 11 gallons | Car#3: 512 miles and 15 gallons |

To find gas mileage:

You need to take the number of miles driven and divide it by the number of gallons that take took to fill the vehicle. This simple calculation will give you the MPG (miles per gallon) or the gas mileage for their car.

Calculations for finding gas mileage (Round to tenths):

Car #1:                                 Car#2:                                      Car #3:

Which vehicle has the best gas mileage?
Converting (Km/L to MPG)

Switching gas mileage from km/liter to miles/gallon.

To convert Km to Miles...

1. Multiply the number of kilometers by .621.
   For example, let's say a car gets 12 km per liter, 12 \times 0.621 = 7.452.
   This is the number of miles.

To convert Liters to Gallons...

2. Multiply the number of liters by .264.
   In our example we have one liter, 1 \times 0.264 = .264.
   This is the number of gallons.

To find miles/gallon...

3. Divide the number of miles by the number of gallons.
   7.452 \div 0.264 = 28.23.
   This is the number of miles per gallon.
Write a descriptive paragraph about your dream vehicle. "Show" it to me. Don't just "tell" me about it. Use carefully chosen words - especially verbs and adjectives. You can also create a visual (picture) to go along with your paragraph on a separate piece of paper.
Dream Vehicle- Science Exploration

*Please provide the websites or resources that you used to identify your information. Do not use Wikipedia unless you can back up the information on another website.

Website/Resource #1 _______________________
Website/Resource #2 _______________________

1. Based on your dream vehicle, which type of energy source would it have and why? (Electric, Gas or Hydrogen)

2. What type of emissions (pollution) does your vehicle produce?

3. What is the average cost of fueling your vehicle? If it's electric, where can you charge your vehicle? How long does it take?

4. What is the most mpg (miles per gallon) or miles on a full charge that your vehicle can travel?

5. How has the amount of miles that the vehicle can travel, changed over the last ten years?

6. What is the average cost of your vehicle?

7. What would your monthly payment be if you were to split up the total cost of the vehicle over six years?
HISTORY OF THE AUTOMOBILE RESEARCH PROJECT

Objectives

- Use both print and Internet sources to research the history of the automobile.
- Determine the accuracy of online information.
- Use your research to create a timeline about the production of the automobile.

Procedures

1. The invention of the automobile helped create suburban communities.
2. Tyou will be gathering information about the history of the automobile.
3. Find information using both traditional resources and the Internet.
4. Interview older relatives or neighbours who have stories to share about automobiles.
5. Evaluate and analyse the accuracy of information found online.
6. Use the information to compose a timeline that shows the history of the automobile.
7. Record your automobile research with others.

Extension Activities

- Use the automobile facts to write 3 paragraphs about how this invention affected the world. What did the invention of the car allow people to do? How did it change where people lived?
- Check out the automobile license plates on the Internet. Design a license plate for a car they will own in the future.
The Madman of Piney Woods

By Christopher Paul Curtis

Jessica Poelma
2/25/2016
4. A simile is comparing two unlike things to make a point. The words “like” or “as” are used in the comparison. Find the simile on page six.

5. Why does Grandmother O'Toole despise the Langston’s grocery store?

6. Find a quote from the text to support this statement: Grandmother O'Toole looks at black people unfavorably.
10. How do Patience and Stubby react to the upside down tree house?


11. What makes Benji think the Madman of Piney Woods is real?


Challenge Question: “There must be something to make a phoenix arise from the ashes of my envy.” (Pg. 38) Explain this statement.
4. "For the sake of Mother's memory, I could be patient for another week or two." What can be inferred about Red's mother from this statement?

5. Find a quote from chapter 9 to support this statement. Benji takes ownership of a portion of the woods.

6. What do you think of Stubby and Patience making up a story and charging people to see their upside down tree house?
10. Why does Benji say today's headline would read: "Evil winds a battle! War may not be lost, but things not looking good."

Challenge Question: Red's father says: "Remember, lad, 'tis not a tree in heaven higher than the tree of patience." What does this mean?
3. According to the Madman of Piney Woods, how are he and Benji alike?


4. Why does the Madman of Piney Woods envy Benji?


5. Why do you think Benji does not want to tell people about his experience with meeting the Madman of Piney Woods?
9. In chapter 16, Grandmother O'Toole gives insight into why she dislikes Red. Why does she not like him?


10. Before she went into the kitchen, Grandmother O'Toole had one more surprise for me. She turned and said, "Chester's right, as usual. "Tis important ye know this." Why does this statement for his Grandmother surprise Red?


11. What can be inferred from the Buxton community based on how they send Benji off to his first day of work?
The Madman of Piney Woods
By Christopher Paul Curtis
Chapters 18-21

1. Why were the ships in quarantine nicknamed coffin ships?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

2. How do you think Grandmother O'Toole's experience on the coffin ship changed her?

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
6. Personification is a figure of speech where human qualities are given to animals, objects or ideas. (Example: The darkness swallowed the night). Find the example of personification on page 155.

7. A hyperbole is an exaggeration in literature. For example: I could eat 20 pizzas is a hyperbole. Can you find the hyperbole on page 155?

8. How does Red feel about being accepted to study Science with the best science teacher in Canada?
Challenge Question: Explain the metaphor Benji uses to describe his family and their importance to him on page 194. (A metaphor is a figure of speech that identifies some as being the same as some unrelated thing.)
4. Benji says to Red, "Gullible is nowhere in the dictionary." What does this expression mean?


5. Why is Benji nervous having Red over for dinner?


6. How does Red break the ice at dinner?


10. Who stole the deer head? How do you know?


11. What does Red feel about The South Woods Lion Man? What does Red feel about Curly and his family?


Why does Red have more respect for the South Woods Lion Man then he does for Curly?
3. Why do you think Benji does not want to involve his friends when trying to find injured and possibly dead "Madman of Piney Woods?"

4. Why does Benji regret having such good tracking skills in chapter 33?

5. A metaphor compares two unlike things. Find the metaphor on page 286. (Hint: It has to do with Red’s hair)
9. What does chapter 40 reveal about Patience's character?


10. Red sings the South Woods Lion Man a song as he lie dying? What would you do if you were in Red in that situation?


Challenge Question: Find the metaphor on page 313.
3. Find a quote in chapter 45 to support this statement: Red begins to finally understand Grandmother O'Toole and therefore no longer fears her.

4. Find a quote from chapter 45 to support this statement: Red's mother and father hope for him to see all human beings as equal.

5. Why does Beni start calling The Madman of Piney Woods "Uncle Cooter?"
9. Why is it hard at first for Benji to return to the woods after Uncle Cooter's death?


10. At the end of the novel, Benji's dreams seem to come true. Explain.


Challenge Question: Alvin's father says of Grandmother O'Toole: "She's only opened the door a crack and allowed you to see a mere fraction of the horrors she's lived through. And though we may try, there's simply no way we'll ever be able to understand or be able to say we could have responded in a manner any different than she did." Do you agree with this statement? Please explain.
The Madman of Piney Woods
By Christopher Paul Curtis
Character Traits
Directions: Create a collage that represents Red's character. You may use words or sketch pictures.
The Madman of Piney Woods
By Christopher Paul Curtis
Character Analysis – Cooter Bixby

1. Explain some of the horrors that Uncle Cooter’s character experienced in his life.

2. How did these experiences shape his character?

3. Find a quote from the text that describes Uncle Cooter’s character.
The Madman of Piney Woods
By Christopher Paul Curtis

Directions: Create a Tic-Tac-Toe on the board.

| Research Buxton, Canada. Create a trifold pamphlet on Buxton. | How does Red's view of his Grandmother change throughout the novel? Compose several paragraphs on this topic. | You are Benji. Compose your second published article. |
| Create a list of 10 words you are unfamiliar with in the novel. Cite how each word is used in the book. Locate each word in the dictionary and record its meaning. | Free Space | Make a list, with page numbers, of all the figurative language examples in The Madman of Piney Woods. |
| How does Benji get what he desires most? Compare Benji's thoughts in Chapter 1 to Chapter 50. Compose several paragraphs on this topic. | Create a movie poster for The Madman of Piney Woods. | Create an alternative ending for The Madman of Piney Woods. |