

# Lesson 10: Convertible or Clunker

**TOPIC: Automobile Purchase**

## **OVERVIEW:**

Buying a vehicle is one of the first and most significantly large purchases young people make. Students will use their compounding knowledge to make sensible purchasing decisions in assessing how much car they can afford, issues of maintenance and **insurance**, and evaluating whether financing options such as **loans** and **leases** are appropriate to their situations.

## **OBJECTIVES:**

1. Research and identify secured and unsecured installment loans
2. Calculate how much car to afford
3. Evaluate long-term costs associated with buying a vehicle, including insurance and maintenance
4. Explain the difference between leasing and purchasing

## **INDIVIDUAL HANDOUTS:**

- Cash, Loans, and Leases
- It's Time to Lease!
- It's Time to Finance!
- Vehicle Comparison

## **GROUP HANDOUTS:**

- none

## **TEACHER PRESENTATION SLIDES:**

- Reality Check (2)
- True Cost of Vehicles
- Secure or Unsecured?

## **ESSENTIAL QUESTIONS:**

- What transportation needs do I have?
- What are my transportation options?
- How do I know whether I can afford a car?
- How long do I want to have vehicle payments?

## **ASSESSMENT ACTIVITIES:**

### **Pre-Assessment:**

- **Activity: Reality Check**

### **Post-Assessment:**

- **Handout:** Cash, Loans, and Leases
- **Activity:** It's Time to Finance!
- **Activity:** It's Time to Lease!
- **Handout:** Vehicle Comparison\*
- **Activity:** Wants Versus Needs

**\*Money Smart Portfolio Handouts**

**Time:** 70 min

### **Subject Connections:**

- English Language Arts
- Math

### **Supplies:**

- Projector (for teacher presentation slides)
- Access to the Internet (optional)

### **Preparation:**

- Make copies of student handout
- Set up projector with presentation slides

**Glossary with key vocabulary** 16

# Instruction Steps

## WARM UP

### Reality Check

10 MINUTES



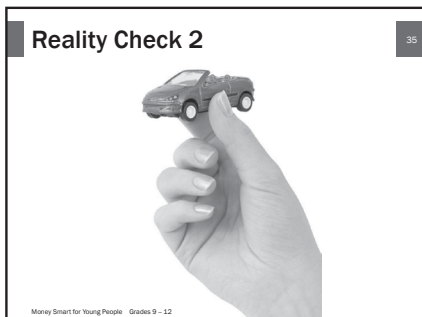
Open the lesson by engaging students in the concept of decisions we must weigh when making a purchase, whether it is a large purchase like buying a vehicle or an everyday purchase like buying groceries.

Display the first **Reality Check** slide and tell students a fictional story about how you dreamed of buying the expensive, fancy car shown on the slide your whole life. Embellish the “want” and “desire” for the luxury vehicle, and convey the longing and pining for such a beautiful ride, including all of the superior features, speed capabilities, and image appeal.

Next, tell students that, after all the years of dreaming and hoping, you were finally able to buy the car!

#### MONEY SMART TIP!

**The Reality Check** activity can be replaced with any number of items if you prefer to tell a personal narrative rather than a fictional story. For example: you could apply the same warm up by using a designer purse or pair of shoes, a new computer, or a long vacation as the “luxury” item instead of a car.



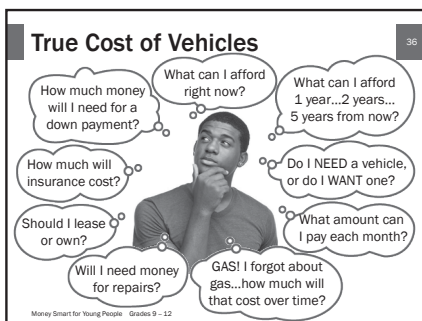
After giving students a few seconds to respond in surprise and pleasure that you accomplished such a dream, show students the second **Reality Check** slide (a toy car similar to the “dream” car), and say, “See, here it is! I bought it!” Students will likely respond with laughter when they realize the “reality check.”

Use this moment as a springboard to explain that, even though you really wanted the “fancy” car, your financial reality told a different story, and that the toy car option was what your budget could afford.

## GUIDED EXPLORATION

### Vehicle Loans

20 MINUTES

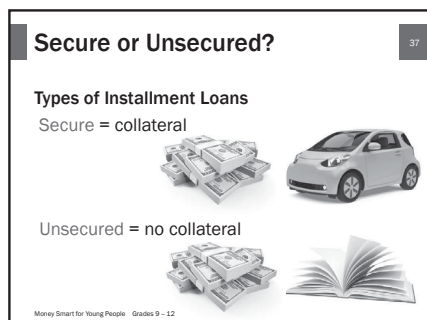


**Ask students** what steps they would take if they were interested in buying a vehicle. What questions would they need answered before making a decision?

Display the **True Cost of Vehicles** slide and review the questions together as a class. Use the questions to help students see the full landscape of the decision-making process that goes into making such a large purchase and explain that, by thinking through all of the questions, you become an informed buyer, which means you are able to make more financially savvy decisions.

Next, **ask students** how someone might pay for a vehicle. Explain that one option is an installment loan, where you borrow a set amount of money and repay it in fixed monthly payments, or installments, for a specific period of time.

Remind students that installment loans are different from open-end credit like credit cards.



Display the ***Secure or Unsecured?*** slide and explain to students the differences between the two types of loans.

- A **secured loan** is one in which you offer collateral for the loan. You must give up the collateral to the lender if the loan is not paid back as agreed. The interest rates for secured loans are comparatively lower than unsecured loans.
  - A vehicle loan is an example of a loan secured by collateral—the vehicle being purchased.
- An **unsecured loan** is a loan that is not secured by collateral.
  - An example of an unsecured installment loan is a student loan or most credit cards.

#### **Grade-Level Modifications:**

**Beginner:** Spend time connecting back to Lesson 7, *Capacity, Character, Collateral, Capital*, and review with students the concept of collateral. Remind students that giving the lender collateral means that you pledge an asset (for example: your vehicle) to the lender with the agreement that the lender can take it to help repay the loan if you do not make payments as agreed.

**Advanced:** Expand the discussion on installment loans to include:

**Annual percentage rates (APR):** The cost of borrowing money (expressed as a percentage rate) on a yearly basis. When shopping for the best loan rates, compare the APRs rather than the interest rates, because APRs reflect both the interest you are charged and any fees. This is the single most important tool to use when comparing loan offers and advertisements.

**Fixed-rate loans:** A loan that has an interest rate that stays the same throughout the term of the loan. Most installment loans have fixed rates.

**Variable-rate loans:** A loan that has an interest rate that might change during any period of the loan, as written in the loan agreement or contract.

**Finance charges:** The dollar amount the loan will cost, including: interest, service charges, and loan fees.

## INDEPENDENT EXPLORATION It's Time to Buy!

35 MINUTES

Explain that, whereas some people choose to purchase a vehicle through a secured installment loan, there are other options for financing, including saving up enough cash to purchase the vehicle in full, or leasing a vehicle.

Distribute the **Cash, Loans, and Leases** handout and review the advantages and disadvantages for each option. **Ask students** to reflect on why it is important to understand all of your options.

**Ask students:** *If you were going to purchase a vehicle, which option do you think you would use, and why?*

**Note:** These activities are more independent than the Guided Exploration activities and may be used as homework assignments, collaborative group work, or independent study.

Distribute the **It's Time to Finance!** and the **It's Time to Lease!** handouts. You will need volunteers to play a narrator, a car salesman, a young adult, and a parent in each of the skits. Ask for volunteers to act out each of the skits.

### **Grade-Level Modifications:**

**Beginner:** Have students read the scripts individually and then regroup for a class discussion about the two different scenarios.

**Advanced:** Challenge students to come up with their own vehicle buying and leasing skits and present them to the class by having students work in small groups to write and perform an example of a buying experience for financing and leasing a vehicle.

When students are finished performing the skits, briefly discuss each scenario.

### **Ask students:**

- *When you are purchasing a vehicle, what questions should you think about ahead of time?*
- *What factors should be considered when leasing?* Remind students that it is important to think about loan terms, interest rates, monthly payments, and costs associated with owning a vehicle, as well as how long a lease term is for, mileage limitations, and purchase price when a lease expires. Additionally, if students are unfamiliar with the concept of cosigning, explain that it is when someone other than the borrower (like a parent or relative) agrees to be responsible for loan payments if the borrower fails to make them.

Next, tell students that they will get an opportunity to put their vehicle-buying skills to the test by researching and assessing different vehicle choices. Distribute the **Vehicle Comparison handout** and allow students time to complete the activity.

Invite volunteers to share their research with the class and discuss the different research components that go into the vehicle-buying process.

## **WRAP UP** **Needs Versus Wants**

5 MINUTES

**Ask students** to reflect in a written response or brief discussion what their transportation needs are and whether buying a vehicle now or in the future is the right choice for them.

Engage students in reflecting on what goes into the decision making process when it comes to buying a large item like a vehicle.

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## **Extended Exploration**

**Note:** Use the following ideas to extend financial literacy concepts throughout the school year within core content areas through English Language Arts, Math, Social Studies and Economics, and Technology activities, projects, and discussions. Duration of activities will vary.

### **ENGLISH LANGUAGE ARTS**

#### **Writing Prompts:**

Is it wiser to buy a new, used, or leased vehicle? Why do you think this is the best approach? Argue your position.

Write a brief paragraph about the vehicle-buying experience from each of the following different perspectives: the salesman, the buyer, and the vehicle!

#### **Suggested Readings:**

*Confessions of a Car Salesman* by Popular Mechanics: An insider's look at how car salesmen operate, providing useful tips for car buyers.

**[www.popularmechanics.com/cars/news/industry/confessions-of-a-car-salesman-5681350](http://www.popularmechanics.com/cars/news/industry/confessions-of-a-car-salesman-5681350)**

## MATHEMATICS

### Activity/Project Ideas:

Have students calculate the cost of a loan by comparing a vehicle's price if they paid cash in full at the time of purchase versus getting a loan with interest spread out over time. Give students multiple loan terms to compare, such as 36, 60, or 72 months, and different APRs to factor in.

Have students research the purpose of an amortization schedule for a vehicle loan and related online resources such as amortization calculators. For a more advanced activity, challenge students to create their own amortization schedule for a vehicle loan. For example: students may create an amortization schedule by using online calculators (<http://MyAmortizationChart.com>) or spreadsheet software templates at <https://templates.office.com/en-us/Loan-amortization-schedule-TM03986974>.

## SOCIAL STUDIES AND ECONOMICS

### Discussion Topics:

Engage students in a discussion about the changes in supply and market price for new vehicles under different circumstances, such as the cost of labor increasing or the number of vehicle manufacturers decreasing.

Explore with students how advancements in manufacturing technologies, such as hybrid, robotics, and driverless vehicles, have impacted and will continue to affect the marketplace.

## TECHNOLOGY

### Online Resources:

*Buying and Owning a Car* by the Federal Trade Commission: A comprehensive car- buying source that includes information on buying, leasing, negotiating prices, how to maximize gas efficiency, and more. [www.consumer.ftc.gov/topics/buying-owning-car](http://www.consumer.ftc.gov/topics/buying-owning-car)

Auto Loan Calculator: An online calculator that calculates monthly payments for auto loans.

[www.cars.com/go/advice/financing/calc/loanCalc.jsp?mode=full](http://www.cars.com/go/advice/financing/calc/loanCalc.jsp?mode=full)

### **Activity/Project Ideas:**

Challenge students to create an amortization schedule for a vehicle loan using a spreadsheet software (<https://templates.office.com/en-us/Loan-amortization-schedule-TM03986974>.) or online calculator at <http://MyAmortizationChart.com>.

Have students research multiple informational vehicle websites and assess the credibility of the information they discover. Discuss how to navigate websites to know whether or not a site is delivering quality and informative information versus simply aiming to sell you something.

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## **Answer Key**

### **Student Handout 1:**

#### ***Cash, Loans, and Leases***

In class activity.

### **Student Handout 2:**

#### ***It's Time to Finance!***

In class activity.

### **Student Handout 3:**

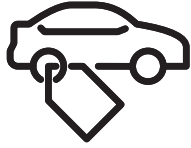
#### ***It's Time to Lease!***

In class activity.

### **Student Handout 4:**

#### ***Vehicle Comparison.***

Answers will vary. Use handout to assess student ability to conduct research and evaluate and compare data.



## Lesson 10: Convertible or Clunker? CASH, LOANS, AND LEASES

Factors	Vehicle Loans	Vehicle Leases	Paying All Cash
<b>Ownership potential</b>	<p>The vehicle belongs to you and the bank that gave you the loan until you have paid off the loan.</p> <p>Then, the vehicle becomes yours.</p>	<p>You are essentially renting the vehicle from the dealership. The lease is like a rental agreement. You make monthly payments to the dealership for a set number of months. The vehicle does not belong to you. When the lease ends, you have to return the vehicle to the dealership.</p> <p>You may decide to purchase the vehicle at the end of the lease. The total cost, however, generally ends up being more than it would have been if you had bought the vehicle.</p>	<p>The vehicle belongs to you because you paid for it in full at the time of purchase.</p>
<b>Cost</b>	<p>Purchasing a vehicle is usually more cost effective if you plan to keep the vehicle long-term.</p> <p>In the short term, however, the costs will generally be greater than a vehicle lease, because your total loan amount and monthly payments are likely to be higher.</p>	<p>A lease will probably cost less than a vehicle loan in the short term, because your total lease amount and monthly payments are likely to be lower.</p> <p>On the other hand, if you exceed the mileage on a leased vehicle or decide to buy it outright once your lease has expired, it will end up costing you more.</p>	<p>Paying in cash can be cost effective because you won't need to acquire any debt to own the car. But, saving up enough money to buy a vehicle outright requires planning ahead and saving diligently.</p>
<b>Monthly payments</b>	<p>Payments are higher, but you only pay them for a set term. Then, you own the vehicle.</p>	<p>Payments are lower because you are not purchasing the vehicle; the dealership still owns it.</p> <p>As long as you lease a vehicle, you will continue to make monthly payments.</p>	<p>No monthly payments, but you would have had to save up a large sum of money ahead of time in order to purchase the vehicle in full. This requires setting and sticking to savings goals.</p>





## Lesson 10: Convertible or Clunker?

# CASH, LOANS, AND LEASES *(continued)*

Factors	Vehicle Loans	Vehicle Leases	Paying All Cash
<b>Auto insurance</b>	<p>It is usually less expensive than auto insurance for leased cars.</p> <p>Insurance may cost more during the loan than it will after the loan is repaid because the lender may require more coverage.</p>	<p>It usually costs more if you lease a car than it does if you buy.</p> <p>Most vehicle leases require you to carry higher levels of coverage than purchase agreements do.</p> <p>Some insurance carriers may also consider leasing to be higher risk than purchasing.</p>	<p>Insurance may cost less than if you carried a loan because a lender may require more coverage.</p>
<b>Mileage limitations</b>	<p>There are no mileage restrictions.</p>	<p>Leases restrict the number of miles you can drive the vehicle each year.</p> <p>If you exceed the mileage allowed, you have to pay the dealer for each mile over the limit according to your lease.</p> <p>For example: a dealer may charge you \$.15 for every mile that you drive over 24,000 miles in two years. If you drive the vehicle an additional 3,000 miles, you would owe the dealer \$450 for those miles.</p>	<p>There are no mileage restrictions.</p>
<b>Wear and tear</b>	<p>No additional costs for wear and tear are included in your loan agreement.</p>	<p>Most leases charge you extra money for any damage found at the end of the lease that goes beyond normal wear and tear.</p>	<p>No additional costs for wear and tear are included in your purchase price.</p>



## Lesson 10: Convertible or Clunker? IT'S TIME TO FINANCE!

**Narrator:** *Jasmine and Rick are walking around Al's Super Used Cars lot and Al approaches them as they are looking at a blue sports car.*

**Al:** Hello there, folks! How can I help you this beautiful afternoon?

**Rick:** Well, my daughter is looking to buy her first car.

**Al:** *(looking at Jasmine)* Well, alright. What type of car are you looking for?

**Jasmine:** I'd like a car with satellite radio, a navigation system, air conditioning, sun roof....

**Rick:** *(cutting off Jasmine)* She wants the best deal you have on the lot...she's paying for this car herself!

**Jasmine:** Yeah, I know I have to pay for it myself, Dad! I really like this blue one! How much is it?

**Al:** The sticker here says \$10,000...*(Jasmine sighs and frowns.)*...but I think I could drop that down to \$9,250.

**Jasmine:** Well, how much would that be per month?

**Al:** That depends on the financing. It could be \$200 a month for five years with no down payment. Do you have money for a down payment?

**Jasmine:** Uh, no. I did not realize I would need money for a down payment.

**Al:** Do you have a job?

**Jasmine:** Yes, I usually make about \$200 a month from babysitting. I do not really have any other expenses, but I do not want to spend everything I make on a car!

**Al:** I have this nice red car over here. *(Al, Jasmine, and Rick walk toward another car.)* You can finance this one for \$125 a month, and then it is yours to own after six years.

**Jasmine:** I can afford that!!

**Rick:** Remember, you'll need to pay for insurance, maintenance, gas, and everything else that comes along with owning a car...

**Jasmine:** I really want this one, Dad, and I can afford it!

**Al:** Step into my office and we can discuss paperwork for the car. *(Al, Jasmine, and Rick walk into Al's office and all sit down.)* OK, now will you be cosigning this loan for your daughter?

### Characters

- Al, the car salesman
- Jasmine
- Rick, Jasmine's father
- Narrator



## Lesson 10: Convertible or Clunker?

### IT'S TIME TO FINANCE! *(continued)*

**Rick:** Yes, she's only 17, so I will be cosigning. *(Turning to his daughter.)* Now, you know I expect you to pay the bill on time every month, right? I expect you to be responsible.

**Jasmine:** Yes, Dad, I know. I'll make sure I have the money to pay for everything.

**Narrator:** *Jasmine ends up financing the car for \$125 per month for six years. She does not realize that one reason the payment was lower per month was that the term of the loan was extended — meaning she will pay the loan back over a longer time period. This means that she will pay more in interest than if the term of the loan were shorter. After driving the car for two years, Jasmine went to start the car to go to work one morning and it made a funny noise and would not start. It ended up costing \$2,000 in repairs! Jasmine was disappointed to find out that the \$500 in insurance she paid every year did not cover the repair. Was financing this car the right idea for Jasmine? What should she have looked out for when shopping for a car?*



## Lesson 10: Convertible or Clunker? IT'S TIME TO LEASE!

**Narrator:** *Todd and Sharon are walking around Al's Super Used Cars lot and Al approaches them as they are looking at a green truck.*

**Al:** Hello there, folks! How can I help you this beautiful afternoon?

**Todd:** I want a truck!!

**Sharon:** *(giving her son a stern look)* Yes, my son is looking for a truck he can purchase.

**Todd:** No, Mom, I want to lease a truck. I am going to college in two years and I will not be able to take my truck on campus. I am just looking for a truck for work and to drive to school and stuff until I graduate.

**Al:** Sounds like you know what you want!

**Todd:** Yes, sir. It will cost me less in the end and I do not want the long-term loan right now. I only plan on driving around town and I will return the truck when the lease expires. So how much does this cool truck cost? *(Points to a nearby truck he has been looking at.)*

**Al:** I can lease that to you for \$200 a month. Is that in your price range?

**Todd:** Wow, that's a lot more than I thought! I do not have a job right now, so coming up with \$200 a month may be difficult. What if I promise that I will get a job, Mom?

**Sharon:** You cannot just promise to get a job, Todd! I thought you said you had saved some money from working at the restaurant this summer?

**Todd:** Yeah, I have money for a down payment and the first few payments, but I will need to find a job so I can continue to make the monthly payments.

**Al:** Maybe you need to come back when you have a job and you know that you can afford this nice truck?

**Todd:** No! I want it now. I told my friends that I could drive them to a concert next weekend. I know I can find a job in the next few weeks, and I have the money for the down payment and the first month. *(Turns to Sharon.)* Mom, can I please get this truck??

**Sharon:** It is your decision, but don't forget that your father and I do not want to cover the payments if you cannot make them.

**Todd:** I know, I know! OK, I want to get it!!

### Characters

- Al, the car salesman
- Todd
- Sharon, Todd's mother
- Narrator



## Lesson 10: Convertible or Clunker? IT'S TIME TO LEASE! *(continued)*

**AI:** Alright, just step into my office and we will see what we can do!

**Narrator:** *Sharon leases the truck on Todd's behalf. Sharon and Todd agree that Todd is responsible for the payment and all expenses. Todd finds a part-time job; however, he did not realize that gas would be so expensive, because he is the one always driving his friends around. Every month he struggles to make the payment. He has to give up buying items like music and clothing just so he can make the lease payment. After two years, Todd turns the leased truck back in to the dealership and realizes that he has paid \$4,800 for the truck, and now he has nothing to show for it! Was this the right choice for Todd? What could he have done differently?*



## Lesson 10: Convertible or Clunker? CASH, LOANS, AND LEASES

Name: \_\_\_\_\_

There are many different elements to consider when contemplating a vehicle purchase. Research three different types of vehicles that interest you and find out what the total cost of the vehicles will be in your area by investigating local vehicle prices, sales tax, and license and registration fees. Use an Internet search engine or the web links below to get started.

FDIC Consumer News  
<https://fdic.gov/consumers/consumer/news/cnspr12/autoloans.html>

FTC Consumer Information  
[www.consumer.ftc.gov/articles/0209-buying-new-car](http://www.consumer.ftc.gov/articles/0209-buying-new-car)

U.S. Department of Energy Fuel Economy  
[www.fueleconomy.gov](http://www.fueleconomy.gov)

	Vehicle 1	Vehicle 2	Vehicle 3
Make/Model			
Price			
Sales Tax			
License and Registration Fees			
Misc.			
Total			

What research was surprising to you? Did the vehicles cost more or less than what you expected? Why?