# **PROJECT: GET IT DONE** TOGETHER

### Simple Interest Activity: Buying a car!

#### How this activity works:

Today, you get to buy a car! Now, unfortunately it's not a real car, which is probably good because you probably don't have your drivers' licenses yet. But you will get to go through some of the steps of buying a car, including figuring out how much it costs. With most things you buy, the amount it costs is just the price tag, plus a bit of tax, right? That's true - but buying a car is a bit more complicated. The reason is that most people don't have enough money lying around to buy a car - so they have to borrow money from a bank and pay it back over time. And, when you borrow money, you need to pay interest. That means you're paying back not only the money you borrow, but some extra money too. That extra money is the interest. And, when you buy a car, there are usually a few additional costs beyond the price tag too.

Are you ready to buy a car? Let's get started.

The first thing you'll need to do is figure out what kind of car you want. This is the fun part. There are six different vehicles shown here, with information such as the price, the features and how old it is. Take a few minutes to read through the descriptions and decide which one you'd like to buy. Once you've done that, we'll go through the next steps in buying your car.

### Mr. Harrison's Car Dealership Newsletter

2019 Toyota RAV4	2019 Scion FR5
Vin#: 3XJ91MAK6B Odometer reading: 27,000 miles	VIN#: 3F974MDHJ7 Odometer reading: 10,259 miles
Price: \$27,899	Price: \$35,540
Color: White	Color: Yellow
<u>Description</u> : The Rav4 is powered by a 203 HP 2.5-liter engine. It gets 28/32 mpg for city/highway. It comes with alloy wheels, Bluetooth, navigation, heated leather seats and third row seating (can seat 7 passengers). This vehicle is perfect for travel and growing families.	<u>Description</u> : The FR5 is a sporty coupe powered by a 2.0-liter engine. It has the power to go but also gets great gas mileage with 24/32 mpg for city/highway/ The car comes with cloth interior, led gauges, spoiler, alloy wheels, Bluetooth, touch screen radio and a state-of-the-art suspension that is ready for the track or road.
2020 Vespa Primavera 50	2019 Chevrolet Silverado 1500
VIN#: 7H48DM91SX	VIN#: 8JMX61FC7Y
Odometer reading: 2,000 miles Price: \$7,950	Odometer reading: 22,000 miles Price: \$24,535
Color: Red	<b>Color:</b> Black

Description: The engine of this scooter is a 3-value -4 stroke single cylinder. It gets | Description: The Silverado has a regular cab that seats 3 people and gets 15/22

amazing gas mileage with 80.91 mpg for combined city/highway. The engine power is 2.4 kW 3.2 HP at 7,500 rpm. The front suspension has a single arm with helical spring and single hydraulic shock absorber. This scooter will save you a lot of money in gas!

#### 2018 Ford Transit Connect



VIN#: M6K92SX6H4 Odometer reading: 35,000 miles **Price:** \$39,800 Color: Silver

Description: The Transit has a 4-cylinder engine and 2-wheel drive. It gets 19/27 mpg for city/highway. It has third row seating (seats 8), keyless entry, parking assist, auxiliary input, power windows, power locks, stability control, brake assist, and rear air conditioning controls. This is a great car that will last for many years to come!

mpg for city/highway. It has 2-wheel drive and the transmission is an 8-speed automatic. It includes Bluetooth audio streaming for 2 active devices, voice command passes through to phone, Apple CarPlay and Android Auto capable. The door locks and windows are manual.

2020 BMW X6



VIN#: 9JT6E13C5L Odometer reading: 5,000 miles Price: \$64,200 Color: White

Description: The BMW has 335-horsepower, turbocharged 3.0 liter six-cylinder or 523-hp, twin turbo 4.4 liter V8. It has all wheel drive and gets 21/26 mpg for city/highway. The BMW seats 5 people and has automatic power and window locks. It also includes a 12.3-inch touchscreen, leather upholstery, heated front seats and ambient lighting.

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#### Step 1:

Now you need to figure out how much your vehicle will actually cost, assuming you have to borrow the money you need to buy the car.

Now, when you borrow money to buy a car, different banks will offer you different types of loans. These loans can differ in at least two ways:

The first is the interest rate. The interest rate is the amount of extra money you need to pay for each year you borrow the money. For example, if you borrow \$100 for 1 year at 10% interest, you'll pay \$10 in interest. The higher the interest rate, the more interest you'll pay.

The second is the amount of time you take to repay the loan. The longer you take to repay the loan, the more interest you'll pay.

Today we're going to assume you've gone to two different banks, and they've offered to loan you money on these terms:

Bank #1 (Best Rates For You): 12% for 4 years Bank #2 (Lowest Bank Rates Around): 9% for 6 years

So, one has a lower rate and but a longer payment period, and the other has a higher rate but a shorter repayment period. What you're going to do now is figure out which of these loans will end up costing you more in the end. Before you start, you may want to make a guess and then see if you're right.

Now, you'll fill out this form to calculate the cost of each loan. There are a couple of extra rows in case you want to do the calculation for more than one vehicle.

#### Helpful tips

- Principal this is the price of the vehicle
- Rate this is the interest rate being charged by each bank
- Time this is the number of years you'll take to repay the loan
- I Calculate this by multiplying Principal x Rate x Time
- B this is the Balance the total amount it will cost you for the loan. It's the Principal plus the interest.

Car Information	Interest and Balance for "Best Rates For You"	Interest and Balance for "Lowest Bank Rates Around"
1. Model: Year: Color: VIN#: Odometer: Price:	Principal =   Rate =   Time =   I = () () ()   I =   B =+   B =+   B =+	Principal = Rate = Time = I = () () () I = B = + B =
2. Model: Year: Color: VIN#: Odometer: Price:	Principal =   Rate =   Time =   1 = () () ()   1 =   B =+   B =+   B =+	Principal =   Rate =   Time =   I = () () ()   I =   B = +   B =
3. Model: Year: Color: VIN#:	Principal = Rate = Time = I = () () ()	Principal = Rate = Time = I = () () ()



#### Step 2:

Now, decide which bank you want to borrow from and complete the Car Loan Application below. At the bottom of the form, you'll also calculate how much your monthly payment will be for the car loan. Feel free to have some fun with this – instead of using your real contact information, go ahead and make up a name, address, phone number, email address.

#### **CAR LOAN APPLICATION**

This is a contract between	and		
	Name of Bank	Your Name	
Customer Name:			
Р	rint Mide	dle Last	
Address:			
Street	Cit	y Zip	
Phone Number: ()	Cell Numb	oer: ()	

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Email Address:					
Car Info: Make	Model	Year	<u></u>		
Amount of Money Borrow	ving (Price of Car):	\$			
Loan Term (# of Months	to Pay Back Loan):	montl	hs		
Monthly Payments: \$	(This is the B	Balance from Ste	p 1 divided b	y the Loan Term ir	n months)
Your Signature Date					
For Bank Use Only The application has be	en: APPF	ROVED		DENIED	
Bank Manager Signatu Date:	re:				

#### Step 3:

Your next step is to pay for the car. We'll assume that you were approved for your loan and you now have the money. So now you're going to write a cheque to the auto dealership to pay for your vehicle.

Now – remember we learned that, with a car, the price you see is just part of what you pay. We've now figured out how much extra interest it will cost, but there are still some more costs – taxes and a registration fee. The amount of tax will depend on where you live, but here we're going to assume it's 8.5% of the purchase price. This is 8.5% of the amount you calculated including interest. There's also a registration fee, which we'll assume is \$500.

So go ahead and calculate the amount of the cheque, and then write the cheque.

Price of Car: 8.5% Tax of Car Price Registration Fee: Total Amount	\$ + \$ + \$500 = \$		
YOUR NAME: PAY TO:	Date:	Check No: \$	 Write the check out to "Mr. Harrison's Car Dealership" for the total amount that you just calculated!
BANK NAME: MEMO:	SIGN:		

#### Step 4:

The final step is to complete the used car contract. This is a legal document that states you are now the owner of the car!

Complete the Used Car Contract. Congratulations, you just bought a car!

#### **Used Car Contract**

On this day, \_\_\_\_\_, this is a contract made between the Seller, Mr. Harrison's Car Date of Sale

Dealership, and the Buyer, \_\_\_\_\_, for the sale of a \_\_\_\_\_ Your name Year Make Model

The VIN number is \_\_\_\_\_\_ and the odometer reads \_\_\_\_\_\_. UIN # Odometer reading

Buyer agrees to pay the seller the total price of \$ \_\_\_\_\_. The payment will be made Purchase price

by \_\_\_\_\_\_. The car is sold "AS IS". The seller does not make any guarantees about the condition of the car. Type of Payment

Your Signature

Date

Your Signature

Date

Source: <u>https://www.teacherspayteachers.com/Product/Simple-Interest-Activity-Buying-a-Car-DISTANCE-LEARNING-1384054</u>