

The Road Ahead Exercise

Can you afford your Dream Car



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Is my “Dream Car” a reality?

Parent Instructions:

This project is designed to have students examine a simple question; can they afford their “dream car”? By exploring this question, we hope to expose students to a much broader understanding of the opportunity costs of their career and financial decisions.

Enduring Understanding:

How one chooses to save and spend money will ultimately determine their financial health.

Essential Questions:

1. How does your saving and spending habits affect your credit score?
2. How does your career choice impact your living standard?
3. How do they calculate what they can afford?

Key Questions:

1. What will my intended career provide in salary?
 2. What is the difference between gross income and net income?
 3. What is forced savings?
 4. What percentage of income should one be allocating for housing, transportation, food, living essentials, and savings?
 5. How do my saving and spending habits affect my credit score?
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Please follow these Steps:

Note: Do not hand over the whole exercise at once. Print this document and provide each sheet as outlined below. PLEASE read through these directions before you begin.

1. Ask your son or daughter to take the NH Banking Department Survey. You will calculate their score by grading their answers (see page 3). Do this while they are working on Step 2.

This worksheet is meant to reflect how adolescent behavior might be reflected in a credit score. A thorough examination of the five attributes that constitute a credit score could be done in another lesson.

2. Ask your son or daughter to research the cost of their first really nice car. You can instruct them that this is something they might purchase after they have finished with their education or job training and have landed that 1st good job. Ask them to get the “sticker price”, its weight, and the miles per gallon ratings (city and highway). **Appendix A** has a few examples and they may find something they like on that page.

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3. Now ask them what kind of job do they want and have them research the starting salary. They can use **Appendix B** or go to the NH Employment Security (<http://www.nh.gov/nhes/elmi/nhcrn/oesfiles.htm>) web site for a more complete list of jobs in New Hampshire and their entry wages. The data is collected from W-2 information provided to the Employment Department by NH Employers.
4. Distribute the worksheet entitled: How much I should spend? Explain the general concept of allocating a certain percentage of income to each category (Per the pie chart in the upper right corner of that page).

This is a good time to discuss the opportunity costs of poor financial decisions; for example one could buy a \$350,000 home instead of a \$225,000 home, the result being little money left for discretionary items like vacations and fun!

5. Students will now individualize their own decisions for each category using the worksheet, How much should I spend? Answer questions if they have them. Note that the numbers for housing, etc are close estimates. Don't argue about them, tell them to make a decision and move on.

*Stop at Item 4, College Loans. If your student doesn't know where He or She is headed or what it costs just enter \$150-200 for college loans. If you know how much He/She might borrow (just estimate) then see **Appendix C** and enter that amount.*

6. Sub total the amount left to save and spend on a car. Transportation is a requirement for many jobs and some may not earn enough to save money and pay for a car. If they have less than \$400 then proceed without saving for retirement, emergencies, and a health plan, you can encourage them to save for those things once they are working and living on their own.
7. Students will now return to our original question, Is my dream car a reality?

Distribute the worksheet, "The True Cost of Car Ownership" and help them (if needed) with this sheet. They will need their Survey Score to determine their loan amount, see Appendix D. Note that higher scores reflect good consumers (savers) and they receive lower interest rates.

8. A final discussion should ensue about what student learned from the exercise, their responses should reflect the Essential Question and Enduring Understandings.

This exercise touches on several personal finance topics but is not meant to take the place of a full semester course. Please encourage your student to take the Personal Finance elective at their school before they graduate. Today more than ever, understanding how much they should spend, and save, is essential to their economic future.

If you have comments, questions or suggestions please call or email:

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The Lesson Plan

Scoring for the NH Banking Dept Survey (Don't share with the students):

				Points	
1.	When you get money from a relative for your birthday or other special occasion, do you save it?	Always 3	Save Half 2	Never 1	_____
2.	Do you lose or misplace money often?	Always 1	Sometimes 2	Never 3	_____
3.	When you go shopping, do you often buy some things you don't need?	Always 1	Sometimes 2	Never 3	_____
4.	Do you want things because you see them on TV or because a friend has one?	Always 1	Sometimes 2	Never 3	_____
5.	Are you reluctant to spend money you have earned?	Always 3	Sometimes 2	Never 1	_____
6.	Do you set goals for saving? For example, I will save \$500 this year.	Always 3	Sometimes 2	Never 1	_____
7.	If you see a coin on the ground will you pick it up? Circle One: Nickel, Dime, Quarter Add "1" more point if you pick up pennies.	Always 3	Sometimes 2	Never 1	_____
8.	Have you ever saved for something special and then decided not to buy it?	Always 3	Sometimes 2	Never 1	_____
9.	If a friend doesn't want to stop for an ice cream or pizza do you ask, "What if I pay for it?"	Always 1	Sometimes 2	Never 3	_____
10.	If the cost of a movie ticket increased by \$3, would you still go once a week?	Always 1	Sometimes 2	Never 3	_____
11.	Do you tend to rationalize your purchases based on their cost.	Always 3	Sometimes 2	Never 1	_____

Total Score =>>

NH Banking Dept Survey: Circle one response for each question.

Points

1. When you get money from a relative for your birthday or other special occasion, do you save it?	Always	Save Half	Never	_____
2. Do you lose or misplace money often?	Always	Sometimes	Never	_____
3. When you go shopping, do you often buy some things you don't need?	Always	Sometimes	Never	_____
4. Do you want things because you see them on TV or because a friend has one?	Always	Sometimes	Never	_____
5. Are you reluctant to spend money you have earned?	Always	Sometimes	Never	_____
6. Do you set goals for saving? For example, I will save \$500 this year.	Always	Sometimes	Never	_____
7. If you see a coin on the ground will you pick it up? Circle One : Nickel, Dime, Quarter	Always	Sometimes	Never	_____
8. Have you ever saved for something special and then decided not to buy it?	Always	Sometimes	Never	_____
9. If a friend doesn't want to stop for an ice cream or pizza do you ask, "What if I pay for it?"	Always	Sometimes	Never	_____
10. If the cost of a movie ticket increased by \$3, would you still go once a week?	Always	Sometimes	Never	_____
11. Do you tend to rationalize your purchases based on their cost.	Always	Sometimes	Never	_____
Total Score ==>>				

- Adopted from Neale S. Godfrey.

The True Cost of Car Ownership

My Dream car is a _____

The Purchase Price is \$_____ (Use this number to calculate your loan)

Enter your NH Banking Dept Survey Score: _____

See Appendix D to determine your monthly loan payment. Your interest rate is based on your Banking Department survey score.

a. Monthly Loan Payment \$_____

b. Monthly Insurance Payment* \$_____
- Young Men pay \$150, young Ladies pay \$105 per month.

c. Calculate your fuel costs:
- Divide annual mileage by your vehicle's average mpg.
Example: 15000/25 = 600 gallons of gas
- Multiply 600 by \$2.50 (cost for a gallon of gas)
Example: 600 x 2.50 = \$1,500
- Divide \$1,500 by 12 to get an estimate of your monthly gasoline expense." \$_____

d. Maintenance: Oil Changes: 4 x \$30= \$120, Divide by 12 \$_____

e. Registration Fees:

➤ City/Town Fee: \$18 per thousand for new cars:
Price of Car \$_____ / 1000, x 18 => \$_____

➤ State of NH Fee is based on the car's weight
0-3000 lbs = \$61 for the year
3001-5000 lbs = \$73 for the year
5001-8000 lbs = \$100 for the year \$_____

Add the Town and State Fees from above and divide by 12. \$_____

f. State Inspection: Approximately \$36 per year, divided by 12 (Enter \$3) \$_____

g. Repairs: (New Cars, Enter \$0 / Used Cars, Enter \$80) \$_____
- Used cars need brakes (@\$400), New tires (@\$400), etc.

Total Cost of Ownership: (Do not exceed 15% of Net Income) \$_____
- Total a, b, c, d, e, f, and g

Appendix A – 2009 / 2010 Car Prices

<u>Car</u>	<u>Approx. List Price</u>	<u>Average MPGs</u>	<u>Weight (lbs)</u>
Acura TSX (2009)	\$29,000	25	3485
Chevrolet Camaro LT (2010)	\$28,000	23	3728
Chevrolet Cobalt LT (2009)	\$20,000	30	2743
Chevrolet Silverado (2009)	\$29,000	17	4558
Dodge Charger (2009)	\$22,000	22	3728
Ford Mustang GT (2010)	\$28,000	20	3483
Ford Escape XLT (2009)	\$27,000	21	3355
Honda Civic EX (2009)	\$21,000	31	2771
Honda Civic Hybrid (2009)	\$21,000	31	2877
Honda CR-V (2009)	\$25,000	23	3415
Jeep Liberty Sport (2009)	\$27,000	18	4030
Kia Soul (2010)	\$13,000	28	2645
Mazda 3 (2010)	\$25,000	27	2963
Mini Cooper Convertible (2009)	\$24,000	33	2546
Nissan Xterra S (2010)	\$28,000	17	4259
Pontiac GS, GT Coupe (2009)	\$24,000	22	3457
Toyota FJ Cruiser (2009)	\$23,000	19	4050
Toyota Prius IV (2010)	\$26,000	48	3042
Toyota Scion Tc (2009)	\$19,000	30	2905
Volkswagon Jetta SE (2009)	\$22,000	25	3230
Volkswagon GTI (2009)	\$26,000	26	4112

Appendix B - Starting Jobs & Salaries in NH (2008)

<u>Based on 40 hours per week, for 52 weeks</u>	<u>Hourly</u>	<u>Per Year</u>	<u>Monthly Net Pay After Taxes</u>
Accountants and Auditors	\$19.32	\$40,185	\$2,603
Automotive Body and Related Repairers	\$12.97	\$26,977	\$1,804
Automotive Service Techs & Mechanics	\$12.56	\$26,124	\$1,749
Bank - Credit Union Tellers	\$10.12	\$21,049	\$1,422
Bookkeeping, Accounting, and Auditing Clerks	\$11.48	\$23,878	\$1,604
Business Operations Specialists	\$16.58	\$34,486	\$2,283
Cabinet Makers and Bench Carpenters	\$12.91	\$26,852	\$1,796
Carpenters	\$14.45	\$30,056	\$2,002
Child Care Workers	\$7.51	\$15,620	\$1,071
Computer Programmers	\$18.69	\$38,875	\$2,530
Computer Specialists	\$18.59	\$38,667	\$2,518
Computer Support Specialists	\$15.54	\$32,323	\$2,148
Cooks, Fast Food	\$7.78	\$16,182	\$1,108
Cooks, Restaurant	\$9.42	\$19,593	\$1,328
Correctional Officers and Jailer	\$15.24	\$31,699	\$2,108
Customer Service Representatives	\$10.58	\$22,006	\$1,483
Dental Assistants	\$12.98	\$26,998	\$1,805
Dental Hygienists	\$30.38	\$63,190	\$3,894
Dentists	\$50.89	\$105,851	\$6,224
Electrical and Electronic Technicians	\$17.48	\$36,358	\$2,389
Electrical Engineers	\$28.01	\$58,260	\$3,618
Electricians	\$16.46	\$34,236	\$2,269
Elementary School Teachers	\$17.52	\$36,455	\$2,394
EMTs and Paramedics	\$12.64	\$26,291	\$1,759
Engineer Technicians	\$17.09	\$35,547	\$2,343
Fire Fighters	\$13.85	\$28,808	\$1,922
Food Preparation Workers	\$7.20	\$14,976	\$1,030
Forest and Conservation Technicians	\$13.84	\$28,787	\$1,921
Graphic Designers	\$14.44	\$30,035	\$2,001
Hairdressers, Hairstylists, and Cosmetologists	\$6.98	\$14,518	\$1,000
Home Health Aides	\$9.76	\$20,300	\$1,373
HVAC Mechanics and Installers	\$16.27	\$33,841	\$2,246
Janitors and Cleaners	\$8.92	\$18,553	\$1,261
Kindergarten Teacher	\$12.07	\$25,109	\$1,683

<u>Based on 40 hours per week, for 52 weeks</u>	<u>Hourly</u>	<u>Per Year</u>	<u>Monthly Net Pay After Taxes</u>
Landscape and Groundskeeper Workers	\$9.63	\$20,030	\$1,356
Lawyers	\$26.19	\$54,475	\$3,405
Legal Secretaries	\$13.96	\$29,036	\$1,937
Librarian Technicians	\$10.23	\$21,278	\$1,436
Licensed Practical and Vocational Nurses	\$17.04	\$35,443	\$2,337
Life, Physical, and Social Science Technicians	\$14.54	\$30,243	\$2,014
Machinists	\$13.47	\$28,017	\$1,871
Mechanical Drafters	\$15.29	\$31,803	\$2,115
Mechanical Engineers	\$24.64	\$51,251	\$3,224
Medical Assistants	\$12.98	\$26,998	\$1,805
Medical Assistants	\$15.05	\$31,304	\$2,083
Medical Records & Health Info Technicians	\$11.31	\$23,524	\$1,581
Medical Secretaries	\$12.83	\$26,686	\$1,785
Meeting & Convention Planner	\$14.94	\$31,075	\$2,068
Metal Workers, Plastic Workers, All Other	\$10.79	\$22,443	\$1,512
Network and Computer Systems Administrators	\$22.44	\$46,675	\$2,968
Nurses Aides, Orderlies and Attendants	\$11.09	\$23,067	\$1,552
Paralegal and Legal Assistants	\$17.65	\$36,712	\$2,408
Payroll and Timekeeping Clerks	\$13.04	\$27,123	\$1,813
Pediatricians, General	\$47.23	\$98,238	\$5,815
Pharmacists	\$42.56	\$88,524	\$5,294
Pharmacy Technicians	\$9.70	\$20,176	\$1,365
Physical Therapists	\$25.75	\$53,560	\$3,354
Plumbers, Pipefitters, and Steamfitters	\$15.27	\$31,761	\$2,112
Police and Sheriff's Patrol Officers	\$15.33	\$31,886	\$2,120
Postal Mail Sorters & Processors	\$15.34	\$31,907	\$2,122
Public Relations Specialists	\$16.77	\$34,881	\$2,306
Receptionists and Information Clerks	\$9.49	\$19,739	\$1,337
Registered Nurses	\$22.23	\$46,238	\$2,943
Reporter and Correspondents	\$12.07	\$25,109	\$1,683
Retail Salespersons	\$7.94	\$16,515	\$1,129
Sales Representatives	\$14.28	\$29,702	\$1,979
Social & Human Resource Assistants	\$9.88	\$20,500	\$1,386
Special Ed Teachers	\$16.85	\$35,063	\$2,316
Tailors, Dressmakers, and Custom Sewers	\$10.88	\$22,630	\$1,524
Tax Examiners	\$13.05	\$27,144	\$1,814
Truck Driver, Heavy & Tractor-Trailer	\$15.03	\$31,262	\$2,080
Truck Driver, Light or Delivery Service	\$9.74	\$20,259	\$1,370

Appendix C – Student Loan Table

Loan Interest Rate =>

For a Ten Year Loan

For a Six Year Loan (Pay More and SAVE!)

Loan Amount	Monthly Pmt At 6%	Total Interest		Monthly Pmt At 6%	Total Interest	Savings
\$10,000	\$111	\$3,320		\$166	\$1,932	\$1,388
\$12,000	\$133	\$3,987		\$199	\$2,319	\$1,668
\$14,000	\$155	\$4,651		\$232	\$2,705	\$1,946
\$16,000	\$177	\$5,316		\$265	\$3,092	\$2,224
\$18,000	\$200	\$5,980		\$298	\$3,478	\$2,502
\$20,000	\$224	\$6,645		\$331	\$3,865	\$2,780
\$22,000	\$244	\$7,309		\$365	\$4,251	\$3,058
\$24,000	\$266	7,974		\$398	\$4,673	\$3,301
\$26,000	\$288	\$8,638		\$431	\$5,024	\$3,614
\$28,000	\$310	\$9,303		\$464	\$5,410	\$3,893
\$30,000	\$333	\$9,967		\$497	\$5,797	\$4,170
\$36,000	\$399	\$11,961		\$596	\$6,957	\$5,004
\$42,000	\$466	\$13,954		\$696	\$8,116	\$5,838
\$48,000	\$533	\$15,948		\$796	\$9,276	\$6,672
\$54,000	\$599	\$17,941		\$895	\$10,435	\$7,506
\$60,000	\$666	\$19,935		\$994	\$11,595	\$8,340
\$66,000	\$733	\$21,928		\$1,094	\$12,754	\$9,174
\$72,000	\$799	\$23,922		\$1,193	\$13,914	\$10,008
\$78,000	\$866	\$25,915		\$1,293	\$15,073	\$10,842
\$84,000	\$933	\$27,909		\$1,392	\$16,233	\$11,676
\$90,000	\$999	\$29,902		\$1,492	\$17,392	\$12,510
\$96,000	\$1,066	\$31,895		\$1,591	\$18,552	\$13,343

Appendix D - Payments on a Four-Year Car Loan

Your Survey Score =>>	33-30	29-27	26-23	22-20	19-17	16-11
Your Credit Score =>	850-805	790-760	745-700	685-655	595-550	535-520
Loan Interest Rate =>	At 4%	At 6%	At 10%	At 15%	At 18%	At 21%
Loan Amount						
\$10,000	\$226	\$235	\$253	\$278	\$294	\$309
\$11,000	\$248	\$258	\$279	\$306	\$323	\$340
\$12,000	\$271	\$282	\$304	\$334	\$352	\$371
\$13,000	\$293	\$305	\$330	\$362	\$382	\$402
\$14,000	\$316	\$328	\$355	\$389	\$411	\$433
\$15,000	\$338	\$352	\$380	\$417	\$440	\$464
\$16,000	\$359	\$373	\$405	\$445	\$469	\$495
\$17,000	\$384	\$399	\$431	\$473	\$499	\$526
\$18,000	\$406	\$423	\$456	\$500	\$529	\$557
\$19,000	\$429	\$446	\$482	\$529	\$558	\$588
\$20,000	\$451	\$470	\$507	\$556	\$587	\$619
\$21,000	\$474	\$493	\$532	\$584	\$619	\$650
\$22,000	\$497	\$517	\$558	\$612	\$646	\$681
\$23,000	\$519	\$540	\$583	\$640	\$675	\$712
\$24,000	\$542	\$563	\$609	\$668	\$705	\$743
\$25,000	\$564	\$587	\$634	\$696	\$734	\$774
\$26,000	\$587	\$611	\$659	\$723	\$764	\$805
\$27,000	\$609	\$634	\$685	\$751	\$793	\$836
\$28,000	\$632	\$658	\$710	\$779	\$822	\$867
\$29,000	\$655	\$681	\$735	\$807	\$852	\$898
\$30,000	\$677	\$705	\$761	\$835	\$881	\$929

Appendix D - Payments on a Five-Year Car Loan

Your Survey Score =>>	33-30	29-27	26-23	22-20	19-17	16-11
Your Credit Score =>	850-805	790-760	745-700	685-655	595-550	535-520
Loan Interest Rate =>	At 4%	At 6%	At 10%	At 15%	At 18%	At 21%
Loan Amount						
\$10,000	\$184	\$193	\$212	\$238	\$254	\$270
\$11,000	\$202	\$213	\$234	\$261	\$279	\$297
\$12,000	\$221	\$232	\$255	\$285	\$305	\$325
\$13,000	\$239	\$251	\$276	\$309	\$330	\$352
\$14,000	\$258	\$271	\$297	\$333	\$355	\$379
\$15,000	\$276	\$289	\$318	\$357	\$381	\$406
\$16,000	\$295	\$309	\$340	\$380	\$406	\$433
\$17,000	\$313	\$328	\$361	\$404	\$432	\$460
\$18,000	\$331	\$348	\$382	\$428	\$457	\$487
\$19,000	\$350	\$367	\$404	\$452	\$482	\$514
\$20,000	\$368	\$386	\$425	\$476	\$508	\$541
\$21,000	\$387	\$406	\$446	\$500	\$533	\$568
\$22,000	\$405	\$425	\$467	\$523	\$559	\$595
\$23,000	\$423	\$444	\$489	\$547	\$584	\$622
\$24,000	\$442	\$464	\$510	\$570	\$609	\$649
\$25,000	\$460	\$483	\$531	\$595	\$635	\$676
\$26,000	\$479	\$503	\$552	\$618	\$660	\$703
\$27,000	\$497	\$522	\$574	\$642	\$686	\$730
\$28,000	\$515	\$541	\$595	\$666	\$711	\$757
\$29,000	\$534	\$561	\$616	\$690	\$736	\$784
\$30,000	\$552	\$580	\$637	\$714	\$761	\$811

Appendix D - Payments on a Six-Year Loan

Your Survey Score =>>	33-30	29-27	26-23	22-20	19-17	16-11
Your Credit Score =>	850-805	790-760	745-700	685-655	595-550	535-520
Loan Interest Rate =>	At 4%	At 6%	At 10%	At 15%	At 18%	At 21%
Loan Amount						
\$10,000	\$156	\$166	\$185	\$211	\$228	\$245
\$11,000	\$172	\$182	\$204	\$233	\$250	\$270
\$12,000	\$188	\$199	\$222	\$254	\$274	\$294
\$13,000	\$203	\$215	\$241	\$275	\$296	\$319
\$14,000	\$219	\$232	\$259	\$296	\$319	\$343
\$15,000	\$235	\$249	\$263	\$317	\$342	\$368
\$16,000	\$250	\$265	\$296	\$338	\$365	\$392
\$17,000	\$266	\$282	\$315	\$359	\$388	\$417
\$18,000	\$282	\$298	\$333	\$381	\$411	\$442
\$19,000	\$297	\$314	\$352	\$402	\$433	\$466
\$20,000	\$312	\$331	\$370	\$423	\$456	\$491
\$21,000	\$328	\$348	\$389	\$444	\$479	\$515
\$22,000	\$344	\$365	\$408	\$465	\$502	\$540
\$23,000	\$360	\$381	\$426	\$486	\$525	\$564
\$24,000	\$375	\$398	\$445	\$507	\$547	\$589
\$25,000	\$391	\$414	\$463	\$529	\$570	\$613
\$26,000	\$407	\$431	\$482	\$550	\$593	\$638
\$27,000	\$422	\$447	\$500	\$571	\$616	\$662
\$28,000	\$438	\$464	\$519	\$592	\$639	\$687
\$29,000	\$454	\$481	\$537	\$613	\$661	\$711
\$30,000	\$469	\$497	\$556	\$634	\$684	\$736