

Lesson Plan

NEUROHEADWAY

Neuroscience Into Education

Considerations for when buying a car activity for KS2 children

One of the most important skills you can learn in life is how to drive a car. Learning to drive gives freedom and the ability to travel around the town, city and country. In order to drive you need a car. It's important to teach the children the expenses of having a car and the costs of running them.

Exercise one

Give the children a few minutes to write down all the factors that cause expense on a car for instant they should write things down like insurance, petrol, tax, MOT and some more. It's important to teach the children about financing and the amounts these different factors add up to. Part two of this exercise is the children have to estimate how much each factor may cost. For example:

- Insurance - £800
- Tax - £100
- Petrol - £30
- MOT- £35
- Service- £80

These are the main factors which go into buying a car, the teacher should discuss with the children their ideas about how much all these factors may cost. After the teacher should show the children the realistic costs of each factor and explain how some of these are a fixed price for instance tax cost £120 and MOT has a fixed price of £35.

Exercise two

The children have to work in their maths groups; the lower groups should have help from the teacher and TA. The groups are given a budget of £3000 and have to research using laptops or iPad what car they can buy with that money. Using the information given by the teacher in the first exercise the children must factor in the costs of the other expenses of the car. These will be written in a table. E.g.

Budget	Expenses
£3000	
£800	Insurance
£120	Tax
£35	MOT
£30	Petrol
£80	Service
Total cost of expenses	£1465

The children should take £1465 away from £3000 to see how much money left they will have to buy a car. This exercise is useful to help children to develop their mathematics skills and to help them develop an important skill that they may need when they are old enough to drive and purchase a car.

Considerations for when buying a car for Secondary school students

In most teenagers lives they will be looking forward to they day they can learn how to drive and even own their own car. For the older students in KS4 from year 11 onwards this can become a possibility due to the legal age for driving is 17. It's important that students learn the running cost of a car and how to budget and purchase their own car when the time comes to it.

Exercise one

In order to purchase a car the students have to decide on what car they would like. To do this they can visit this website: www.autotrader.com Once the student finds the car that best fits them get them to answer this short questionnaire.

What is the

Make: _____

Model: _____

Year: _____

New or Used and why?

Price: _____

How many miles has your car already been driven? _____

What is the gas mileage for your car in the city? _____,
highway? _____, and its average gas mileage _____.

These are the basic information that ordinary people have to consider when purchasing a car. This information is important to learn as it allows you to recognise the different factors of the car and the information tells us whether a car is worth purchasing or not. Plus it allows us to see whether it fits into our budget.

Exercise two

Now that the students have chosen their car they can determine how much they need to pay a month or year for their car payment. Below is a website where they can do this:

<http://www.cars.com/go/advice/financing/calc/loanCalc.jsp?mode=full>

Since this is the very first car the students will ever own they do not have a car to trade in. Assume if a dealer asks for a down payment, they usually want 10 %. The students can also price the car with zero down. Compare each using the table below.

	Car payments with a 10% down payment	Car payments with no down payment
Original cost of the car		
Down payment amount		
The amount of your monthly car payment over 36 months		
The amount of your monthly car payment over 48 months		
The amount of your monthly car payment over 60 months		
The amount of your monthly car payment over 72 months.		
Total amount you will eventually pay for your car		
Total amount of interest you will pay on your loan		

What is the monthly cost of if you were to lease the car?

24 month lease _____ with _____ miles

This table gives the students a realistic idea of how much it costs to buy a car or lease it out for a year. They can also use their mathematics skills to work out the different costs of the car from the original price and see over all how much they would be spending if they had the money.

Extension exercise

After adding up how much it is to own a car and lease it out its important to learn the other key factors which count into the cost such as car insurance, road tax and MOT's. As MOT's and road tax have a fixed price of road tax: £120 MOT: £35, the students can use this website to get an insurance quote: www.progressive.com Once the students have all the information they need they can enter it into the table below.

Amount paid yearly in car payments (monthly payments)(12)	
Amount paid yearly in car insurance	
Amount paid yearly in registration	
Amount paid yearly for NY Inspection	
Total amount paid	

After filling out the table and working out the total amount paid for the car the students can answer two questions which will get them to think about the experience of purchasing a car and how they may come to reduce their total amount to a much cheaper price.

Does this seem realistic? Why?

What are some things that you think you would do differently to help reduce the cost of your car?