

MANCHESTER UNIVERSITY STUDENT LESSON PLAN

Subject: Running and buying a car **Year Group:** 10 **Duration:** 55mins

Number of Students: 24 **Ability:** Mixed ability

Lesson Objectives:

Know: Be able to use mathematics to make decisions about money management.

Understand: That after buying a car you need to be able to run it and think about the future when considering insurance.

Have developed: The skills to use mathematics to make logical decisions based on income and circumstances.



Start time



14:30

Starter:

Settle down. What would you think about when buying a car?
Giving answers.



14:35

Tasks/Activities:

Working out how much everyone can save in a year. Title and learning objective. Everyone can save 20% of their income. Those who live with parents can save an extra 3%. Who can save the least/most? Circulate the room. Talk to each group about what they think. Use Sheet 8 Saving and buying.



14:50

Use Sheet 7: Choosing. Looking at the cars who would you match with which cars - based on the people's circumstances. Now knowing the prices do any of your answers change? How long will it take each person to save up for a car?



14:55

Use Sheet 10 Insurance. Plot a graph of insurance and age. What do you notice? Can you explain what is happening? Insurance can be paid annually or monthly. Extra 9.8% for paying monthly. Who can afford to pay it all at once? Who do you think should pay monthly and annually - based on their circumstances?

Why?



15:10

Use Sheet 9: Fuel. Decide who you think should be put into the low/med/high mileage groups. Work out how much fuel they will use in a week from being told mpg of car. Unleaded = 108.7p per litre, 1 gallon = 4.54609 litres. Can they afford to run their car?



15:25

PLENARY: Reflect. Review. Preview.

Have your answers to the starter changed?
What did mathematics did you use today? Do you think it is important to learn about more things like this -money management in school?

BIG MATHEMATICAL THEME

Finance



KEYWORDS

Saving, spending, annual, mileage, gallon, litre, convert.

LESSON OBJECTIVES

ALL

Students will appreciate that there are many things to think about when buying a car.

MOST

Students will understand that after buying a car you need to be able to run it and think about the future when considering insurance.

SOME

Students will have the skills to use mathematics to make logical decisions based on income and circumstances.

Key Questions

What can we afford based on income?

What can we afford based on circumstances?

Resources

- Presentation
- Resource sheets

Assessment for Learning

- Targeted questioning
- Class discussion.
- Group work