Year 10

Focus for this week: Your Money Matters (Life skills): Savings

SAVINGS

SAVING OR SAVINGS?

It is easy to confuse the terms saving and savings.

Saving is often thought of as the act of putting away money for future use. This might range from a few pence being kept in a money box at home to a larger amount being placed in a bank account.

Saving can also refer to reducing the amount you spend, maybe allowing you to put some of that money away for future use.

Savings refers to the amount or value of the money that is being put to one side. If you have put £50 into a bank account this is your savings. If you then arrange to put in a further £10 per month then that is the amount you are saving. In this example, at the end of 1 year you would have saved a further £120 (£10 x 12 months) on top of the initial £50, giving you a total savings amount of £170 altogether. This is the amount that is said to have accrued.

Reasons to save:

- For a very specific purpose or to help achieve a particular goal
- To gather together wealth for future use
- To put money aside for unplanned events
- To keep your money safe.

DISCUSSION

Think about the different reasons people might have for saving money. Come up with two examples for each of the reasons above.

DELAYED GRATIFICATION

When you save money, it is likely that you will spend it at some point in the future. That could be either in the next few days or weeks (short-term saving) or within the next year (medium-term saving). It may even be much further into the future (long-term saving) – for example, when you are saving up for somewhere to live or even thinking about retirement. In some cases, the money you save may be passed on to others through gifts, donations to charity or inheritance.

Saving for future spending is sometimes called "delayed gratification" – in other words, we postpone the sense of enjoyment we get from immediate spending to sometime further into the future. But remember, the money can only be spent once, so the choices you make about how to spend your savings should be made very carefully.

Saving can bring its own sense of satisfaction – if you're saving on a regular basis and can see your savings increase as you move towards your target amount.

ACTIVITY

1. Sam currently spends all of his £5 pocket money every week on a music streaming subscription. There is currently an offer to make a one-off payment of £80 for a whole year of streaming.
   a) How many weeks will it take Sam to save up the money for the one-off payment?
   b) How much would Sam save over the year?
   c) Do you think it is worth the wait to save up for the one-off payment?
   d) What might the disadvantages be?

2. Jakob has saved up for a new game to play on his console. He can buy it online now for £40, plus £5 postage and packaging, or he can wait 3 months, save a bit more and buy the downloadable version, which will have added features and levels, for £55. He can only spend the money that he's saved up once, so needs to decide what to do.
   a) Identify the benefits and implications of each option.
   b) In your opinion, should Jakob delay buying the game? What would you do?

QUESTIONS

1. What is the difference between 'saving' and 'savings'?
2. Identify three benefits of someone having savings.
3. What might be the consequences of not having savings?
4. Give an example of delayed gratification.

WAYS TO SAVE

The simplest way to save is to put some cash to one side at home. This is usually fine for small amounts but becomes increasingly risky as the amount of savings becomes larger. Cash in the home is at risk of being stolen or lost, and it can be difficult to keep track of exactly how much you have in order to know if any is missing. That's why many people choose to keep their money in a safer place such as a bank, building society or credit union.

DID YOU KNOW?

Banks, building societies and credit unions are all organisations that provide financial services, including the ability to save, but are structured differently.

A bank is an organisation owned by its shareholders. It aims to maximise profits for its shareholders through its financial activities.

A building society is an organisation that is owned by its members, some of whom will be customers who save money with or borrow money from the society. They often offer a range of financial services and are similar to banks.

Credit unions are community focused, non-profit making organisations that encourage saving and lend money to members. To use a credit union, you have to become a member.

TYPES OF ACCOUNT

There are two main types of account which can be opened at a bank, building society or credit union:

- **Current accounts.** These help you to manage your day-to-day money, pay bills, receive incoming money and help keep your money secure. Most standard current accounts are free to use.

  Many banks and building societies offer current accounts with extra incentives, for example: holiday or mobile phone insurance, cheaper rates on loans and mortgages, and money off holidays and flights. These have a monthly fee of between £10 and £20 and are called "packaged accounts". However, you should only consider one of these current accounts if you know that the annual cost of the package is less than if you were to buy the incentives separately.

  There is also a switching service available that allows you to move your current account from one bank or building society to another. They may provide you with vouchers, cash and better interest rates as a reward to switch to them.

  Some current accounts pay interest on the money you have in them and may even pay more than a savings account (although this is often only up to a limit of around £3,000).

- **Savings accounts.** These are specifically designed for you to save money in and are usually best for saving larger amounts. The amount you put in may grow as interest is added. Interest is an extra payment given as a reward for keeping your money with that particular organisation. They may also be referred to as deposit accounts.

We'll look in more detail at the different types of savings account later in this chapter.

DID YOU KNOW?

All UK-regulated current or savings accounts and cash ISAs (Individual Savings Accounts) in banks, building societies and credit unions are covered by the Financial Services Compensation Scheme (FSCS).

This means that if they fail you would get back up to £85,000 per person, per financial institution.

QUESTIONS

1. Give three advantages of keeping money in a bank account rather than at home.
2. What is the difference between a current account and a savings account?
3. How do you think someone might use a current account and a savings account together?
4. Some people have more than one savings account. Why might this be the case?

INTEREST

A REWARD FOR SAVING

As well as being a safer option for storing savings, people choose to save with a bank or building society because they offer interest on money saved with them. Interest is the reward you get for keeping your money with a bank or a building society. It is also the cost you pay when you borrow money through a loan or credit agreement – see the 'Borrowing' chapter. It is usually worked out as a percentage, known as the interest rate. From this, you can work out how much interest is going to be earned on top of the money you save.

There are two ways of working out interest – simple interest and compound interest. In reality, all banks will use the compound method to work out the interest they pay or charge you, but let's look at the simple interest method first to see why this is:

The interest earned on an initial amount of £1,000 (known as the **P**rincipal) deposited into a savings account with an interest rate of 2%, or 0.02 in decimal format (known as the **R**ate), for 1 year (known as the **T**ime) can be worked out using the simple interest formula:

Interest = P x R x T

In this case, this would be, 1000 x 0.02 x 1.

So, an interest rate of 2% paid on a principal of £1,000 would gain £20 interest over 1 year. This will only be accurate if no further money, on top of the original £1,000, is deposited or withdrawn.

This method of calculating interest is known as the simple interest method. It suggests that the principal amount would earn £20 every year.

ACTIVITY

1. Using the simple interest formula, calculate the interest if the £1,000 were kept in the savings account at the same interest rate of 2% for:

a) 3 years **b)** 7 years **c)** 15 years

(HINT – use the formula but change **T** to the different number of years the money is saved.)

2. Can you see anything slightly unfair with the calculations you have made in Q1?

(HINT – think about the amount you are receiving interest on each year.)

COMPOUND INTEREST

In reality, organisations use a different method of calculating interest known as compound interest. This recognises that at the end of year 1, your total savings would be £1,020 and that in year 2 you should have your interest calculated against this higher amount. This means that the interest gained in previous years will also earn interest – meaning you receive a higher return on top of your savings.

Interest on interest on interest...

So, if the £1,000 is deposited for 3 years and the 2% rate is compounded it will work out as follows:

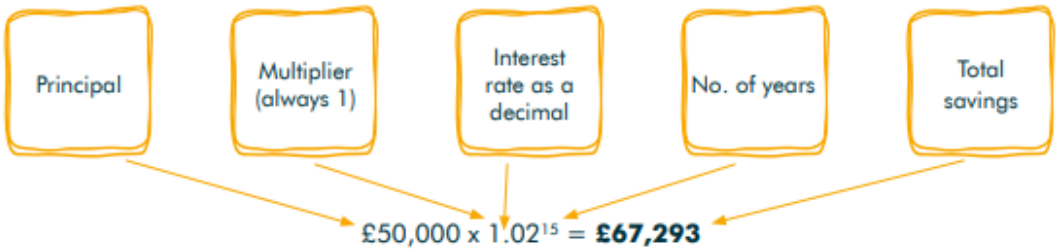
Year 1: £1,000 x 0.02 x 1 = £20.00 interest. Total savings at the end of Year 1 = £1,020

Year 2: £1,020 x 0.02 x 1 = £20.40 interest. Total savings at the end of Year 2 = £1,040.40

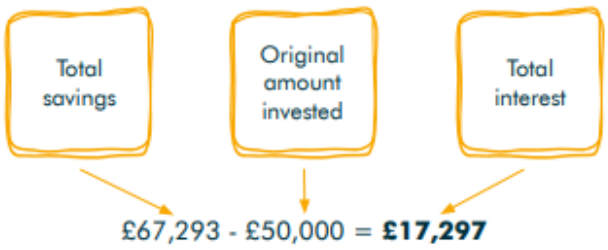
Year 3: £1,040.40 x 0.02 x 1 = 20.81 interest. Total savings at the end of Year 3 = **£1,061.21**

So, over 3 years with a principal sum of £1,000 you would receive £1.21 more if the interest was calculated using the compound method compared to the simple interest method. Not a huge difference? Well, that's true on smaller amounts saved over short time periods but, for larger amounts over longer time periods, the interest gained will be much more significant.

This method of calculating compound interest is really good to use when there are only a small number of years to calculate but imagine if you had savings of 10 years or more...it would take you much longer to work out the answer. Therefore, another way of calculating compound interest is using the multiplier, for example if £50,000 was saved over 15 years at an interest rate of 2% the total value of savings would be:



So, the amount of interest earned over 15 years would be



If we had used the simple interest method, the total interest would have been:

£50,000 x 0.02 x 15 = **£15,000**, so the total value of the savings would have been **£65,000**.

In this scenario, using the compound method would mean you would receive £2,293 more interest. That's £2,293 more, just because of the way the interest is calculated.

This final amount will only be reached if no further money is deposited or withdrawn. In reality, more money may have been added to the amount being saved or some of it taken out to be spent. Therefore, the amount actually being saved will vary constantly; this will in turn affect the amount of interest being accrued.

DID YOU KNOW?

The formula for compound interest, which you will use in GCSE Maths, is:

Total accrued = $P\left(1+\frac{r}{100}\right)^{n}$

ACTIVITY

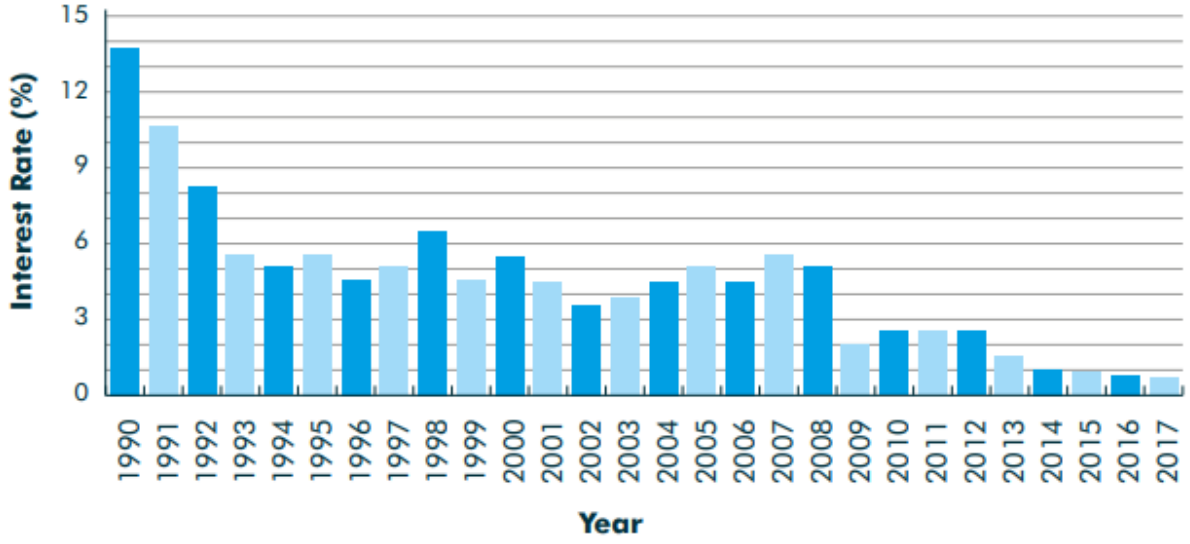
1. Use the compound method to calculate the interest paid on a principal of £150,000 saved in a savings account paying 3% interest over the following periods:
   a) 5 years **b)** 12 years **c)** 20 years
2. What if the interest rate was 5%? Use the same information in Q1 to recalculate the interest received.
3. Calculate Q1 and Q2 using the simple interest method and compare the difference in interest received to the compound method.

ACTIVITY

The chart below shows the average annual savings interest rates in the UK from 1990 to 2017.

1. Summarise what has happened to savings interest rates over this 27 year period.
2. If you had put £1,000 into a savings account in 1990, how much interest would you have earned over the year?
3. If you had put £1,000 into a savings account in 2017, how much interest would you have earned over the year?
4. Look at your answers for Q2 and Q3, what does this tell us about interest rates?
5. Look at the trend over the 27 years, what would you say is likely to happen to savings interest rates in the future?

Annual average UK interest savings rates



Email completed activities to me at acroft@bower-grove.kent.sch.uk . Each good attempt earns a golden token.

DID YOU KNOW?

Banks tend to calculate the interest on your savings on a daily basis using the compound method, although the period that they pay the interest to you can vary from one savings account to another.

Take a look at the following table, which shows what would happen if banks were to calculate the interest payable on £5,000 at a rate of 3% for 5 years over different compounding periods.

SIMPLE INTEREST	COMPOUND INTEREST			
	Yearly	Quarterly	Monthly	Daily
£5,750	£5,796.37	£5,805.92	£5,808.08	£5,809.14

DISCUSSION

Why do you think banks calculate interest on a daily basis?

Why do you think different institutions pay interest out at different intervals?

ACTIVITY

1. ZYX Bank offers a saver rate of 1.5% and a borrowing rate of 9.5% per year. Calculate the profit the bank would make if an amount of £2,000 was saved and then lent out over 1 year.
2. Explain what would happen if the borrowing interest rate was lower than the saving interest rate.

DID YOU KNOW?

It is important to remember that interest on savings are a form of income and are subject to tax (except ISAs - we will look at these later on). There are limits as to how much interest you can earn before it becomes taxed. These are set out in the Personal Savings Allowance (PSA), but for most people they would have to earn over £1,000 interest a year before paying any tax.

WHY DO BANKS PAY INTEREST?

Banks pay interest as a way of attracting people to save with them. While they have your money, they are able to make use of it, for example, it can be lent to borrowers. When a bank lends money to borrowers it will do so at a higher interest rate than it pays to its savers.

This is why it is better to save than borrow, because in effect you get paid to save whereas you have to pay to borrow.

If you have borrowed money from a bank, you should try to pay this off before you start saving. This is because it costs you more to borrow than save.

For example, ABC Bank pays savers an interest rate of 2% a year, but charges borrowers an interest rate of 10% a year. If a saver put £1,000 into their savings account for a year ABC Bank would pay them £20 interest.

Over that same period, if ABC Bank loaned the £1,000 to a borrower the bank would receive £100 in interest at the end of the year.

In total, ABC Bank have made £80 profit. This would be £100 interest from the borrower minus £20 interest they have paid to the saver. This is how banks and other financial institutions make some of their profits.

COMPARING INTEREST RATES AND THE ROLE OF ANNUAL EQUIVALENT RATE (AER)?

You might think it would be really easy to compare two savings accounts by looking at the interest rates they offer. Well, it's actually not always as easy as you might think.

Some savings accounts have charges associated with them, for example, when withdrawing cash at short notice. While some savings accounts offer additional perks and bonuses, for example, a higher interest rate for the first year.

To make comparing the interest on savings account easier it is shown as an Annual Equivalent Rate (AER). This takes into account the charges and the interest paid on the account and shows it as an overall percentage rate. This means that savers can easily compare savings accounts from different banks. The higher the AER the more interest they will receive on their savings.

DID YOU KNOW?

The interest rate you get on your savings is influenced by the Bank of England. They set a base rate, which banks then use to help set the interest rate they offer on their savings accounts.

The Bank of England have an opportunity to change this rate eight times per year, however, unless they have made an explicit promise not to do so, high street banks can vary their interest rates whenever they want.

If you want to learn more about how savings can work for you then go to **www.moneysavingexpert.com/savings**

QUESTIONS

1. Why do financial organisations offering similar savings products have different interest rates?
2. Why is the Annual Equivalent Rate (AER) used to work out overall interest on a savings account?
3. Explain the advantage of compound interest compared to simple interest.
4. Which is better for a saver – an account which calculates interest daily, monthly or yearly?
5. AER is one way to compare savings accounts, but what else should you consider when choosing the right account for you?

THE IMPACT OF INFLATION

Inflation is simply the general increase in the cost of goods and services from one year to the next. The government calculates this figure every month and publishes it as a percentage. The higher the inflation rate, the greater the increase in cost of everyday goods and services.

For example, if the inflation rate was 2% then a weekly food shop that cost you £100 last year would be expected to cost £102 this year.

If the rate of inflation is higher than the interest rate on savings, it means that the cost of goods and services are increasing faster than the level of interest received. Therefore, the amount you can purchase with the savings will have reduced.

So, if you have savings, or if you're looking for a new savings account, make sure to keep an eye on how the interest rate you will be receiving compares to the rate of inflation.

SAVINGS ACCOUNT FEATURES

While the AER gives a very good indication of the amount of interest you will receive on your savings, it's not the only thing to look for in a savings account. There are different types of savings accounts with features that appeal to different people:

TYPE OF SAVINGS ACCOUNT	DEFINITION	ACCOUNT FEATURES
Easy access accounts	This type of account allows you to withdraw money at any time without prior warning. Often these are "instant access" accounts, which allow you to withdraw any amount of money from an ATM straight away for free.	• May offer a higher interest rate when first set up • Interest rate tends to be lower than for other accounts • May be restrictions on how many withdrawals you can make every year, so make sure you check the small print
Notice account	Advance warning usually has to be given if you wish to withdraw money from this type of account without being penalised.	• Typically, 30, 60 or 90 days advance notice has to be given to withdraw money • Withdrawing money without giving notice could result in loss of interest • Generally have a better interest rate as the bank knows when you will be taking money out, and can plan accordingly
Regular saver account	A regular sum of money must be added to the account each month.	• The interest rate is usually higher • The number of withdrawals that can be made from the account may be limited • In all cases, there is a limit to how much you can save (usually around £250 per month)
Fixed rate savings (sometimes called bonds)	Your saved money is "locked away" for a specified period of time (known as the term). A bond is another word for a loan. This means that you are lending your money to a bank or building society in return for interest.	• A one-off amount often must be deposited at the start • The term is usually between 1 and 5 years • A fixed (and usually higher) interest rate is offered – depending on how much money is deposited and how long the term is • You may be able to withdraw money before the term is up, but this will usually result in penalties, which are often higher than for a Notice account
Individual Savings Account (ISA)	This is a form of savings account where you do not pay tax on the interest earned.	• The government set the limit of how much money you can save in an ISA each tax year

These different forms of savings account are available from a wide range of banks and building societies, although the interest rate you receive will vary from one organisation to another. That means that while a higher rate of interest might be expected on a regular savings account, or fixed interest account, there could still be better rates to be found on easy access accounts. The golden rule is to always look around!

All of the above forms of savings account can be taken out as an ISA. This means that you are not taxed on the interest you receive up to a certain limit, which the government set each year. More details about ISAs can be found later on in the chapter.