

# SIMPLE INTEREST

Task 1 – Calculate the simple interest on:

- 1) £500 at 4% per year for 3 years      **£60**
- 2) £1,200 at 5% per year for 2 years      **£120**
- 3) £800 at 3.5% per year for 4 years      **£112**
- 4) £2,000 at 6% per year for 5 years      **£600**
- 5) £350 at 2% per year for 10 years      **£70**

Task 2 – Calculate the final amount earned when simple interest is paid on:

- 6) £900 at 4% per year for 3 years      **£1008**
- 7) £1,500 at 5% per year for 2 years      **£1650**
- 8) £2,400 at 6% per year for 1 year      **£2544**
- 9) £1,000 at 7.5% per year for 4 years      **£1300**
- 10) £2,800 at 2.5% per year for 5 years      **£3150**

Task 3

- 11) Sophie invests £2,000 in a savings account paying 4% simple interest per year. How much interest does she earn after 3 years, and what is the total amount in her account?  
**Interest earned = £2000 × 0.04 × 3 = £240**  
**Total amount = £2000 + £240 = £2240**

- 12) A car loan of £6,000 is taken out at 5% simple interest per year. How much interest is paid over 4 years? What is the total repayment amount?  
**Interest earned = £6000 × 0.05 × 4 = £1200**  
**Repayment = £6000 + £1200 = £7200**

- 13) Ben borrows £1,200 from a friend. He agrees to pay 3% simple interest per year. If he takes 5 years to pay it back, how much interest will he pay in total?  
**Interest paid = £1200 × 0.03 × 5 = £180**

- 14) £800 is invested in a bank at 2.5% simple interest per year for 6 years. Calculate the interest earned and the ending total balance.  
**Interest earned = £800 × 0.025 × 6 = £120**  
**Total balance = £800 + £120 = £920**

- 15) A school saves £5,000 to buy new computers. They place it in an account earning 2% simple interest per year for 2 years before spending it. If each computer costs £400, how many can the school buy?

$$\text{Interest} = £5000 \times 0.02 \times 2 = £200$$

$$\text{Total} = £5000 + £200 = £5200$$

$$\text{Number of computers} = £5200 \div £400 = 13$$

**The school can buy 13 computers.**

- 16) A shop takes a £4,000 business loan at 6% simple interest per year. If the loan is repaid after 18 months, how much interest is paid?

$$18 \text{ months} = 1.5 \text{ years}$$

$$\text{Interest paid} = £4000 \times 0.06 \times 1.5 = £360$$

- 17) James invests £3,500 at 4% simple interest for 4 years. He spends half of the interest earned on a holiday. How much money does he spend on the holiday?

$$\text{Interest earned} = £3500 \times 0.04 \times 4 = £560$$

$$\text{Holiday fund} = £560 \div 2 = £280$$

- 18) Ella borrows £2,500 from the bank at 5% simple interest per year for 3 years. Ella will pay £500 each year towards the loan. At the end of the 3 years, she will repay the remaining balance in full. What is the remaining balance?

$$\text{Interest} = £2500 \times 0.05 \times 3 = £375$$

$$\text{Total owed} = £2500 + £375 = £2875$$

$$\text{Remaining balance} = £2875 - (£500 \times 3) = £1375$$

- 19) A charity receives a £10,000 donation and invests it at 2% simple interest per year for 4 years before spending it. They spend 60% of the total final amount on a community event. How much money is spent on the event?

$$\text{Interest earned} = £10000 \times 0.02 \times 4 = £800$$

$$\text{Final amount} = £10000 + £800 = £10800$$

$$\text{Amount spent} = £10800 \times 0.6 = £6480$$