

**Resource Management & Consumer Studies**

**Leaving Certificate Home Economics Notes**

- Planning ↓ stress
- **Resource management** → use and handling of resources for the achievement of desired goals by using resources effectively
- An effective management system in a household ↑ quality and ↑ smooth operation in household
- Managing Cashflow → \* Know exactly what cash goes in and out of household  
→ \* Determine € needed for essentials
- **Ergonomics** → the study of time management, use of appliances, resources and the implementation of tasks to minimise energy use
- **Need** → something that is vital- cannot do without eg. Food, shelter, warmth, clothes
- **Want** → something we would like eg. Luxury car, foreign holiday, handmade chocolates
- Decision making is a vital part of family resource management

**Components of management:**

→ needs and wants

→ decision-making and communication

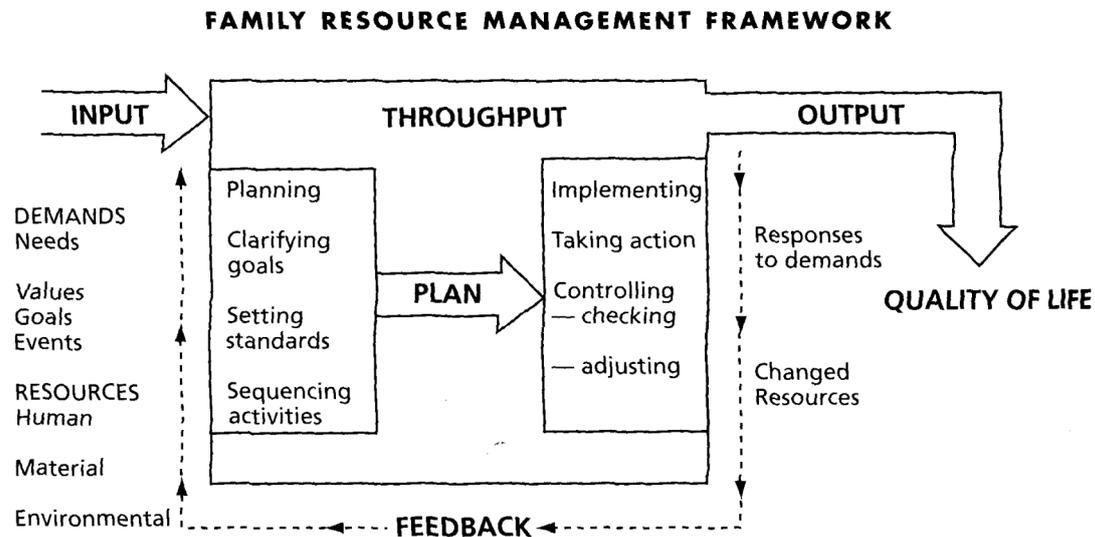
→ values, goals & standards

→ input, throughput and output

**Input** → 1<sup>st</sup> stage → demands and resources → goals are outlined → find direction → decide which & why resources are needed

**Throughput** → 2<sup>nd</sup> stage → plan of action → (1) planning & (2) implementing → resources are used to meet demand

**Output** → 3<sup>rd</sup> stage → combined result of input and throughput → final plan → evaluation of result → feedback



**Human Resources** → eg time, work, judgement, knowledge, skills

**Non-Human Resources** → eg money, materials, community resources ( schools, libraries, parks, shops, services)

**Attributes affecting family management:**

- 1. Family life cycle (young family, widower, retired, pre-retirement)
- 2. Employment pattern (employed, unemployed, dual role (both parents working))
- 3. Cultural changes (ethnic, diet, gender equality)

\*All of the above influence and effect how the household is managed

**Management of household finances:**

1. Each household acts as a financial unit in the economy
2. **Household Budget Survey (HBS)** → this survey represents a random sample of Irish households aiming to find out the current household expenditure patterns of private households

3. **Household expenditure** → patterns vary depending on income → eg HBS  
1999-2000 found households spent €578.33 per week on average which was a significant ↑ on previous spending patterns recorded in Ireland  
→ Urban household were found to spend more than rural  
→ Low income families tend to spend a higher % of income on food (compared to higher income families)  
\*Household expenditure is made up of (1) Essential and (2) Non-essential expenditure
  
4. **Household income** → ↑ in income by over 50% in the past 5 yrs  
→ gap between higher and lower income families has increased  
→ more pensioners are now found in low income households

**Important Terms:**

**Pensions** → actual or potential source of income → pension guaranteed on retiring → contributory/ non-contributory pension

**Wages** → paid weekly → hourly rate eg. Shop workers

**Salaries** → fixed monthly payment eg. Teachers, nurses, civil servants

**Gross income** → total income before any deductions

**Net income** → “take-home-pay” –gross pay less deductions

**Statutory/ Compulsory deductions** → deductions that must be taken from your income to go to the Revenue Commissioner to help finance services & general running of the country eg PAYE, PRSI

**PAYE (Pay As You Earn)** → main tax on income, employer takes tax from employees wage/salary and gives it to the government

**PRSI (Pay Related Social Insurance)** → a contribution usually shared by both employer and employee, based on % of income and deducted from salary/wage, the contribution is used by the government to pay social welfare, pensions, healthcare and provide employment and training schemes. You may be able to claim benefits if you are sick, unemployed on a Fas course or retire

early. To qualify you must have 39 weeks of PRSI contributions paid in the last full tax year

***PRSI benefits include:***

Unemployment benefit, Contributory old-age pension, Survivors contributory pension (widow(er)), Dental & optical benefits and Maternity benefits

***PPS number (Personal Public Service number)*** → this number is required to fill in a tax return form at the end of the year, PPS number is issued to everyone over 16yrs by the Dept. of Social, Community and Family Affairs for tax, social welfare and related services (eg. Drugs payment card)

***P60*** → A form given to the employee by the employer at the end of the tax year showing all pay and tax deductions from salary for the year (keep for at least 2 yrs)

***P45*** → given to the employee by employer when leaving a job, shows details of pay & deductions up to the date of leaving the job, this form is required when starting a new job or signing-on for social welfare

***Assistance Payments*** → payments available from the Government to those who are ineligible to get other benefits, means tested eg. Carers allowance, One-parent family payment, Non-contributory pension

***Universal Payments Benefits*** → these are payments made regardless of any PRSI contributions paid they include child benefit, free bus and train for pensioners, Family Income Supplement (FIS) and Rent allowance

**Budgeting:**

***Budget*** → a plan for managing and spending money (advance planning)

How to plan a Budget:

1. Write down needs and wants
2. Write down expected income and expenditure

3. Be aware of the date bills are due and approx. amount
4. Keep a record of all cheque stubs, card receipts (ATM, credit card, Laser), receipts
5. Keep a check on your budget
6. Avoid overspending & impulse buying
7. Overestimate bills
8. Allow for seasonal variations (eg Christmas, heating, birthdays etc)

**Budgeting for Low Income Families:**

- Good budgeting skills are essential
- Ensure that you are in receipt of all social welfare payments
- Help and advice is available from MABS (Money Advice And Budgeting Services)

(MABS → this free service is provided by the Dept. of Social, Community and Family Affairs the services include

→helping to plan a family budget

→negotiating with creditors (banks, moneylenders etc) on the clients behalf

→offer support and advice

→helps to set up special a/c's with local Credit Unions

→provides ongoing support

**Advantages of Budgeting:**

1. Develops good money management skills
2. ↓ financial worry and stress
3. Controls spending
4. Helps to plan for events (eg. Holidays, birth of a new baby)
5. Sets a good example for children
6. Helps to manage and plan for large bills (eg. Insurance)

**Guidelines for the allocation of average household budget:**

- Housing/ Accommodation 25%
- Food/ Groceries 25%
- Household expenses 20%
- Clothing/ Footwear 10%
- Transport 5%
- Healthcare 5%
- Leisure/ Recreation 5%

### **Housing Finance:**

\*Choice of Renting or Home Ownership

#### **1. Renting:**

→ reasons from student, working abroad, do not want a mortgage, cannot get a mortgage, unemployed, insecure job, no suitable property available to purchase

#### **Advantages of Renting:**

1. Not responsible for upkeep of building
2. No legal costs
3. No large deposit
4. Easy to move
5. Unemployed may be able to claim assistance towards rent

#### **Disadvantages of Renting:**

1. Cannot make changes to the building
2. No return on rent money
3. Selection of accommodation available for renting may be limited
4. Rent can be increased
5. Can be given short notice to leave
6. Restrictions may be in place eg no children/ pets

#### **2. Home Ownership:**

→ large financial transaction, most people have to borrow seen as a long-term investment

**Mortgage** → loan taken out to buy a house

→ Moneylenders usually will loan 2 ½ times that of the highest earners income and 1 ½ times that of the lower earner ( if 2 people are involved in the mortgage), a minimum of 10% of price of house must be paid as a deposit, the house acts as security on the loan.

**Mortgage Repayments** → the sum of money paid each month to pay the mortgage it should be no more than ¼ of the households net monthly income

**Other expenses in buying a house:**

1. **Legal fees** → solicitors fees to buy the property
2. **Valuation fees** → a check must be carried out to see if the value of the house is secure enough to support the mortgage (€127 max fee)
3. **Stamp duty on purchase of the deed** → government tax applicable on new homes with a specified floor area or 2<sup>nd</sup> hand homes over €76,000 regardless of the floor area
4. **Stamp duty on the mortgage deal** → government tax on all mortgages over €25,400 at a rate of €1 per €1000 borrowed

**Mortgage Protection** → insurance to protect the mortgage holder against future inability to repay mortgage

**Life Cover** → Insurance to protect the family / household in the event of death of the mortgage payer

**Mortgage Repayments** → repayments can be made over a number of years; failure to meet repayments may result in the house being repossessed by the moneylender

**Where do I find finance (moneylender) to purchase a house?**

1. Banks
2. Local Authorities
3. Building Societies
4. Assurance companies

**Types of Mortgages available:**

(1) Repayment Mortgage or (2) Endowment Mortgage

1. **Repayment Mortgage** → most common type, similar to a personal loan, monthly payment for the term of the mortgage (incl. Interest + part of loan), initial payments pay off interest
2. **Endowment Mortgage** → 2 regular monthly payments made for the term of the mortgage → one payment to the insurance company & one payment to the mortgage lending agency paying off the interest on the loan. The endowment policy paid to the insurance company is cashed at the end of the term of the mortgage resulting in a lump sum of cash which should be enough to pay off the mortgage (possibly with extra funds left over)

**Fixed or Variable rate of interest repayment?**

\*NB → decision for the house buyer

1. Fixed rate mortgage → interest is fixed for an agreed number of years → you know what your payments will be every month
2. Variable rate mortgage → involves risk, interest is calculated on the rate at time the payment is due interest rate may increase (disadvantage) or decrease (advantage), amount of each monthly payment is uncertain

**Local Authority Loans for House Purchase:**

- o Provides loans for those who want to buy a house but are unable to get a loan from a bank/building society
- o Eligibility is determined by income
- o Inability to borrow from other financial institutions must be evident
- o Local authority can purchase up to 95% of the price of the house but the max is €126,974 and repayments must not be greater than 35% of the households net income

Local Authority is also involved in the **Plan for Social Housing** → covers those who cannot afford to pay the full price of a house local authority enters into shared ownership with them → 40% is owned by the occupants of the house and 60% is rented from the local authority → the 60% must be purchased back within 25 years

Local Authority also runs the **Affordable Housing Scheme** → provides for the building of new houses in areas where low income purchasers have no access to the housing market by providing loans to purchases houses

**Voluntary Housing Schemes** → eg Respond building houses in Wexford, Dublin & Sligo → social agenda involved → build estates to build community

\*\* (First time buyers grant was a sum of €3,809 that was payable to new home owners from the Government but was abolished in the 2003 Budget)

### **Advantages of Home Ownership:**

1. Investment → usually appreciates
2. Provides security
3. Tax relief available on mortgage
4. Structural changes can be made
5. You can invite friends over whenever you like (no Landlord)

### **Disadvantage of Home Ownership:**

1. Large deposit required

2. Expensive legal costs
3. Responsible for maintenance
4. Getting a loan may be difficult

**Payment for Goods and Services:**

Methods of payment:

1. Cash
2. Credit
3. Bank Loan/ Overdraft
4. Credit Card
5. Hire Purchase
6. Cheque
7. Interest Free Credit
8. In-Store Budget account
9. Saving stamps

**1.Cash:**

→Coins and notes exchanged for goods and services

***Advantages***

- o You can only spend the amount that you have with you
- o Avoids overspending

***Disadvantages***

- o Loss, robbery
- o Coins can be bulky/heavy to carry

**2.Credit:**

→buy now pay later eg. Credit cards , Hire purchase, Overdrafts, In-store budget accounts

***Advantages***

- o Possible to buy expensive items eg house ,car
- o You have immediate use of good/service
- o Allows you to take advantage of special offers/ bargains
- o Avoids carrying cash , safe

### ***Disadvantages***

- o Temptation to overspend
- o Risk of being unable to meet repayments
- o May lead to financial difficulties
- o Buying on credit usually costs more (interest, fees)

\*Before purchasing on credit always check the APR rate (the lower the better)

### **Credit and the Law:**

#### **1. Consumer Credit Act 1995**

→provides protection for the borrower in

- (a) Consumer loan & credit agreements
- (b) Hire Purchase & leasing agreements
- (c) Housing loans, related fees & charges
- (d) Moneylenders, pawnbrokers

\*Protects against advertisements for credit

\*Protects credit agreements

#### **2. Hire Purchase Acts 1946 & 1960**

***Hire Purchase***→you hire or rent the product while paying instalments , you do not own the product until the final payment has been made under the act:

→*a copy of the agreement must be sent to the purchasers within 10 days of signing*

→*if the purchaser cannot meet the repayments the seller has the right to repossess the product*

**The Hire Purchase agreement must contain the following:**

- 1.Name & addresses of everyone involved in the agreement
- 2.Identification of the document as a hire purchase agreement
- 3.Hire purchase price, cash price and details of penalties
- 4.Description of goods
- 5.Details of instalments
- 6.Information on the termination of the agreement

7.Information on the sellers right to repossess the goods

8.Details of 10 day cooling off period (date)

### **3.Cheques and Cheque cards:**

***Cheque*** → an order form instructing your bank to pay the specified amount out of your account to the person named on the cheque (Payee)

***Payee***→ the person/organisation to whom you are making the payment to.

***Cheque guarantee card*** → a card that guarantees payment from the person named on the cards account up to a certain value (eg. €130) when presented with a cheque (way of making it more secure for people/shops etc to take checks from unknown individuals as the bank guarantees to honour a payment up to the amount stated on the card

#### ***Advantages of a cheque***

- o Money can be paid from your account for bills
- o Safe no need to carry cash

#### ***Disadvantages of a cheque***

- o Danger if you carry cheque book and cheque guarantee card together if stolen (signature)
- o The bank charges a fee on every cheque written

### **4.Credit Cards:**

→allows the card holder to purchase goods and services on credit up to a pre-arranged monthly limit

***Advantages***

- o Safe and convenient
- o Saves you carrying cash
- o You have the use of the good/service 6 weeks before you have to repay the bank

***Disadvantages***

- o Temptation to overspend
- o High interest rates if full bill is not paid off every month

**5.Laser Card (Debit Card):**

→ an electronic payment card that allows you to pay for goods and services by automatically debiting (taking money from) money from your bank account within 2 working days

→**EFTPOS** (Electronic Funds Transfer at Point Of Sale) is the name of the process Laser uses

***Advantages of Laser***

- o Convenient
- o Safe
- o Controls spending
- o Widely accepted

***Disadvantages of Laser***

- o Need to keep receipts to check against your bank statement

- o Risk of overspending/ impulse buying

### **Other Cards:**

**Smart Card** → a payment card with an embedded electronic chip, acts as an electronic purse with a certain amount of money pre-loaded onto the card that allows you to make purchases up to that value

**Cirrus Card** → this card allows withdrawal of foreign currency from ATM's in other countries up to a daily limit of €255

### **6. Direct Debit and Standing Order:**

**Direct debit** → allows payments to be made directly from your bank a/c (eg credit card bill, ESB etc)

**Standing order** → an order given to a bank to send fixed amounts of money to another account (eg many charities ask people to set up a standing order to their account)

#### ***Advantage of Direct debit / Standing order***

- o Convenient method of payment

#### ***Disadvantage of Direct debit/ Standing order***

- o Must be adequate funds in your account on the date of payment

### **7. In-store Budget a/c / Store cards:**

eg M&S , Arnotts

***Advantages***

- o Allows for the purchase of goods in store with a statement arriving each month
- o Allows you to take advantage of the cards credit facilities

***Disadvantages***

- o Impulse buying , overspending
- o Danger of debt
- o High interest rates

**8. Saving Stamps**

eg Post Office, Supermarkets

***Advantages***

- o *Good way of saving*
- o *Customer does not need to suddenly find a large sum of money eg TV licence stamps*

**9. Interest- Free Credit**

eg. A period of interest free credit is offered to entice the purchaser eg 6 months interest free credit on television but if not paid for within 6 months interest is charged

in the 7<sup>th</sup> month used very frequently by ESB shops, electrical shops, computer companies

***Advantages***

- o Allows large items to be bought
- o Payments can be spread out over time
- o No interest is charged

***Disadvantages***

- o If money is not paid within the term of the agreement interest charges apply
- o Possible to go into debt, offer may look attractive but only if you can afford to repay the credit in full

**Methods of Saving:**

***Advantages of saving:***

- o Sense of security (saving for a rainy day!!)
- o Savings may earn interest
- o Helps avoid debt worries

- o Easier to get a loan with a good savings record

**Before deciding to save your money always check:**

- 1. Rate of Interest**
- 2. Ease of withdrawal**
- 3. Security**

**DIRT (Deposit Interest Retention Tax)** → this is the tax charged at 26% on the interest earned on savings sent directly to the tax office all registered charities do not have to pay this tax → to avoid paying this tax on savings you could invest your savings in tax-free investments eg saving certificates or bonds alternatively some investment schemes have a lower rate of DIRT

### **Saving with Banks and Building Societies**

- o A number of different savings and investment options are available
- o Deposit accounts pay a fixed rate of interest every year, money can be easily withdrawn, no time limit, interest is subject to DIRT
- o A current account is not a savings account it is used for regular spending

#### ***Advantages of saving with Banks & Building Societies***

- o Regular statements issued
- o Number of ways lodgements can be made to a/c's eg Telephone, ATM
- o May offer a selection of different types of accounts that offer different interest rates
- o Mortgages available, large sums available on request

#### ***Disadvantages of saving with Banks and Building societies***

- o Charges & fees on a/c
- o Opening times may be inconvenient (open 5 days)
- o High interest rates may be charged on loans

**Saving with An Post (Post Office):**

- o A number of saving schemes offered:
  1. **Deposit account** → lodge/withdraw money → recorded in deposit book → notice required in writing for large withdrawals → interest earned is subject to DIRT  
**(\*\*Deposit account plus → special savings account Dirt @ a lower rate 20% no withdrawal in 1<sup>st</sup> 3 months, 30 days notice required for withdrawal)**
  2. **Childcare saving account, Pension save** → child benefit payments and Social welfare pensions can be transferred into a savings a/c to earn interest → 7 working days notice for withdrawals
  3. **Instalment savings** → tax-free a/c (no DIRT) → a fixed amount is paid each month for 1 year then if this is left for 5 years untouched a max 15% interest will be paid → 30 days withdrawal notice required within the initial 1<sup>st</sup> year of payments → after 1<sup>st</sup> years payment 7 days notice needed to withdraw
  4. **Saving Bonds** → bought in €50 units → minimum purchase of €127 → maximum purchase €76,184 → tax-free interest @ 8% for 3 years investment → no interest paid if bonds cashed in 1<sup>st</sup> year → 7 days notice for withdrawal
  5. **Saving Certificates** → purchased in €10 units → minimum investment of €64 → maximum investment €76,184 → tax-free @ 16% after 5 years → 7 day withdrawal notice required

***Advantages of Saving with An Post***

- o An Post is State Guaranteed
- o No account charges
- o Most savings options are tax-free
- o An Post is widespread and widely accessible nationwide (open 6 days)

***Disadvantages of Saving with An Post***

- o Not a great return on deposit accounts
- o Minimum number of day required for withdrawals on many a/c's
- o Cheque deposits take longer to clear
- o No ATM facilities for cash withdrawals

**Saving with the Credit Union:**

- o Owned and controlled by members
- o Non-profit making
- o All members benefit from any interest earned on loans
- o “Common Bond” links all members eg same locality
- o Must be 16yrs to join → €12.70 joining fee
- o Loans are given in relation to saving record

***Advantages of saving with the Credit Union***

- o Convenient & flexible opening hours
- o No hidden charges
- o No DIRT
- o Transfer payments can be made to accounts

- o ATM facilities
- o If repayment problems occur credit union links up with MABS
- o Credit union is insured → your money is safe

### **Pensions**

- o Most tax effective method of saving for retirement
- o Over 66yrs entitled to the State pension
- o Also possible to contribute to your own personal pension
- o 4 main types of pensions→
  - (1) Non-contributory state pension
  - (2) Contributory state pension
  - (3) Occupational pension
  - (4) Personal retirement savings account (PRSA)

**1. Non-contributory state pension →**

Pension given to people on low income by the state → means tested → payment adjusted for employment, ownership of property, savings etc → over 66yrs → €108.56 max

**2. Contributory state pension →**

Pension based on PRSI contributions paid while working → €121.89 max over 66-80yrs → extra payments for spouses

**3. Occupational pension →**

Pension set up by employer for employee → certain % of wage/salary is paid into pension fund → nest egg for retirement to prevent a dramatic change in lifestyle upon retirement

**4. Personal retirement savings account (PRSA) →**

Allow for saving towards pension by individuals in a flexible manner essentially a personal pension.

***Advantages of a Pension***

- o Security on retirement
- o Reduces financial worry
- o Offers prospect of a comfortable lifestyle

**Insurance:**

**Insurance** → provides financial protection and security for individuals, family and property in the event of unforeseen circumstances → **PROVIDES COVER FOR SOMETHING THAT “MIGHT” HAPPEN**

**Assurance** → provides cover for something that will definitely happen eg death

**Premium** → the money paid annually or in instalments to the insurance company

**Policy** → the scheme in which the insured person is involved in

**Policy document** → legal document stating the details of the insurance agreement

**Claim** → the term used for the request for compensation from the insurance company

**Broker** → a person/ agent that offers advice on insurance/assurance to people who receives commission on sale of a policy

### **Life Assurance:**

- o Insurance on people's lives → upon death the beneficiary ie spouse/partner etc get a lump sum of money from the insurance company depending on the policy taken out and premiums paid. Life assurance is a method of protection & saving.
- o 3 Types of Life Assurance → (1)Term (2)Whole Life (3)Endowment

(1) **Term Assurance** → protective function, terms vary from 10-20 years, if the insured person dies within the term a lump sum is paid, if the person lives longer than the term of the policy no lump sum is paid

(2) **Whole life Assurance** → 2 parts, risk premium paid against death payments made to dependants after death, other is a savings element that the insurance company invests and the money + any profit earned is paid back to the policy holder at the end of the policy term

(3) **Endowment Assurance** → high savings element (often used for saving), lump sum paid if policy holder dies before reaching a specified age or it can be cashed when it reaches maturity

(\*\*\*Mortgage protection policy- link)

### **Insurance** →

**Statutory** → Home/ household insurance (floods, fire, robbery, contents etc) , Car insurance (3<sup>rd</sup> party) , PRSI

**Voluntary** → Health & Travel Insurance

**House Insurance** → (1)House /Buildings (2) Contents

**Car Insurance** → (1) Third Party (compulsory) (2) Third Party Fire & Theft (3) Comprehensive

**PRSI** → (SEE PREVIOUS NOTE))

**Travel Insurance** →accident, loss of luggage, medical expenses, cancellations

**Health Assurance** →VHI or BUPA Ireland

### **HOUSING:**

\*Housing requirements vary depending on the situation ie a family with a two young children, a single person, an elderly person, a student, a couple with no children will all have different housing requirements this is evident in the vast range of housing in Ireland.

### **Factors that determine individual and family housing choices:**

#### **1. Socio-economic factors**

- o Income level → rent, buy, lease?
- o Number in household
- o Location → amenities eg. School, work, infrastructure?
- o Community atmosphere → nice place to live? Sense of belonging?
- o Quality of area → safety, crime, unemployment?

## **2. *Housing development and availability***

- o Housing demand exceeds supply
- o Many new private housing developments incl. Apartments, estates by developers
- o Local authority housing for low income families, housing lists
- o Private housing, built on individuals own site , in own style

## **3. *National Housing Policy:***

- o Oversee, maintain & sustain national housing programme & efficient housing market
- o Facilitate home ownership for as many people who desire it (use tax incentive etc)
- o Develop & support social housing sector
- o Place emphasis on needs of low income households and run-down local authority housing estates
- o Support Remedial Works Scheme (repairs for elderly & disabled)

**Household Technology:**

Technology has enabled people do complete work faster and become more energy efficient.

\*FOOD PREPARATION

\*LAUNDRY

\*CLEANING

\*TEXTILES / HOUSEHOLD MATERIALS

\*COMPUTERS

**Household Appliances →**

<b>Large Appliances</b>	<b>Small Appliances</b>
Cooker	Kettle
Washing machine	Toaster
Fridge	Iron
Tumble Drier	Coffee maker
Freezer	Food Processor
Vacuum Cleaner	Juicer
	Hand-mixer
	Electric carving knife

**NB\* Criteria for the selection of a Household Appliance**

1. Cost
2. Safety
3. Efficiency
4. Size
5. Specifications
6. Ease of use
7. Ease of cleaning
8. Guarantee
9. Servicing

\*Before purchasing any appliance the consumer must be informed eg. TV, newspapers, manufacturers brochures, advertisements, showrooms , people

**Household appliance with a HEATING ELEMENT → Deep-fat Fryer**

- o Small household appliance
- o Use→ cooking a variety of foods eg. Chips, sausages, chicken, fish in batter, doughnuts, cheese wrapped in filo pastry
- o The deep-fat fryer uses oil to cook foods

***Construction of a Deep-fat fryer:***

1. 2 main parts→ inner aluminium bowl and an outer case of enamelled steel

2. A thermostat controls the element located at the base of the fryer between the 2 cases, the thermostat controls the temperature
3. A filter in the lid reduces the odour, smoke & grease
4. A wire basket with a handle (removable) to raise food in and out of oil safely
5. Oil level indicator marked on the inside of the inner bowl shows the max & min level of oil required for cooking
6. A flex with a 3 pin plug is attached
7. Thermostat control dial on outside of appliance for ease of selection of the required temperature
8. On/ off switch
9. Indicator light (goes off when selected temperature is reached)

***Working Principle of the Deep-fat fryer:***

1. Electricity flows to the element through the plug when switched on
2. The element heat up the bowl by **CONVECTION**
3. The thermostat maintains the required temperature (light)

***Guidelines for Use of Deep-fat fryer:***

1. Read & follow manufacturer's instructions
2. Fill with oil to the maximum level
3. Ensure that you select the correct temperature for the food (manufacturer's guidelines)
4. Do not overfill basket
5. If the light is on remove food and wait until the desired temperature is reached

***Guidelines for Care of Deep-fat fryer:***

1. Always unplug the machine before cleaning
2. Strain the oil after each use
3. Replace the oil after 8-10 uses
4. Clean the inside of the machine with a non scratch scourer

5. Avoid putting the appliance in water
6. Follow manufacturer's recommended method of cleaning
7. Rinse inside with warm water & dry
8. Clean outside with warm soapy water & dry

\*NB → BE ABLE TO DRAW A DIAGRAM OF THE CONSTRUCTION OF A DEEP-FAT FRYER – refer to text book

**HOUSEHOLD APPLIANCE WITH A MOTOR→ Food Processor**

- o Examples of other appliances with a motor → vacuum cleaner, electric carving knife, washing machine, hand mixer
- o Food processor, multi-purpose → cut, slice, liquidise, beat, whisk
- o Use → breadcrumbs, making pastry, making soups, sponge cakes, queen cakes

***Construction of a Food Processor:***

1. A motor is enclosed in a plastic outer casing
2. A large plastic jug/bowl with a funnel opening on top to put food in
3. On/off switch
4. Variable speed controls (pulse) (vary –depending on model)

5. A selection of different blades and discs that can be attached to the central spindle that comes through the centre of the bowl/jug (allow for a variation of different tasks to be performed eg cutting , slicing, mixing, whisking)
6. Flex & 3-pin plug attached to the machine

***Working Principle of the Food Processor:***

1. Appliance is switched on causing the motor to drive the spindle with the attached rotating blade/disc that causes the food to be processed in the desired manner (depending on the attachment used)
2. A safety switch is located on the lid that does not allow the machine to function unless the lid has been correctly attached to the bowl of the machine

***Guidelines for use of the Food Processor:***

1. Follow manufacturer's instructions
2. Never leave unattended
3. Make sure the lid and all attachments are correctly positioned
4. Avoid overloading the machine
5. Use the funnel on the lid to add ingredients/ foods

***Guidelines for care of Food Processor:***

1. Unplug before cleaning
2. Avoid immersing the base in water (destroy motor)
3. Remove all removable parts and wash in warm soapy water and dry
4. Allow lid to rest loosely on the bowl for air to circulate
5. Wipe the base with a damp cloth

**HOUSEHOLD APPLIANCE → The Refrigerator**

What is available?

Refrigerator, Integrated fridge/freezer, American style fridge/freezer, Upright fridge freezer, chest freezer

***Construction of Refrigerator:***

- o Outer casing made of enamelled steel
- o Inner casing made of moulded plastic
- o Door light that automatically turns on when door is opened
- o Rubber seal around the door
- o Adjustable shelves and other moveable door storage compartments

- o Door bottle rack
- o Vegetable drawers
- o Automatic defrost button
- o Thermostat control dial

***Working principle of the Refrigerator:***

\*Basic principle involves removing heat from the inside of the cabinet by the evaporation of a refrigerant liquid

1. The **motor** powers the **compressor** forcing the gaseous refrigerant into the **condensor** located at the back of the fridge
2. The gaseous refrigerant is cooled in the condensor turning it into a liquid
3. The now liquid refrigerant flows to the **evaporator** (Ice box) where it absorbs heat from the food (keeping the fridge cold) causing the liquid to evaporate back to its gaseous state returning to the compressor for the cycle to start again

\*Be able to draw the working principle diagram (refer to textbook)

***Guidelines for using a refrigerator:***

1. Avoid opening the door unnecessarily
2. Avoid putting hot / warm food in the refrigerator
3. Cover all food
4. Avoid overpacking the cabinet (air needs to circulate)
5. Avoid storing raw meat next to cooked meat
6. Keep a check on use by dates
7. Clean & defrost regularly
8. Keep fridge temp. at 2-5 C

***Guidelines for Care & Cleaning:***

1. Air must be able to circulate behind the refrigerator (10cm)
2. Keep refrigerator away from hot equipment eg cooker
3. Wipe up spills as they occur
4. Only use bread soda and hot water to clean interior of fridge

### **The Freezer:**

#### ***Construction:***

- o Thick layer of insulating material between inner and outer casing
- o 3-lights → Green = normal freezer, Orange= fast freeze, Red= fault/warning

#### ***Working principle of the Freezer:***

\*\*\*Same as the refrigerator but at a much lower temperature –18C

#### ***Defrosting the Fridge/ Freezer:***

**AUTOMATIC defrosting** → fully automatic, compressor stops at regular times and prevents the build up of ice in the evaporator

**PUSH BUTTON defrosting** → special defrost button that is pushed in to start defrosting, when defrosting is finished refrigerator restarts automatically

**MANUAL defrosting** → refrigerator is turned off and the ice is allowed to melt, turned back on manually when ice has been removed

#### ***Guidelines for using a Freezer:***

1. Avoid opening the door
2. Use food in rotation
3. Label and date all food

4. Use the correct packaging materials for a freezer
5. Food must be cool before putting in
6. Keep freezer full (energy efficient)

***Care & Cleaning the Freezer:***

1. See refrigerator points also →
2. Avoid opening during a power cut
3. Defrost when supplies are low
4. Avoid using sharp tools/ metal – use a plastic spatula to scrap ice away
5. Wash outside with warm soapy water

**STAR MARKINGS \*NB (Indicate the length of time frozen food can be stored):**

- 1 STAR \* → Store FRESH food for 1 WEEK at –6 C
- 2 STAR \*\* → Store FRESH food for 1 MONTH at –12 C
- 3 STAR \*\*\* → Store FRESH food for 3 MONTHS at –18 C
- 4 STAR \*\*\*\* → Store food for up to 12 MONTHS at –25C (DEEP FREEZE)

**HOUSEHOLD APPLIANCE → **The Microwave Oven****

- o Time saving appliance
- o Energy saving appliance (small amounts)
- o Microwaves can go through paper, glass, porcelain, plastic, air → **these items will not be heated by the waves as they do not contain water or metal**
- o Microwaves are reflected by metal
- o Microwaves are absorbed by water, oil, fat
- o When the microwaves come in contact with water, oil or fat molecules they rub against each other causing vibration → resulting in heat
- o Microwave energy causes the food to make its own heat → cooking the food

***Working principle of a Microwave Oven:***

1. Electrical energy is converted into electromagnetic waves by a  
MAGNETRON

2. Rotating blades (WAVE STIRRER) direct the waves into the metal-lined oven
3. Microwaves bounce (reflected) off the walls
4. Waves pass through the cooking dish (transmission) and penetrate the food to a depth of 2cm
5. The food molecules begin to vibrate rapidly causing heat which cooks the food (absorption)
6. Heat may also cook the food by conduction

**\*\*NB** → Be able to draw & label diagram of microwave oven (refer to textbook)

***Features of a Microwave Oven:***

- o Control panel, oven door, turntable, door seal, door glass, rotating plate

***Types of Microwave Ovens:***

1. Microwave
2. Microwave with grill (browns top of food)
3. Combination Microwave ( microwave & grill or microwave & oven)

***Using the Microwave Oven:***

1. Follow manufacturers instructions
2. Use recipes adapted for the microwave
3. Use suitable containers (no metal or metal trim)
4. Cover food to prevent splattering
5. Prick all food with a skin
6. Allow for standing time
7. Always place the thickest part of the food to the outside
8. Always stir liquids throughout cooking
9. Never turn on the microwave with no food inside
10. Never leave unattended

