सत्यमेव जयते

Basic Concept of Fire and Life safety

Prepared By: Aarzu Pathan

“WHAT BURNS NEVER RETURNS”

“PREVENT FIRE, AVOID DESTRUCTION”

सत्यमेव जयते

WHAT IS FIRE ?

It is an exothermic chemical reaction where heat, light, smoke & various Gases like Carbon Di Oxide(CO_2) & Carbon mono oxide (CO) etc. are evolved.

CONSEQUENCES OF FIRE

- LOSS OF LIFE
- LOSS OF PROPERTY
- UNEMPLOYMENT (बेरोज़गारी)

} TWO MOST PRECIOUS THINGS OF HUMAN BEING

- LOSS OF BOOKS OF ACCOUNTS & RECORDS (दस्तावेज)
- LOSS OF SKILLED (कुशल) WORKERS
- SHORTAGE OF COMMODITIES (सामग्री)

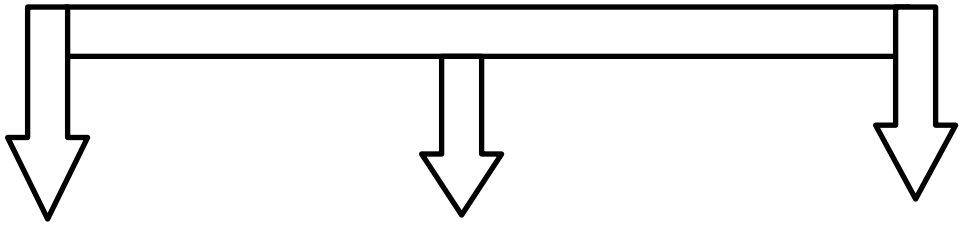
सत्यमेव जयते

EVERYONE MUST KNOW

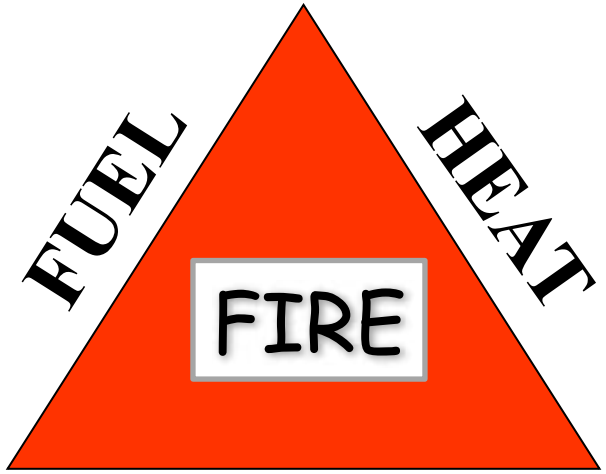
1. WHAT IS FIRE ?
2. METHODS OF EXTINCTION OF FIRE
3. CATEGORIES OF FIRE
4. PORTABLE FIRE EXTINGUISHERS
5. COMMON CAUSES OF FIRE AND PREVENTIVE MEASURES
6. WHAT TO DO IN CASE OF FIRE ?
7. HOW TO CALL FIRE BRIGADE ?
8. WHAT TO DO WHEN FIRE BRIGADE ARRIVES ?

सत्यमेव जयते

WHAT IS FIRE ?



FUEL + HEAT + OXYGEN



FIRE TRIANGLE

PRODUCTS OF FIRE & THEIR EFFECTS

FIRE

Smoke

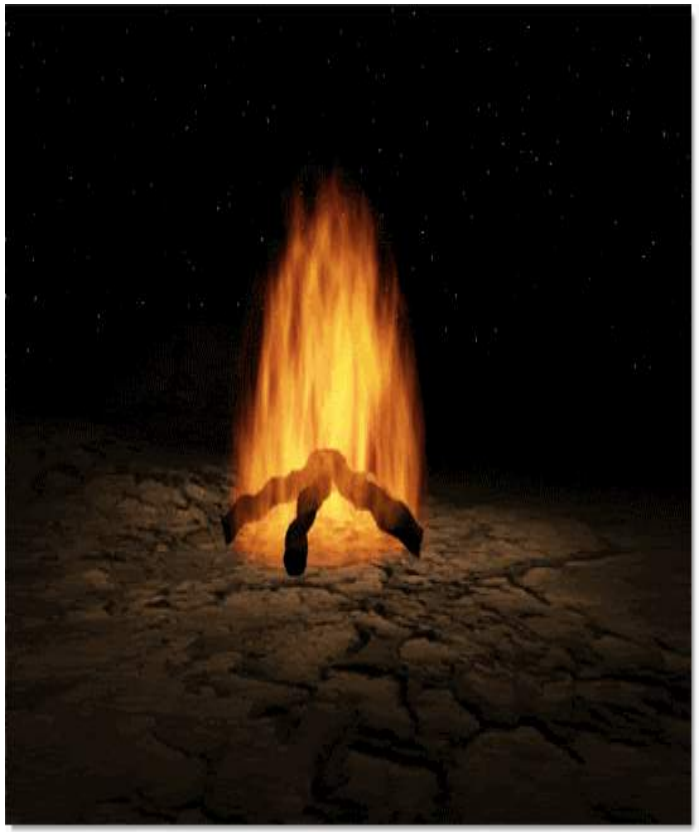
⇩

Poor Visibility

Prevents Escape.

Asphyxiation, Death
Panic, Stampede, Death

PRODUCTS OF FIRE & THEIR EFFECTS



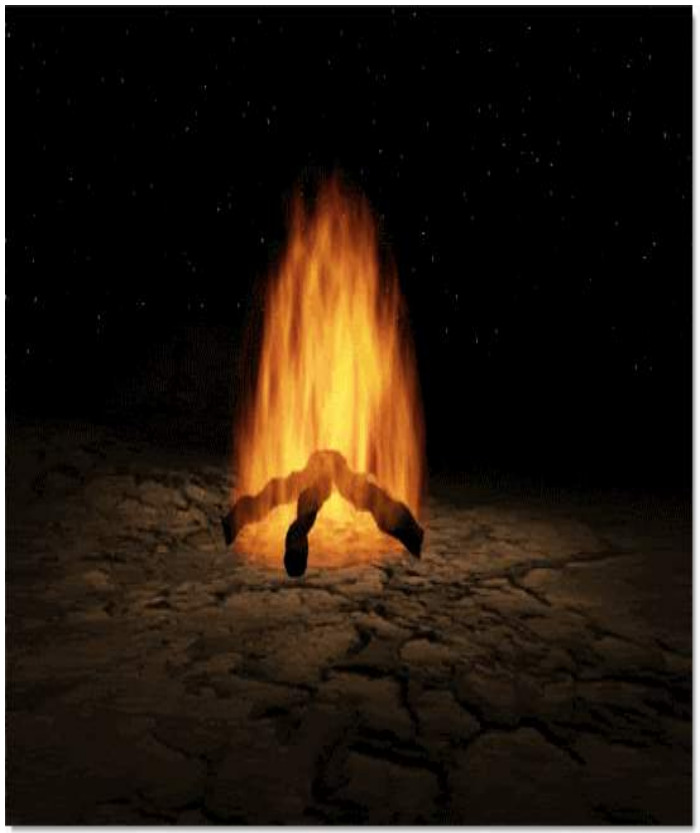
Fire Gases (CO, HCl & CO_2)

Toxic and Explosive Gases

Explosions and Fire Spread

Abnormal Respiration
Asphyxiation Panic, Stampede,
Death

PRODUCTS OF FIRE & THEIR EFFECTS



FIRE

HEAT

Fire spread due to Radiation

- Prevents Escape Burns and Scalds
- Damage to Lungs & Respiratory System
- Jumping to escape Hence Injuries/ Death

PRODUCTS OF FIRE & THEIR EFFECTS

Flame

⇩

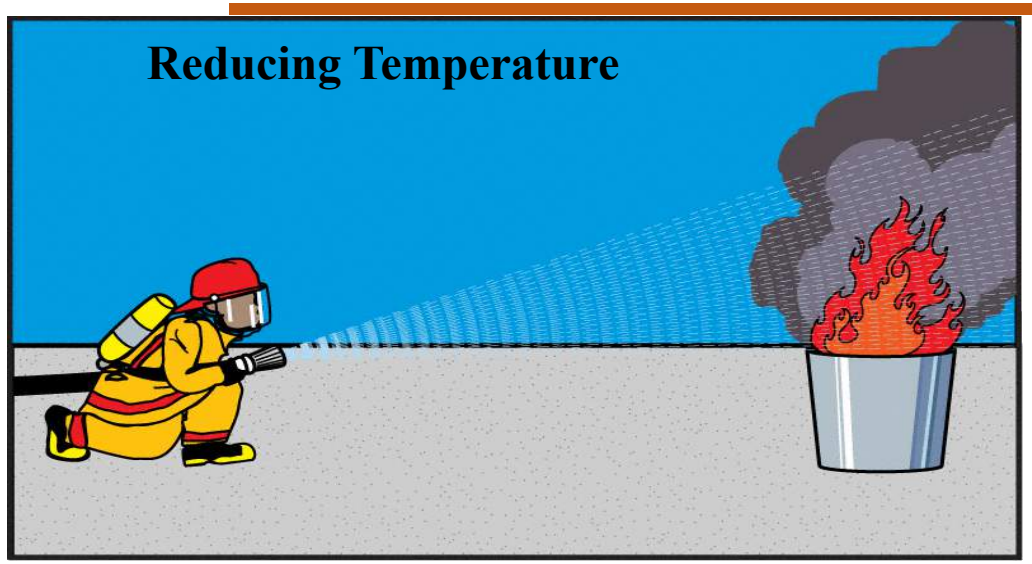
Fire spread

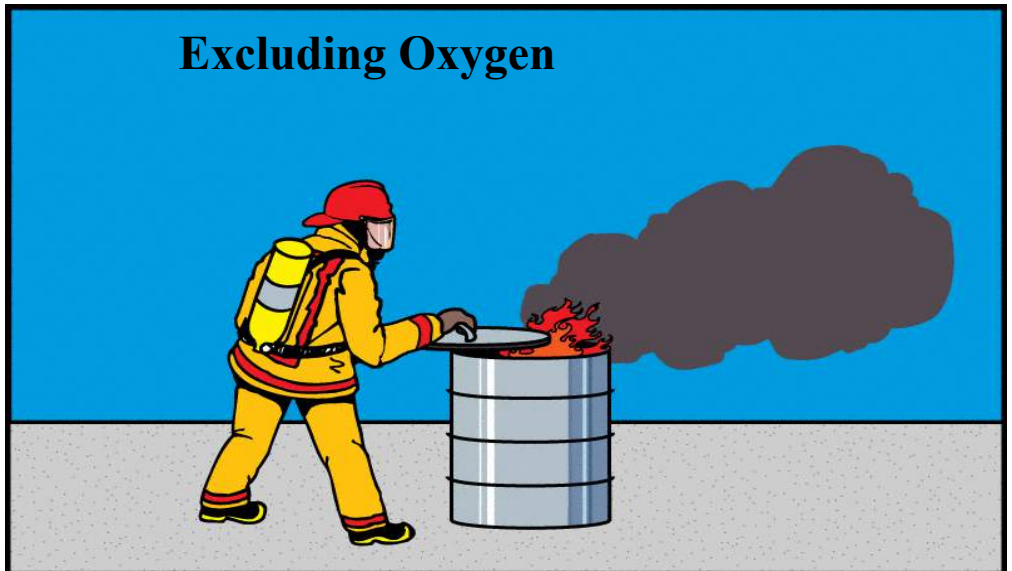
- Prevents Escape Burns and Scalds
- Damage to Lungs & Respiratory System
- Jumping to escape Hence Injuries/ Death

FIRE

सत्यमेव जयते

EXTINGUISHING METHODS





CLASSIFICATION OF FIRE AS PER IS 2190/1979

CLASS		COMBUSTIBLE MATERIAL
A	Ordinary combustible solids	Paper, Wood, Cloth, etc.
B	Combustible liquids or liquifiable solids	Oils, Paints, Chemicals, Wax, etc.
C	Combustible gases	L.P.G., Acetylene, Hydrogen, Methane,Natural Gas, etc.
D	Combustible metals	Magnesium, Sodium, Uranium, Thorium, etc.
E	Electrical equipment & installations	Switch gears, Transformer, etc.

सत्यमेव जयते

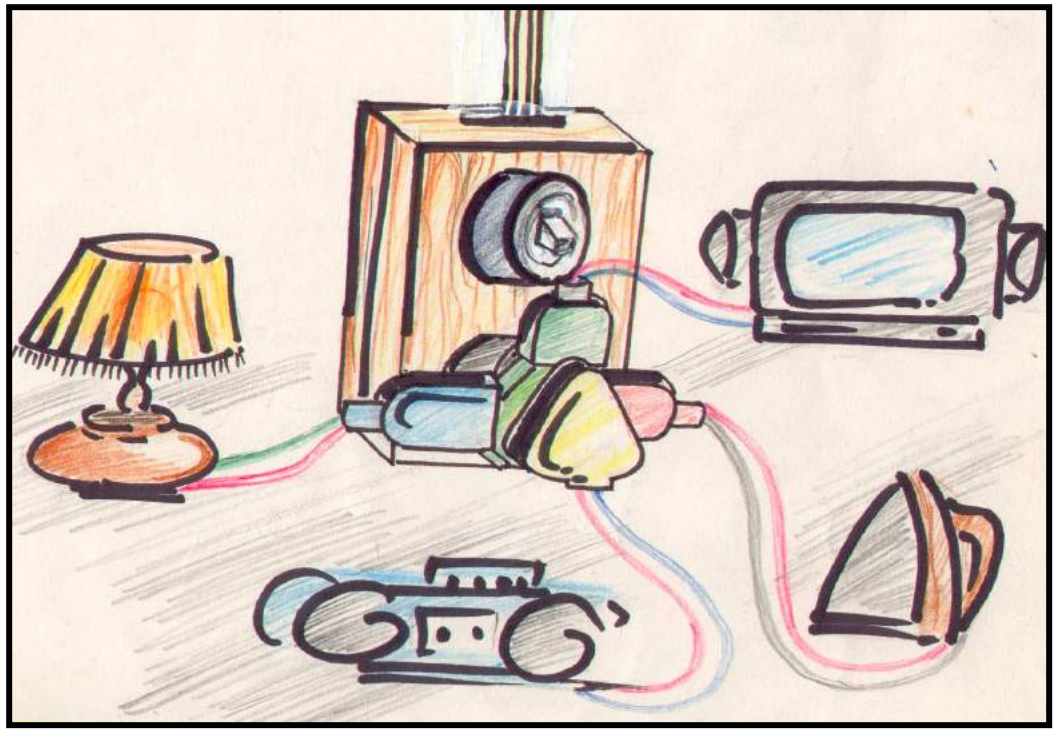
COMMON CAUSES OF FIRE

&

PREVENTIVE MEASURES

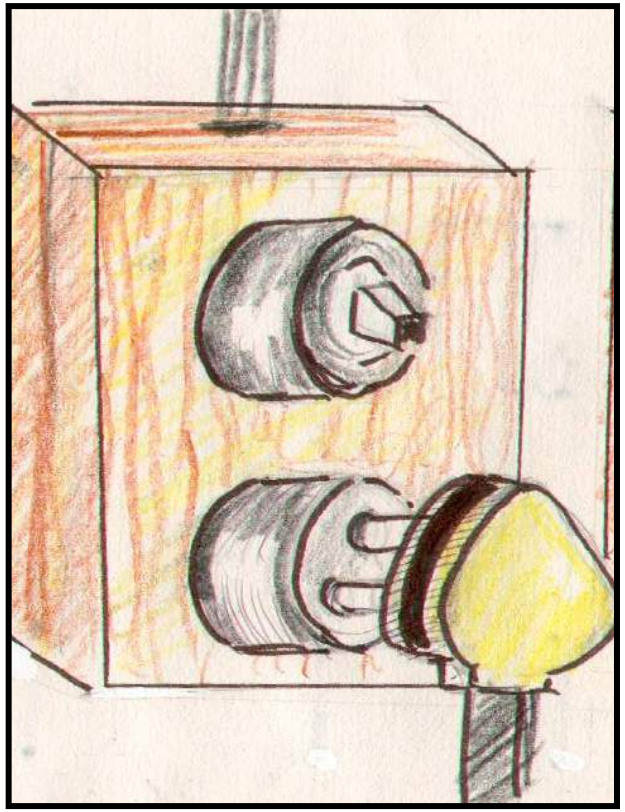
COMMON CAUSES OF FIRE

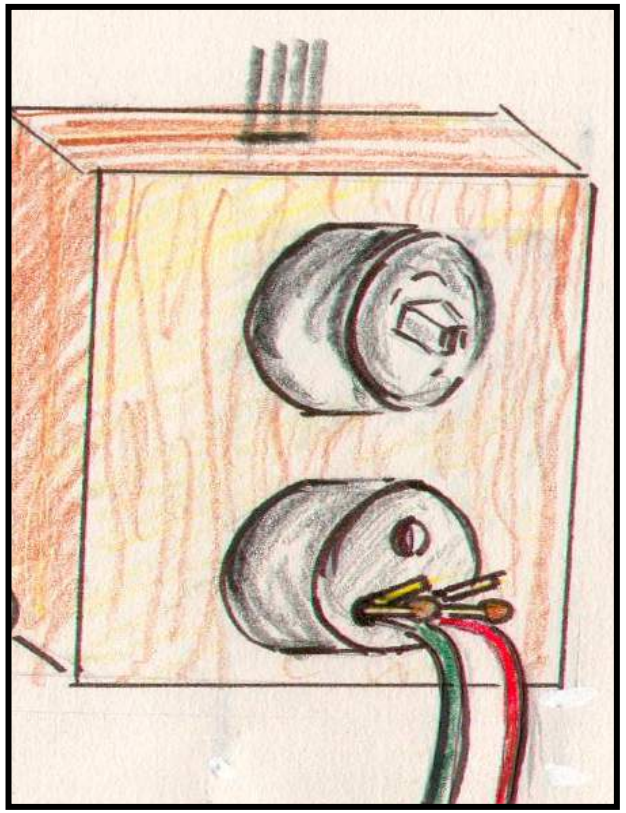
- **Electrical**
- **Overloading**



COMMON CAUSES OF FIRE

- Electrical
- Overloading
- Loose Connections



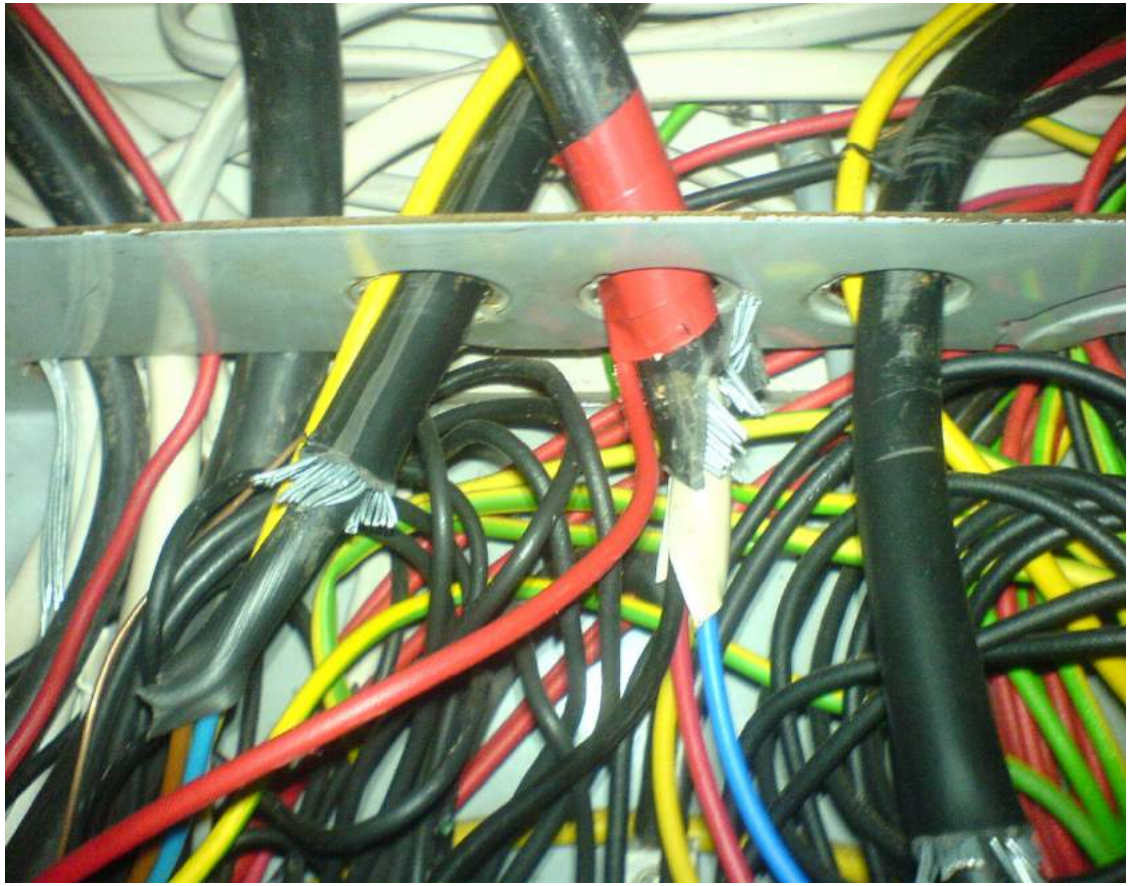


COMMON CAUSES OF FIRE

Electrical

- Overloading
- Loose Connections

- Damaged Installations

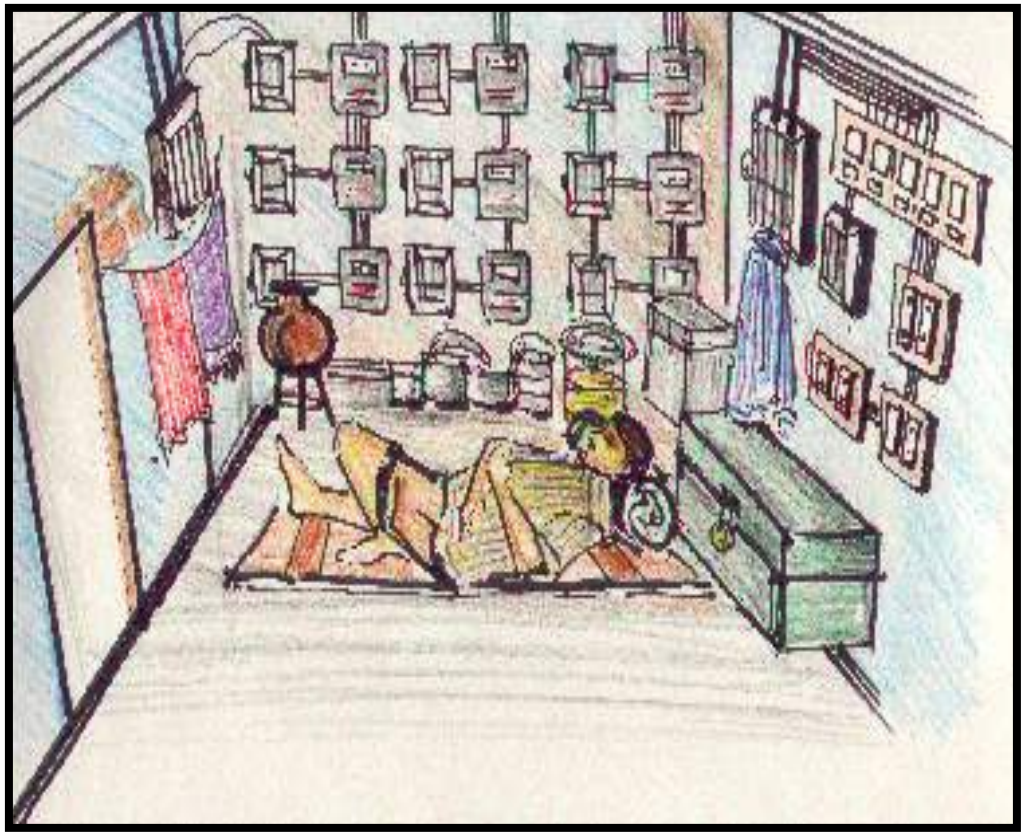


COMMON CAUSES OF FIRE

- **Electrical**

- **Overloading**
- **Loose Connections**
- **Damaged Installations**

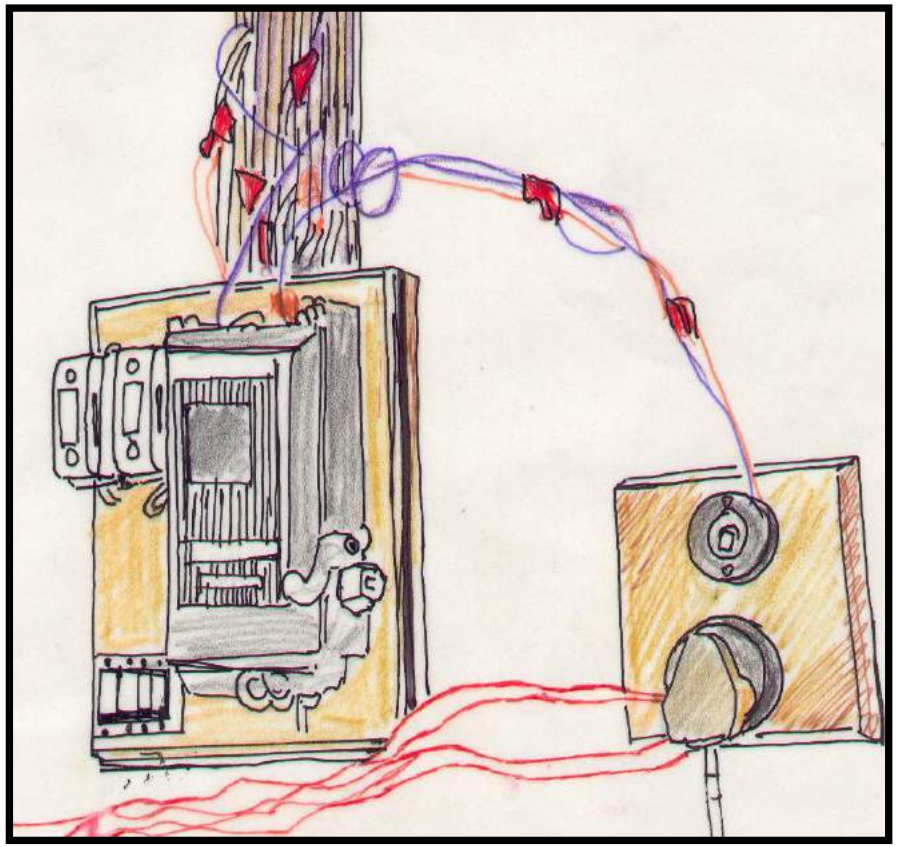
- **Misuse of Elec. Meter rooms**



COMMON CAUSES OF FIRE

- Electrical

- Overloading
- Loose Connections
- Damaged Installations
- Misuse of Elec. Meter rooms

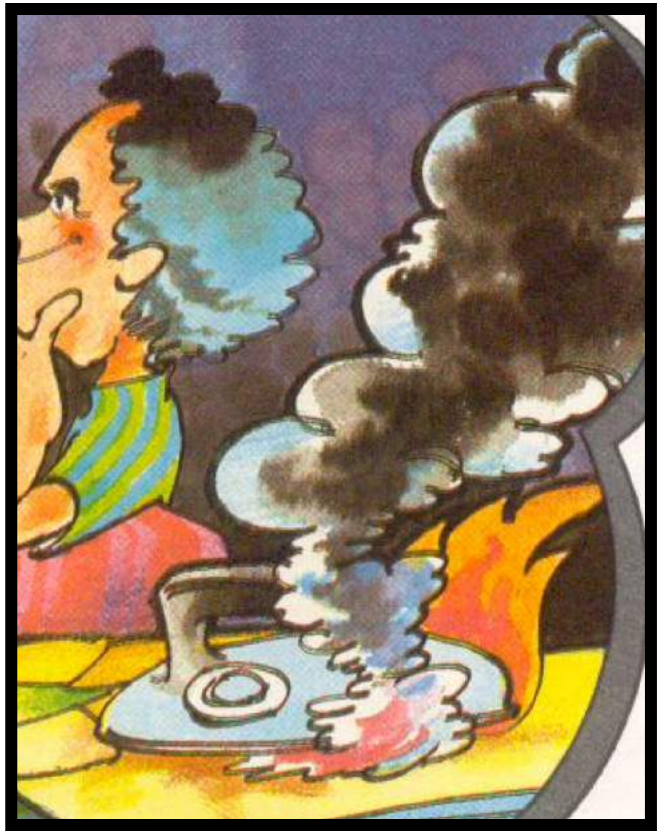


- Aged Wiring and Installations

COMMON CAUSES OF FIRE

? Electrical

Overloading
Loose Connections
Damaged Installations
Misuse of Elec. Meter rooms
Aged Wiring and Installations

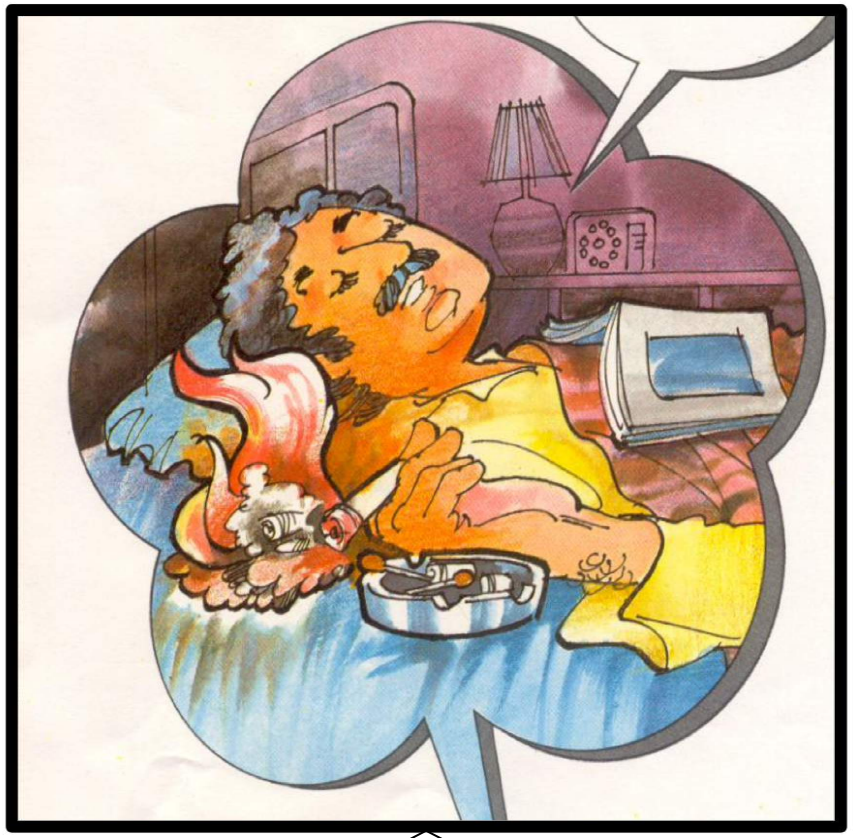


Unattended Elec. Appliances

COMMON CAUSES OF FIRE

Careless Smoking

Homes



SMOKING IN BED

RESULT

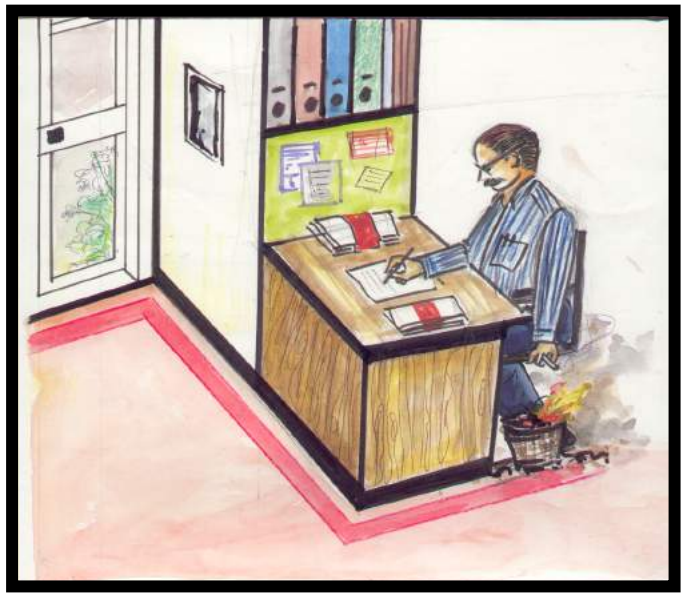
सत्यमेव जयते

COMMON CAUSES OF FIRE

Careless Smoking

Factories & Offices

Hotels & Hospitals



सत्यमेव जयते

COMMON CAUSES OF FIRE

Careless Smoking

Clubs & Discotheques

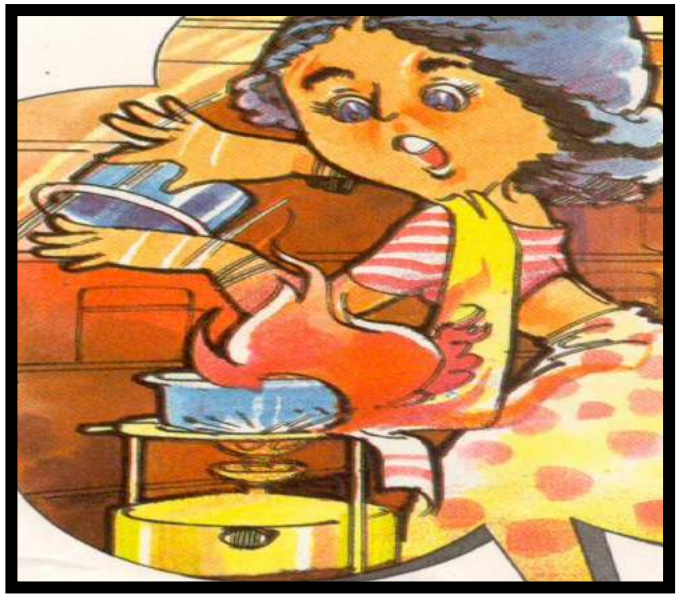
Moving Vehicles (trains, automobiles etc.)

COMMON CAUSES OF FIRE

Naked Flames in Kitchen

Oil Lamps, Candles

Welding



Never go outside of the home keeping lighted oil lamps

COMMON CAUSES OF FIRE

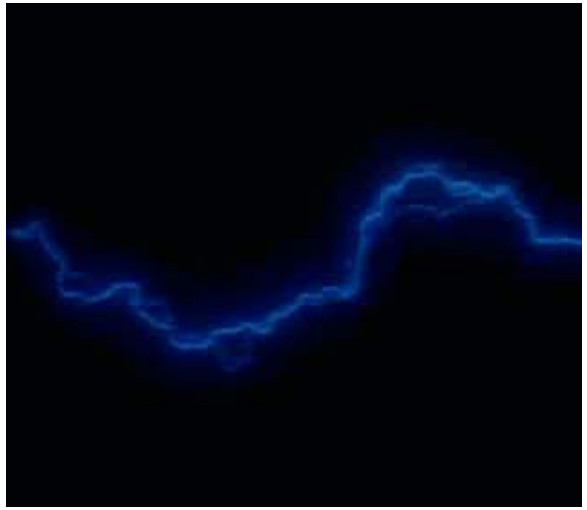
Furnace, Pantry, etc.

Bonfires

Worshiping Time
(home, havan, etc..)

COMMON CAUSES OF FIRE

Lightings Sparks



Fire Crackers

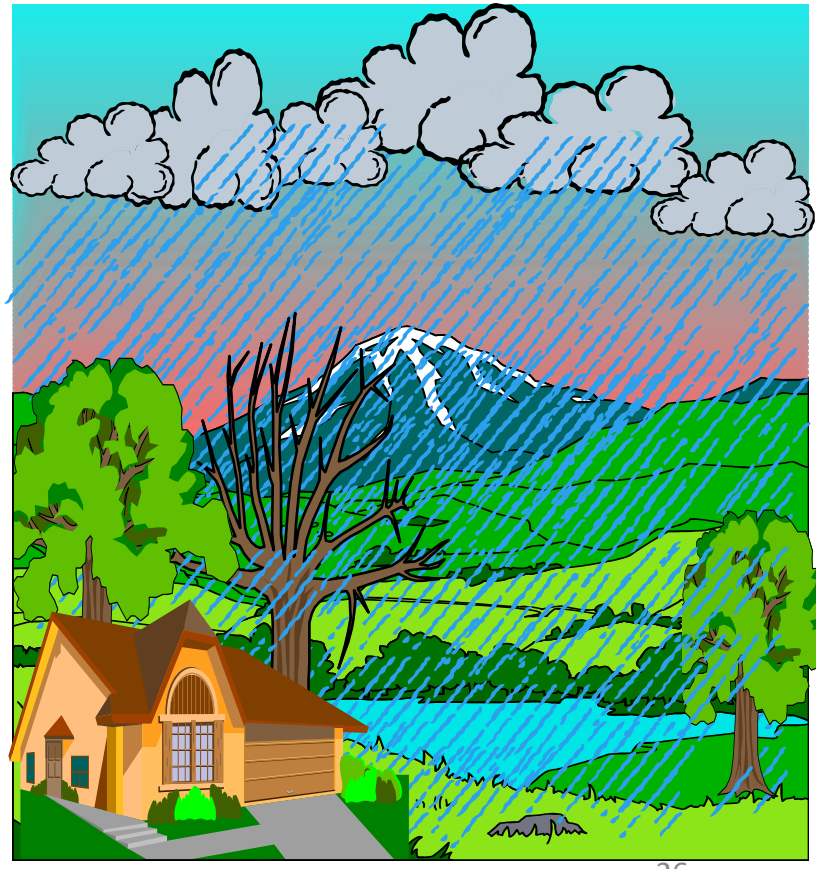
Frictional
(Grinder, Pulverize, etc.)

OTHER CAUSES OF FIRE

Spontaneous Combustion

Chemical Reaction

Lightning

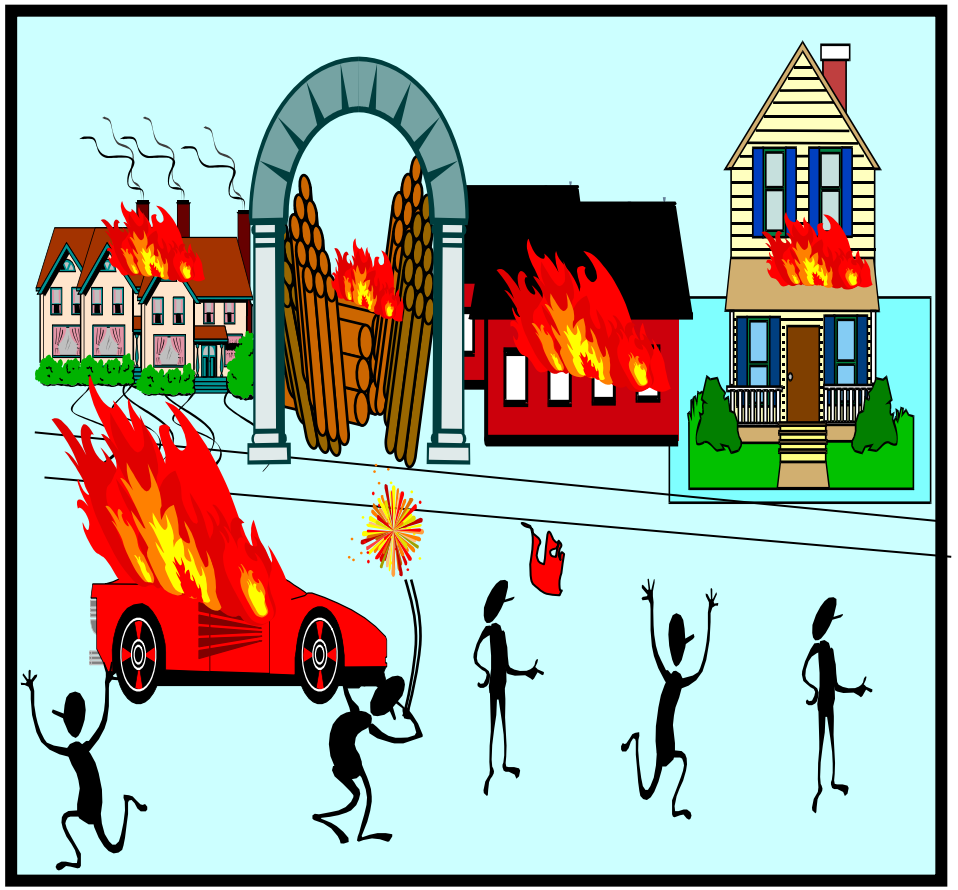


सत्यमेव जयते

Hot Ashes

Incendiarism

Arson

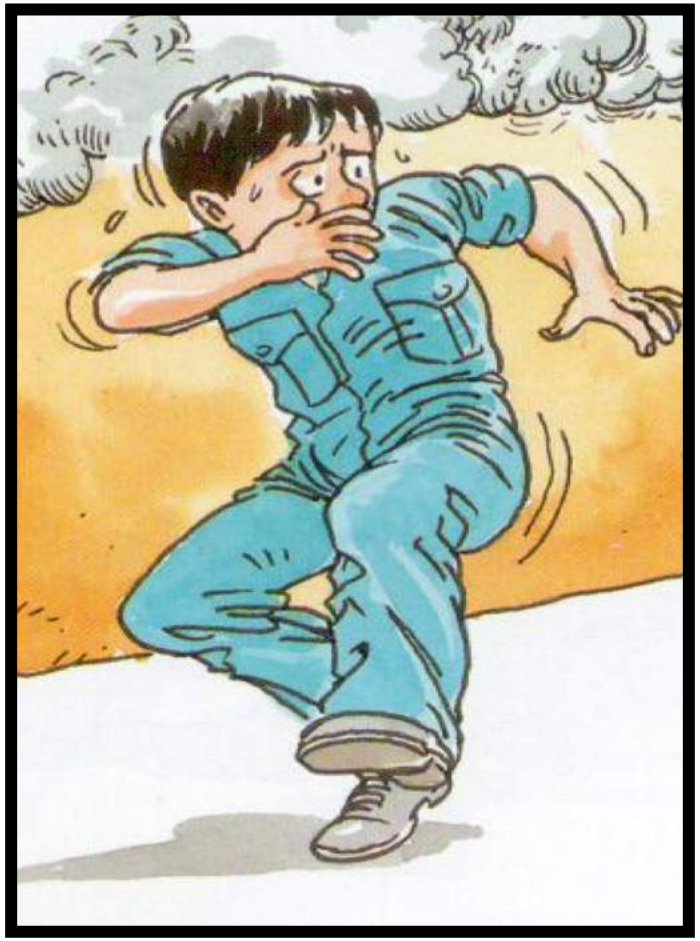


सत्यमेव जयते

WHAT TO DO IN CASE OF FIRE

DO NOT RUN

DO NOT WASTE TIME FOR COLLECTING VALUABLES



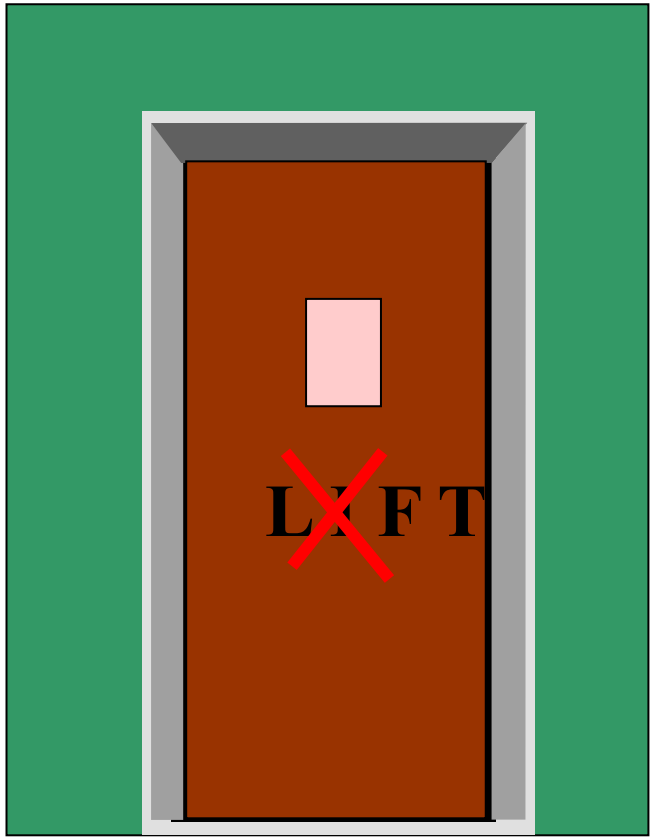
DO NOT PANIC

INFORM FIRE BRIGADE
ABOUT FIRE
ALERT NEIGHBOURS

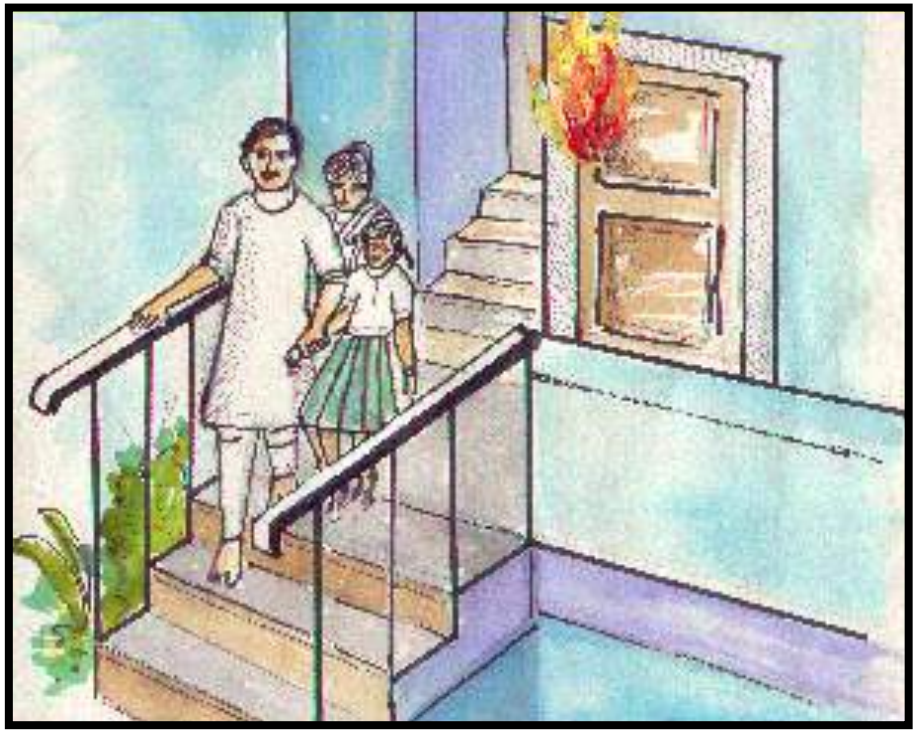
IF POSSIBLE, USE FIRE EXTINGUISHER

SHUT ALL THE DOORS BEHIND YOU

DO NOT TAKE SHELTER IN TOILET



DO NOT USE LIFT TO ESCAPE



USE NEAREST MEANS OF ESCAPE AND THE STAIRECASE AVAILABLE

MAKE EXIT TO GROUND LEVEL INSTEAD OF TERRACE

सत्यमेव जयते

IF TRAPPED OR STRANDED

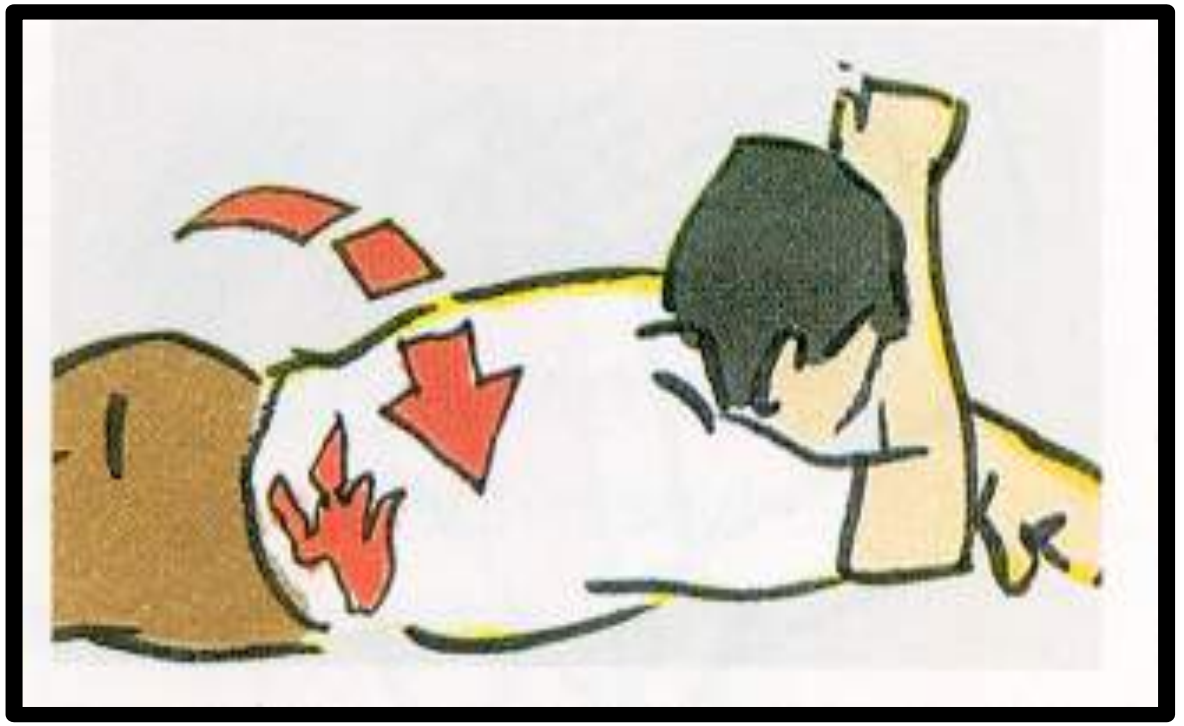
STAY CLOSE TO THE FLOOR LEVEL

COVER THE GAPS OF THE DOOR BY BLANKET OR BY RUG OR ANY OTHER PIECE OF CLOTH AVAILABLE

DO NOT JUMP OUT OF THE BUILDING. SIGNAL OR SHOUT FOR HELP

सत्यमेव जयते

IF CLOTHES ARE ON FIRE



DO NOT RUN

STOP, DROP & ROLL ON THE GROUND AND

COVER WITH BLANKET

POUR WATER ON THE BODY

HOW TO CALL FIRE BRIGADE

1. Dial 101 Control Room Duty officer receives your call.
2. Give him detailed Address nature of Incident and Telephone No. from which you are calling.
3. Keep down the receiver and wait. Control Room will call back to verify the call.
4. Wait for the Fire Engine, and co-operate with Firemen.

REMEMBER 101

सत्यमेव जयते

KNOW YOUR HIGH RISE BUILDING

KNOW THIS :-

- Location of the Staircases
- Location of the nearest Fire Exit
- Location of the Manual Call Points
- Location of the Fire Extinguishers
- Location of the Hose Reels
- Location of the Refuge Area
- Location of the Automatic Fire Protection System

Safety System in High-rise Buildings

SPRINKLERS

Fire Safety Signs

सत्यमेव जयते

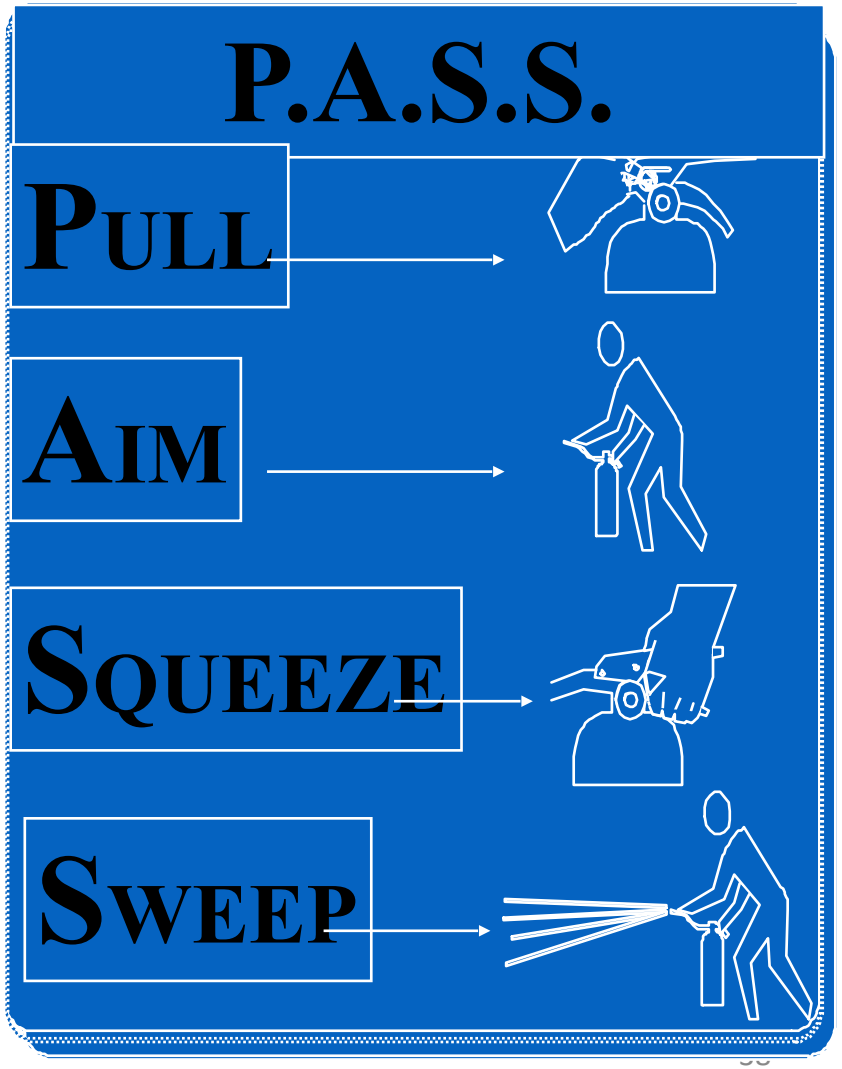
PLACEMENT OF FIRE EXTINGUESHER

HOW TO USE EXTINGUISHER

Remember the PASS word:

1) Keep your back to a clear escape route,

2) Stand back 6 to 8 feet from the fire



सत्यमेव जयते

KNOW YOUR EMERGENCY EVACUATON PLAN

- Know and Understand the correct Evacuation Procedure of your Building
- Location of the Assembly Points
- Be present for the Roll Call
- Know who is the Responsible person
- Do not re-enter the building for any reason

सत्यमेव जयते

FIRE SAFETY

JOINT EFFORT
AND
JOINT RESPONSIBILITY

सत्यमेव जयते

“ WE SERVE TO SAVE ”

Thank You