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MAINTENANCE OF PREMISES

If you look around in your house, you may come across stained floors, dirty walls and work surfaces, torn wall paper, unpolished accessories, scratched tables and many more. Is there any way we can maintain these on a regular basis? Can all surfaces be cleaned with just water and detergent? Definitely not! In this lesson you will read about cleaning and maintaining different surfaces.

OBJECTIVES

After reading this lesson you will be able to:

- identify different surfaces in the house;
- clean and care for different surfaces used in walls and floors;
- clean and care for glass, metal and wooden surfaces;
- carry out routine repair work in the house for electrical equipment and plumbing units.

30.1 SURFACES

You must have noticed that your walls, floors, counters, tables have different textures. Do you clean them in the same manner? No. Every surface is different and needs specific maintenance. These surfaces can be hard such as wood, ceramic, metals, marble etc. They are also semi hard, such as linoleum, plastic, paper etc. Then there are soft surfaces such as upholstery, jute, linen etc. For convenience we will study about these surfaces according to their use.

30.2 CLEANING AND CARE OF WALLS AND FLOORS

Walls and floors are mostly made of cement and concrete or even plastered with mud. Walls may either be painted / white washed or some may be covered with wallpaper, ceramic tiles, fabric or wooden panels. Floors may also be made of marble, granite, mosaic chips, or wood. Maintenance and precautions to be

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adopted for some of the commonly used surfaces on walls or floors have been discussed in the table below.

Table 30.1 Cleaning walls and floors

Surfaces	Maintenance	Precautions
Painted surfaces	i. Dust and remove the cobwebs regularly ii. Sponge with warm water and detergent from top to bottom iii. Rinse with clean, fresh water.	i. Never rub the walls vigorously or scrub with coarse abrasives and brushes. ii. Never use strong chemical solvents
Wallpaper	i. If torn, you should immediately gum it back in place. ii. Rub stains with a piece of soft damp cloth or a sponge. iii. Wipe, if the paper is washable. Use grease absorbers like talcum powder, Fuller's earth, bran, etc., to remove any grease stains.	i. Never scratch the wallpaper.
Ceramic tiles	i. Clean regularly with hot water and detergent. ii. Remove stubborn stains with water sand-paper along with hot water and detergent. iii. Special chemicals are available for cleaning them.	i. Do not use too much of acids as they may become loose and come off. ii. Acids should be rinsed immediately after use.
Marble/granite/ mosaic/cement	i. Clean with hot water ii. Occasionally clean them with kerosene oil and sawdust. iii. Rub with lemon juice to keep the marble white and stain free.	i. Wipe corners and sides sides daily as they can get black.

3.3 CARE AND MAINTENANCE OF FLOOR COVERINGS

Just as walls and floors have different surfaces and various ways of cleaning them, there are different ways of cleaning floor coverings. It is not necessary that all floors be covered. In fact, in a country like ours, it is felt by most people that the easiest way to keep floors clean is to sweep and mop them. However, in most commercial establishments, the floors are wholly or partially covered, mainly for convenience and an aesthetic look. What you learn in this section will definitely help you in keeping various floor coverings clean.

Table 30.2 Cleaning floor covering

Surface	Maintenance	Precautions
Carpet	i. Clean carpets regularly. ii. Once a month take it out, turn it upside down and shake it to remove loose dust. iii. Alternatively, vacuum cleaners can be used effectively. iv. Wash colour fast, dirty carpets with soap solution. Work a lot of lather into the carpet with a brush, using circular motions over small areas at a time. Rinse thoroughly with sponge and dry it in the sun.	i. Put naphthalene balls in rolled up carpets. ii. Air them at intervals. iii. Dry thoroughly before rolling. iv. Remove any stains immediately.
Vinyl/linoleum	i. Clean with wet cloth. ii. Rub stains with a mild detergent.	i. Do not soak with water. Take care to squeeze out excess water from the mop before wiping. ii. Scrub the corners regularly. iii. Do not use hard abrasives and srubbers. iv. Avoid washing soda or alkali as it tends to stick.

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Coir is made up of coconut fibre.	i. Clean it daily with a coarse broom or brush. Occasionally take it out, turn upside down and shake to remove the dust. ii. If it gets very dirty, wash with soapy water, rinse in cold salty water and dry completely in open air.	i. Do not let it get very dirty. ii. Dry completely.
Doormats	i. Turn it upside and beat with a wooden stick. ii. They can be washed with soapy water, rinsed and dried in the sun.	

Activity 30.1

Make a daily, weekly, and monthly plan of cleaning your cement and marble floor, painted door , carpet, coir rug, bathroom tiles.

Surface	Daily	Weekly	Monthly
i. Cement floor			
ii. Marble floor			
iii. Painted door			
iv. Carpet			
v. Coir rug,			
vi. Bathroom tiles.			

3.4 CLEANING OF WOODEN SURFACES

Wood is used for furniture, counter surfaces in the kitchen and floors. It is finished in a number of ways so that its pores get sealed. It also needs to be treated for protection against white ants. If left untreated, it is likely to develop permanent marks on account of dirt, oil and other spills.

Table 30.3 Cleaning wooden surfaces

Wooden Surface	Maintenance	Precautions
Plain wood (chopping boards, pastry boards, rolling boards and pins)	i. Wash with mild soap and warm water. Rinse and dry in open air. ii. Extra bits of food sticking to the board can be removed by using the back of a knife.	i. Always scrub along the grain. ii. Never use hard scrubbing brush. iii. Avoid soaking in water. Never use very hot water as the wood will swell. iv. Avoid strong cleaning agents.
Polished wood	i. Dust and rub with a flannel cloth. ii. Remove water marks by rubbing methylated spirit/ turpentine or a mild solution of ammonia.	i. Avoid spilling on wood. ii. Wipe spills immediately.
Painted wood (doors and windows)	i. Clean with mild soap and water. Rub dry with a flannel cloth to give it a gloss. ii. Repaint periodically to preserve it better.	i. Ensure that all traces of soap are carefully removed, otherwise, stains may still seen on the surface.
Laminated/veneer surface (sunmica)	i. Wipe clean with wet cloth. ii. To remove heat marks, rub metal polish and wash up with mild detergent. Use wax polish or creams to protect veneer surfaces.	i. Avoid scratching and using coarse abrasives. ii. Wipe all spills immediately to avoid permanent staining.

3.5 CARE OF METAL SURFACES

Utensils/ appliances – may be made of copper, brass, glass, steel, silver, iron, etc. Brass and copper form a poisonous tarnish- a blue-green colour, in humid climates. We would need to maintain each of these surfaces in a different way, some of which have been discussed below.

Table 30.4 Cleaning metal surfaces

Surfaces	Maintenance	Precautions
Brass and copper	i. Use soaps and cleaning powders with mild abrasive action. Rub lemon juice and salt, vinegar or tamarind pulp along with fine steelwool. Use sifted ash to clean utensils at home . ii. Clean engraved brass with an old tooth brush. iii. Use 'Brasso' or mild solution of the hydrochloric acid to clean very dirty ornamental articles.	i. Never use brasso or other chemicals to clean cooking utensils as they are poisonous.
Silver and silver- plated used for tea pots, trays etc.	i. Wash with warm, soapy water immediately after use. ii. Protect from getting tarnished by covering them individually with tissue paper. iii. Scrub lengthwise with a soft cloth. iv. Remove any tea stains by using 2 table spoons of soda and boiling hot water. Rub decorative articles with 'Silvo' (a polish available in the market).	i. Do not use any coarse abrasives as it gets scratched easily. ii. Use mild abrasives.
Steel	i. Clean with cold or hot water along with detergent. ii. Scrub badly stained pans with mild abrasives. iii. Soak burnt steel utensils in saline water (add salt in water) and scrub with mild abrasive.	i. Do not use hard abrasives as the steel gets scratched.
Iron	i. Clean soon after use. ii. Smear oil on the surface to seal it. iii. Remove stains by using brick powder, bran, saw dust etc.	Dry completely as moisture can result in rusting.
Non stick/ Teflon coated (tava, pans, snack toasters, saucepan)	i. Smear oil before use. ii. Rinse immediately after use. iii. Clean with sponge and soapy water, rinse and dry.	Do not use steel wool or hard abrasives.

3.6 CARE, CLEANING OF GLASS, CANE AND

PLASTIC

Glass is used for windows, table tops, partitions and sliding doors. Cane is light-weight and mostly used in chairs and tables. Plastic is used in bottles, mugs, buckets etc.

Table 30.5 Cleaning of glass, cane and plastic

Surfaces	Maintenance	Precautions
Glass	i. Clean with a wad of newspapers and water. ii. To give it shine, rinse it with water in which vinegar is added. iii. Remove grease stains with ammonia in warm water. iv. Remove fly specks by rubbing with methylated spirit.	i. Do not use hard scrubbers and abrasives, as it will result in scratches.
Cane	i. Regularly dust and clean to eliminate bugs, spiders, and cockroaches in corners. Use a brush to reach the corners. ii. Wash it with warm salty water (1 Tb spoon salt in 1 litre water) Then dry it completely in open air . iii. Coat with clear varnish to prevent staining. It can also be polished with liquid wax polish.	i. Avoid soaking in water.
Plastics	i. Remove stubborn stains by applying kerosene oil and if possible, put it out in the sun.	i. Do not use strong abrasives as they tend to scratch the surface. ii. Do not use chlorine.

Activity: 30.2. Practice cleaning any of the following surfaces – wooden chair, glass window, brass vase, plastic bucket, ceramic mug, cane basket, plastic table cloth, kitchen slab.

INTEXT QUESTIONS 30.1

1. Radha is confused. Help her match the agents (given in column I) used to clean the following surfaces (given in column II).

Column I	Column II
a) grease stains on glass	(i) linseed oil
b) water marks on wood	(ii) kerosene oil
c) linoleum	(iii) soda and boiling water
d) stubborn stains on plastic	(iv) ammonia
e) Tea stains on silver	(v) alkali
	(v) mild detergent

2. Sheela has the following problems in her house. Suggest ways to clean them.
   (i) Dirt stains on wall.
   (ii) Turmeric stains on marble slab.
   (iii) Grease stains on wallpaper.
   (iv) Water marks on ceramic tiles.
   (v) Heat marks on laminated table.

3.7 ELECTRICAL REPAIRS

Apart from keeping the premises clean and well maintained, you also need to be familiar with some general equipment and appliances, so that if required you may repair them or supervise their repair. In this section we will study how to repair some electric gadgets. You must remember one thing clearly, if any electric appliance stops functioning, the first thing to check is the electric supply to it. You must also be careful when handling such appliances. Whenever attempting a repair work, make sure that the appliance is disconnected from the main supply, by removing the plug from the switchboard socket.

IMPORTANT WARNING

- ALWAYS WEAR RUBBER SLIPPERS.
- ALWAYS DRY HANDS COMPLETELY.
- ALWAYS KEEP A WOODEN PLANK/ WOOLLEN BLANKET HANDY.
- ALWAYS DISCONNECT THE MAIN SUPPLY /UNPLUG THE APPLIANCE

Electrical Fuse

You must be quite familiar with an electricity fuse. A fuse is made of a thin metallic wire, normally of a tin, lead and zinc alloy. Some times, due to a short circuit , or a faulty appliance, this wire melts and the fuse blows. Once it blows, you can carry out the following steps –

a. Put the main switch off.
b. Identify the faulty appliance, switch off and remove it.
c. Take out the fuse cut out and examine it. You will see the melted wire or its remains. Remove this wire and clean the cut out/carrier.
d. Replace with a new wire. The new wire should pass through the hole if one is provided.
d. Replace the fuse cut out, close the box and put the main switch on.

3 pin plug

These plugs are mostly of two sizes : either 5 or 15 amperes. Due to high current they sometimes melt, thus exposing raw wires which can lead to electric shock. This plug consists of 3 wires : one for positive, another one for negative and the third one for earthing (neutral). Usually different colours are used to differentiate between them. Green colour is mostly chosen for earthing, red for positive and yellow or some other colour is chosen for negative (these colors can vary).

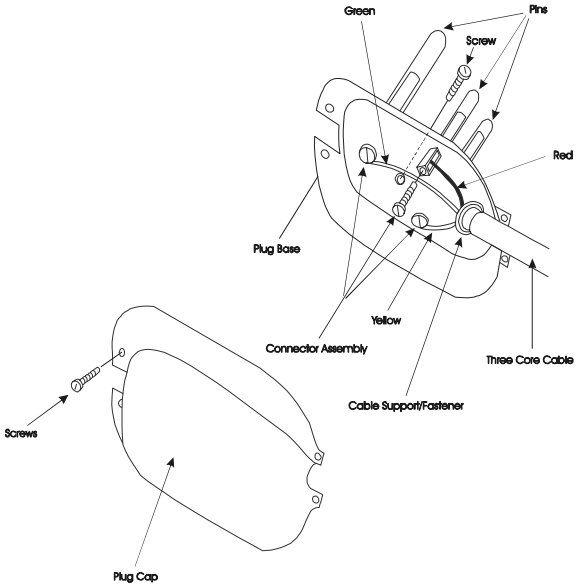

Fig. 30.1: Changing the plug

To change the 3-pin plug, follow the given steps:-

a. Unscrew the main screw placed in the middle of the plug.
b. Unscrew the small screws on each of the three wires and pull them out.
c. If needed, expose the inside wires by scraping the outer plastic coating with a blade or a sharp knife.
d. Replace with a new plug, put positive in one screw band and negative in the other screw band, parallel to it. Tighten the screws. Make sure the two do not touch each other.
e. Put the neutral wire in the lower screw band and tighten the screw.
f. Put the cover and tighten the main screw.

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Fans

Fans are one of the most common electric appliances one comes across in daily life. In case a fan stops working, usually you must call an electrician. But there are some points which you may try yourself.

a. Proper oiling and greasing must be done regularly. Most of the time you will find holes provided for oiling, especially in table fans.

b. If a fan stops working, switch it off, try rotating its blades with the help of a wooden stick. Stop once it is set in motion and switch it on. If it picks up speed, its capacitor needs to be changed; if it does not, check the electricity supply. Help of an electrician may be needed.

c. If it makes noise, it is usually because of worn out bearings. This happens due to lack of lubrication. The bearings must be changed and lubricated periodically.

Room Coolers

Room coolers consist of a cabinet, a water pump and an exhaust fan. The air first passes through the wet cooling pads and then this cool air is thrown in the room. The fan needs attention, about which you have already read. Let us now go through certain other points of attention.

a. The cabinet must be well cleaned before installation and also periodically, when in use. If it is made of iron, it should be painted to avoid rusting.

b. The cooling pads, which are made of grass wool or 'khus-khus' should be changed every summer.

c. Pump and the fan must be lubricated before summer.

d. The water inlet in the pump should be covered with a filter, usually wire mesh, to prevent the entry of grass wool or 'khus-khus' particles, which may clog the water pipe.

e. Care should be taken that the water is always above the minimum level, otherwise the pump will be damaged.

f. Whenever water is being filled in cooler, make sure that the electricity supply is switched off.

Room Heater

The main part of a room heater is the heating element, which gets heated when electric current passes through it. The heating element can be easily replaced by removing the screws which hold it. You must keep in mind that the body should be periodically cleaned to maintain a smooth shiny surface so that maximum heat gets reflected.

3.8 PLUMBING FAULTS

You have read about some electric faults. You must also be aware of certain utility items of plumbing nature. Let us go through the most common ones.

Taps

The two major things involved in the water supply are the pipeline and the tap. If a pipeline is faulty or leaking, you can only give a temporary treatment to it by tying a cloth or taping the leaking part; but you have to call a plumber to rectify it permanently. Taps normally show only one kind of fault and that is when they start leaking. If it happens, you need to change the washer. You can carry out the following process-

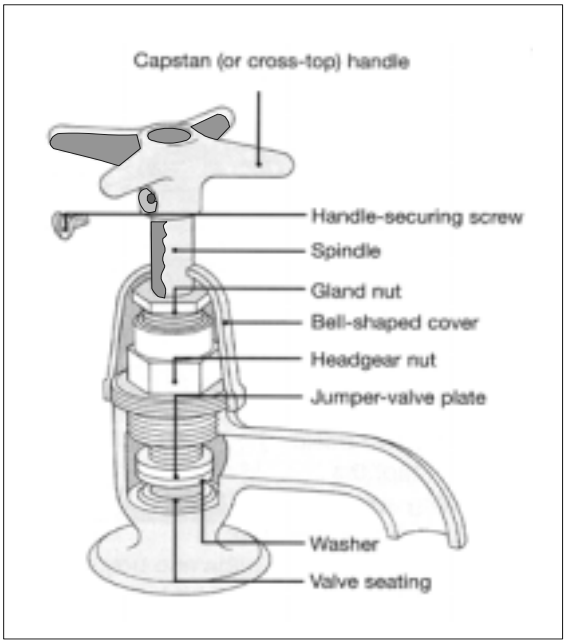

Fig. 30.2 : Changing the washer

a. First stop the water supply by turning the mains off.

b. Unscrew the hand-wheel.

c. Remove the hanger. For this you will have to use two wrenches, one to hold the lower part of the body and with another, unscrew the headgear. You may use a padded wrench for the lower part to avoid scratches.

d. Once the headgear is removed, you can access the stem holding the washer. Take it out. Remove the washer.

e. Replace the old washer with the new one and place the stem back.

f. Close the tap, fixing the headgear in place and then the hand-wheel.

Flushing Cistern

To be able to maintain this, you must first know how it works. Please refer to the figure as you read the text. When the lever is pulled down, the bell shaped unit rises up releasing the passage for the water to flow into the pipe. With the water flowing down the pipe, vacuum is created pulling more water from the tank, and pushing it down. This process continues till all the water in the tank gets over. As the water level decreases, the ball/float valve goes down thus releasing the inlet

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valve so that the water starts filling the tank and the ball valve starts rising. At a predetermined level, the valve has risen enough to close the inlet valve and the water stops entering the tank. The cistern is ready for fresh use.

Now, what kinds of faults can develop in this system? Let us go through some of them and how they may be rectified.

a. The washer in the inlet valve can develop a problem which can be repaired in a similar way as taps.

b. Sometimes the valve gets jammed due to impurities in the water supply, then it has to be opened and cleaned.

c. The impurities in the water may settle down in the tank and hinder the ball from settling properly. To avoid this, the tank needs to be cleaned periodically.

d. The operation of inlet valve is governed by the ball valve. Sometimes the ball may corrode or puncture, thus may not rise with the water level. Then you may have to change the ball.

Activity 30.3

Practice changing the following in your house:

i. Electric fuse.

ii. 3 pin plug of an iron.

iii. Washer of a tap.

INTEXT QUESTIONS 30.2

1. Geeta finds following faults in her gadgets. Help her to identify the exact causes.

   a. Electricity Fuse

   b. Noisy fan

   c. Fan rotates at extra fast speed

   d. Leaking tap

   e. Ball valve in cistern does not rise with water level and water overflows.

1. Give suggestions to maintain the following at home.

a. Carpets b. Wooden surface c. Brass

d. Glass window e. Cane chair

f. Coir flooring.

ANSWERS TO INTEXT QUESTIONS

30.1 **1.** a) iv b) i) c) vi) d) ii) e) iii)

2. (i) Wash with warm water and detergent with sponge from top to bottom. Rinse with clean water.

(ii) Clean with hot water and detergent. Rub lemon.

(iii) Apply any grease absorber (talcum powder, bran, etc.), brush off after a while.

(iv) Water and detergent, if needed along with sandpaper or mild acid. Rinse immediately.

(v) Rub a little metal polish. Wash with mild detergent.

30.2 (a) Wire in cut-out melts on passing heavy current.

(b) Bearings worn out

(c) Capacitor needs to be changed

(d) Washer needs to be replaced.

(e) Ball valve may have corroded/punctured.