TVET CERTIFICATE V IN FOOD AND BEVERAGE SERVICE

CLEANING EQUIPMENT AND TECHNIQUES

HKCT301

USE CLEANING EQUIPMENT AND TECHNIQUES

Competence

Credits: 6

Learning hours: 60

Sector: HOSPITALITY AND TOURISM

Sub-sector: FOOD AND BEVERAGE SERVICE

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Purpose statement

This module describes the skills, knowledge and attitudes required for a learner of Certificate III, to clean and use the appropriate equipment following the techniques depending on which surface is being cleaned. By the end of this module, the learner will be able to use cleaning materials and equipment and techniques, in hospitality establishments.

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LO 1.1: Identify cleaning equipment, tools, materials and products.

- Content/Topic 1: Different Equipment, tools and Materials

1.1.1. equipment, tools and Material

Machinery	Tools	Materials
○ **Washing machine**: use water, detergents to clean linen and clothes ○ **Tumble dryer/dryer**: use hot air to dry linens and clothes ○ **Dry-cleaning machine**: use to clean non washable fabrics ○ **Pressing machine** ○ **Steam pressing machine** ○ **Steam former** ○ **Weighing machine**: used to measure weight of linens to be washed ○ **Calendar machine**: big machine use to iron flat and large linen ○ **Hydro extractor**: used to remove excess of water from wet fabric ○ **Folding machine**: used to fold sheets	○ **Iron box /electrical hand iron:** Tools used to iron clothes and small linens ○ **Ironing board /table**: A foldable used to iron clothes ○ **Measuring jugs**: used to measure the quantity of laundry products ○ **brushes**: used to remove hard stains ○ **Hangers**: used for hanging clothes ○ **Hanging rails:** used for hanging clothes ○ **Spraying bottles**: spray water on the cloth while ironing ○ **Laundry trolley**: trolley used to collect linen from the washing machine	○ **Laundry bags**: used to collect linens and clothes to be cleaned ○ **Buckets**: used for mixing chemicals ○ **Basins**: used for washing ○ **Pegs** ○ **Peg holder**

1.1.2. Washing Equipment

Washing equipment consist of Wash Cycle. A complete wash cycle is composed of various stages and the time taken is approx. 40 to 50 minutes. It has been proven that quick wash cycles using large volume of water broken down into the following sequence is most effective. Flush › Suds › Bleach › Rinse › Sour & Soft › Extract; Additional Stages in the Wash Cycle: These are essential where there is a specific type of soiled or the articles are heavily soiled:

Soak › Break › Carryover Suds (Intermediate Rinse) › Intermediate Extract › Starch (Sizing).

A. Washing Machine

A washing machine, or washer, is a machine designed to clean laundry, such as clothing, towels and sheets. The term is mostly applied only to machines that use water as the primary cleaning solution, as opposed to dry cleaning (which uses alternative cleaning fluids, and is generally performed by specialist businesses) or even ultrasonic cleaners.

All washing machines work by using mechanical energy, thermal energy, and chemical action. Mechanical energy is imparted to the clothes load by the rotation of the agitator in top loaders, or by the tumbling action of the drum in front loaders. Thermal energy is supplied by the temperature of the wash bath.

B. Tunnel Washers /Continuous batch washers (CBW)

These are also called batch washers or continuous washers and are in effect a series of inter-connected washers. Each 'bath' is in a different cylinder and the load moves from one cylinder to the next. Computerized systems automatically adjust the time, temperature and chemicals to be used, so that each batch receives the required treatment. Machines may be top transfer or bottom transfer. Tunnel washers have distinct advantages in that they are timesaving, thereby reducing staff requirement. There are also significant energy and water savings. Tunnel washers can also be hooked up to an extractor and subsequently with conveyors to the dryer.

1.1.3. Drying Equipment

A. Tumble Dryer

Dryers are machines that dry laundry by tumbling it slowly in a perforated drum exposed to hot air ranging from 40ºC to 60ºC in low capacity dryers and going right up to 85ºC in an industrial dryer. There are programmes for delicate articles with low or no heat. Dryers may operate on gas, electricity or steam. For speedy drying and less wrinkling the volume of the dryer should be 25% more than the washer-extractor. Most dryers have a microprocessor computer control system.

Although suitable drying times are usually recommended for specific fabrics, some dryers have sensors hooked onto their microprocessors so that they can gauge the moisture in the load and cut the dryer off automatically the moment the laundry is dry. A lint screen traps the lint particles and must be cleaned

regularly. The length of the drying cycle is dependent on the absorbency of the fabric and the residual moisture. Modern dryers are equipped with high tech features such as signal lights, self-cleaning lint screens, reverse cylinder drums as well as energy-saving devices like extra insulation and heat reclaimers.

B. Tunnel Dryer

Clothes are hung on conveyor belts that pass through a tunnel. Hot air blowing in the tunnel, renders the articles completely dry by the time they exit. It is a fully automated process that also transfers the linen to the next area of activity.

C. Cabinet Dryer or Drying Room

Is a chamber where low-crease garments are suspended on hangers and steam or hot air is circulated through the cabinet.

1.1.4. Finishing Equipment

For those articles that require a pressed finish there are many finishing equipment. Some of the more frequently used equipment are listed below:

1. Flatwork Ironer / Roller Iron / Calendar

Is used for flatwork i.e. items like sheets, pillowcases, tablecloths, serviettes, aprons, sarees, etc. The items are passed through heated rollers for ironing.

2. Press

Press is used for fine pressing of Flat Linen like Table covers,

Pillow covers, Napkins, Kitchen linen, Staff uniforms. They are special presses to perform specific functions and operation can be on electricity or steam.

3. Puffer or Suzie

For coats and articles that do not crease heavily. The articles are put onto a dummy that is inflated with steam to remove creases and then with hot air to remove the moisture created by the steam.

1.1.5. Safe instructions for handling equipment

1 Never under load and overload the machine washer
2 Do not leave the door open after unloading and before loading the next batch
3 Never leave hot laundry in the drier at the end of working day (this can cause fire hazard)
4 Never use iron box on wet clothes
5 Use proper water setting on the washer
6 Use proper time setting on the washer

7 Use proper temperature setting on the washer or drier

8 Turn the machine off at the wall at the end of the day

9 Never put a lot of detergent (it can turn off the washer

10 Daily clean the machine washer at the end of washing work

11 Store hot iron when it is cool

12 Never use any faulty equipment

13 Do electrical check before use

14 Never switch on the washer with empty washing water

15 Keep laundry tools in appropriate storage

16 Ensure there is enough current installation

- Content/Topic2: Different cleaning products used:

Stain removals: A stain is defined as a discoloration brought about by contact with a foreign substance which is difficult to remove.

I) Water

As water is not a chemical, it is one of the most important elements of the wash cycle. The quality of water is important in determining which washroom chemicals will be chosen. Water may have a high iron or calcium content or even a high volume of vegetable dyes from plants located by the supplying dam. All these minerals will affect the effectiveness or not of washroom chemicals chosen. Water testing must be carried out at regular intervals by a reputable company.

- **Water temperature**

Washing at a temperature of 70C for approximately 25 minutes will kill most bacteria in hotel linen (except spores.) This is known as thermal disinfection. This temperature is however not recommended for woolens or synthetic fabrics.

ii) **Bleaches**

These include Chlorine bleaches and Oxidizing bleaches:

- **Chlorine bleaches**

These are used to whiten linen and remove residual stains. Chlorine bleaches must only be used on white linen. Chlorine bleaches if used in excess can cause fabric damage and loss of tensile strength in linens. They also act as a sterilizing agent leaving linen in a sanitary condition. Chlorine bleaches are available in both liquid and powder form. The most common chlorine bleach is sodium hypochlorite.

- **Oxidizing bleaches**

These can also be used to remove stains. Examples include hydrogen peroxide and sodium perforate.

- ✓ **Liquid soap/multi-purpose cleaner**

These are used to wash the linen, allowing water to penetrate the soil and hold it in suspension before rinsing. All detergents used in a commercial laundry are synthetic combined with builders to allow fats to emulsify. Detergents have a high tolerance to hard water and can be efficient at all temperatures.

Classification of detergents:

- ➢ Synthetic / active detergent
- ➢ Built-soap detergent
- ➢ Enzyme-action detergent.

They are more suitable for commercial laundering than soap which can produce a film when used in hard water.

- ✓ **Window cleansers.**

Window cleansers consist of water miscible solvent to which a small quantity of surfactant and possibly an alkali are added-to improve the polish effect of the cleanser. Some also contain fin abrasive. The cleanser is applied with a cleaning rag and rubbed off with a clean soft cloth. Cleansers can also be applied by spraying and the surface wiped clean.

- ✓ **Akline /acids.**

Most soil is acidic in nature and alkalis are used in the first part of the wash cycle to neutralize the soils in the linen prior to the main washing process. They also assist the detergent to "wet" the linen thereby penetrating the soil and holding it in suspension. Alkalis also assist in converting fats and oils to soap so that they become water soluble. These are added in the final rinse to neutralize residual alkalis. If alkalis are not removed, white linen can turn yellow or grey. Some sours contain optical brighteners.

Acids: acids remove mildew stains, metal stains, ink stains and old blooded **s**tain. They are used to neutralize the residual of alkali from main wash.

Two types of acid:

- ✓ **Mild/weak acids:** acetic acid, citric acid
- ✓ **Strong acids**: Potassium acid oxalate, hydrochloric acid, sulphuric acid formic acid, carbonic acid, oxalic acid (solid form)

NB:

- ✓ Only acetic acid, citric acid and oxalic acids are used today as stain removers. Acids should be neutralized by the strong alkaline solution to avoid corrosive effect to the fabrics.
- ✓ Try the simplest method (weak solution), if it fails, use strong acid solution.
- ✓ Complete rinsing is recommended after the use of acid products.
- ✓ Shampoos: is a soapy liquid that you use for washing your hair. is a hair care product, typically in the form of a viscous liquid, that is used for cleaning hair. **Shampoo** is used by applying it to wet hair, massaging the product into the scalp, and then rinsing it out.

- ✓ **Polishes:**

They do not necessarily clean but produce a shine by providing a smooth surface from which light is reflected evenly. They do this by smoothing out any unevenness on the surface of the articles. Polishes fall into three broad categories - spirit based, oil based and water based. Spirit based is used primarily for mirrors, window panes, etc. Oil based is used on wood, linoleum and synthetic floorings, leather, tiles, etc. Water based is used on sealed floors, rubber and thermoplastic floors.
Polishes may be used only after dirt and dust has been removed from surfaces. It should be used in small quantities. Ensure that the correct type of polish is used with the correct method of polishing. Polishes come in three forms liquid, paste & cream.

- ✓ **Creams cleansers/brass**: is a form of cold cream used to remove grime and cosmetics from the skin. or Cleansing cream, also known as cold cream, is usually made of a combination of mineral oil, petrolatum, water and waxes. It can moisturize your skin and remove dirt, sweat, makeup at the same time. The term cleanser refers to a product that cleans or removes dirt or other substances. A cleanser could be a detergent, and there are many types of cleansers that are produced with a specific objective or focus. For instance a degreaser or carburetor cleanser used in automotive mechanics for cleaning certain engine and car parts. Other varieties include the ones used in cosmetology and dermatology or skin care. In this case, a cleanser is a facial care product that is used to remove make-up, dead skin cells, oil, dirt, and other types of pollutants from the skin of the face.

- ✓ **Air freshener**: An air freshener is a product designed to mask or remove unpleasant room odors. These products typically deliver fragrance and other odor counteractants into the air. They do so through a variety of product formats, including aerosols, candles, potpourri, and gels.

L O 1.2. Use cleaning equipment and products

- Content/Topic1: Different cleaning equipment and products for

✓ **Dusting:** When any surface is wiped with a piece of dry cloth, (duster), it carries the loose dust with it and the process is known as dusting. This should be done with a clean soft clothes. Dusters These are mostly made of soft cotton, flannel or artificial feathers mounted on a stick. These are used to clean loose dust and are also used for wiping various surfaces. You should use separate dusters for dusting and wiping surfaces such as dining table, mirrors, kitchen slabs, etc. They should be washed and dried after use.

✓ **Cleaning:** Cleaning means removing impurities, dirt and stains on a surface. In housekeeping, it relates to keeping and maintaining all areas, equipment, machinery, furniture, tools, and linen free from dust, impurities and unsoiled

✓ **Polishing:** When some reagent is rubbed on a surface to bring out the shine, the process is known as polishing and the reagent applied is known as the 'polish'. Similarly, many other articles/ decorative items made of brass, wood, marble may be polished. Polishing cloth- these are made of soft absorbent cloth such as flannel. Dry polishing cloth helps to clean and shine the polished surfaces by rubbing them vigorously.

✓ **Mopping:** wiping a surface with a damp cloth is called 'mopping'. The piece of cloth used is known as a 'mop' and is generally coarser than a duster. In this process, both the dust, as well as easily removable dirt, is also removed. Mopping is mostly done on floors. Extra attention should be paid to nooks and corners otherwise it gets tougher to remove fixed grime later on. **Mops**- are mostly made of thick, loosely woven cotton cloth. These are used to wipe dust from the floors. These are dipped in clean water and squeezed before wiping the floors. You should change the water after mopping each room or when it gets dirty. You should thoroughly wash the mop and spread it for drying, after use.

✓ **Scrubbing**: Scrub is defined as to clean by rubbing hard. An example of to scrub is to rub a bathroom with a sponge and cleansing liquid really hard to get it clean. to rub (a surface) hard, with or as if with a brush, soap, and water, in order to clean it. to remove (dirt), especially by rubbing with a brush and water. to wash the hands and arms thoroughly before operating.

- ✓ **Shampooing:** a cleaning with a liquid soap for washing your hair

- ✓ **Vacuuming:** is a cleaning by using a device that uses an air pump to create a partial vacuum to suck up dust and dirt, usually from floors, and optionally from other surfaces as well. The dirt is collected by either a dust bag or a cyclone for later disposal.
- ✓ **Sanitizing:** refers to the reduction of microorganisms to levels considered safe from a public health viewpoint.

- Content/Topic2: Appropriate quantities of cleaning products according to the use

Chemicals in cleaning products like laundry detergent can help these products to perform just as well in cold water as in hot water, enabling consumers to save money and energy when washing their clothes. In addition, highly concentrated liquid laundry formulations made possible by chemistry require less packaging materials and generate less waste. Household cleaning products containing antibacterial cleaners not only remove dirt and soil, but they also can kill the germs that may cause illness. Chlorinated can help protect against seasonal flu outbreaks and episodes of foodborne illness. Daycare centers, hospitals, restaurants and other public facilities rely upon the disinfectant qualities of chlorine-based cleaners to keep the environment germ-free. Cleaning solvents are also common cleaning products. For example, glycol ethers are highly effective as an active component of heavy-duty glass, floor and other hard surface cleaning formulations. These solvents have good water compatibility, high solvency for greases and oils and good biodegradability.

- Content/Topic 3: Manual and Mechanical equipment use

I. Manual Cleaning Equipment

a) Brushes

The brushes are devices with bristles, wire or other filaments, used for cleaning. There are mainly three types of brushes:

1. Hard brush: have bristles that are stiff and well- spaced.

These are most suitable for removal of litter. Example: upholstery brush, carpet brush etc.

1. **Soft brush:** have bristles that are flexible and set close together. They can be used to remove loose soil and litter. Example: tooth brush, feather brush, shoe brush, coat brush etc.

2. **Scrubbing brush:** can be used to remove heavy soiling from small areas or by the use of mechanical scrubbing machines, if possible. Example: deck scrubber**.**

b) Mops

A mop is a tool generally used for cleaning the floors, although when possible it is also used for cleaning other surfaces, for example tiled walls, to avoid unhygienic working conditions. The different types of mops are as following:

1. **Dry mop or dust mop:** A dry mop or dust mop is designed to pick up dry, loose contamination like dust, earth and sand from the floor surface.

2. **Wet mop or moist mop:** A wet mop or moist mop is, in professional cleaning, used as a second step in the cleaning of a surface. The wet mop is swept over the surface to dissolve and absorb fat, mud and dried-in liquid contaminations.

3. Hot mop: Wet mop is also called the hot mop, which works on a similar concept to a steam iron. After adding water, it is heated to make the water exude on top of a floor, which can then be cleaned without using a cleaning solvent. These can work best on surfaces where a regular mop would also be used, such as floors, hearths, and laminates.

4. Yarn mop: In daily usage, a mop is usually equal to a yarn mop. Used to clean a floor, the mop is soaked in a bucket of water, usually mixed with a cleaning solution and swept against the surface.

5. Mop for premoistening: In professional cleaning, mops are often preimpregnated with an ideal amount of liquid. This ideal amount is often recommended by the manufacturer in terms of weight percent of water per dry weight mop, (175% water). The cleaner does not have to have a bucket of water with him / her when cleaning the floor, but simply carries an appropriate amount of mops. Pre-moistening can be done with a special washing machine or by hand by simply folding and packing the mops tight in a container and pouring the measured amount of water over them.

c) Broom

A broom is a cleaning tool consisting of stiff fibres attached to, and roughly parallel to, a cylindrical handle, the broomstick. A smaller whisk broom or brush is sometimes called a duster.

Wall Broom

Used to remove soiling from ceiling, and high ledges

Hard Broom

They are used for removing dust from variety of Hard Floors

d) Squeegees

A squeegee is a cleaning tool with a flat, smooth and thick rubber blade, used to remove or control the flow of liquid on a flat surface. It is used for cleaning floors and small thin and flexible squeegee is used for cleaning windows.

Rubber/water squeezer

Window cleaning squeegee

e) Carpet Sweeper

Carpet sweeper is a mechanical device for the cleaning of carpets in place. A carpet sweeper typically consists of a small box. The base of the box has rollers and brushes, connected by a belt or gears. There is also a container for dirt. The arrangement is such that when pushed along a floor the rollers turn and force the brushes to rotate. The brushes sweep dirt and dust from the floor and particles into the container.

f) Melamine Foam

Melamine foam is a foam-like material consisting of a formaldehyde-melamine sodium bisulphate copolymer. The foam, because of its micro porous properties, may remove otherwise "unclean able" external markings from relatively smooth surfaces. For example, it can remove crayon, magic marker, and grease from painted walls, wood finishing, and grime from hub caps.

g) Cloths

1. Floor cloths: It is a yarn fabric usually made from loosely spun yarn. They are used for removal of spillages from the floor.

Floor cloths are bigger, thicker and made of coarser cotton material than all-purpose swabs. They are used to wipe WC pedestals, clean tile floors, clean marble or granite floors, remove spills from floors etc.

3. **Wipes and swabs:** These are cloths used for wet cleaning of surfaces above floor level.

4. **Scrim:** It is a loosely woven linen cloth which is absorbent and does not leave stains. They are suitable for cleaning glazed area.

This is a loosely woven linen material resembling fine sackcloth. Scrim, because of its high absorbency and lint-free nature, is often used instead of chamois leather for cleaning windows and mirrors.

5. **Rags / disposable cloths:** This old discarded linen is obtained from the linen room and used for the purpose of general cleaning. They are discarded when heavily soiled.

6. Dust sheets: These are thin cotton sheets used to cover furniture especially during special/ spring cleaning. They are also old discarded linen obtained from linen room.

Dust sheets are made of any thin cotton material, being about the size of a single sheet. Discarded bed sheets or curtains from the linen room are ideal for use as dust sheets. They are used to cover floors, furniture or other articles during spring cleaning or decorating

7. Drugget: It is a sort of cheap stuff, very thin and narrow, usually made of wool, or half wool and half silk or linen; it may have been corded or plain. They are used for rugs, tablecloths, carpet square to protect the floor during bad weather and during redecoration.

These are made of coarse, fine canvas or clear plastic and they may be of the size of carpet square and are placed on the floor on the doorway to prevent excessive dirt being brought in or out during bad weather or during redecorating projects. They are sometimes placed in the passage between the kitchen and dining area to catch spills and debris.

8. Hearth and bucket cloths: These are thick fabric cloths placed under the buckets to prevent marking of the floor/ surface.

These are made up of thick fabrics and used to protect the carpet and flooring when a fireplace is being cleaned or placed under buckets to prevent marks on the surface they are kept on. They also catch splashes of water.

9. Chamois leather: It is a skin of chamois goat. They are used for cleaning windows and mirrors.

II. Mechanical Cleaning Equipment

Mechanical Cleaning Equipment are that equipment usually uses electrical energy for their operations.

a) Vacuum Cleaners

A vacuum cleaner uses an air pump to create a partial to suck up dust and dirt, usually from floors. Most hotels carpeted floors possess a vacuum cleaner for cleaning. Dirt is collected by a filtering system or a cyclone for later disposal. Vacuum cleaners come in variety of models owing to their usage. Vacuum cleaners come in variety of models owing to their usage:

1. Upright vacuum cleaners take the form of a cleaning head, onto which a handle and bag are attached.
2. Canister (or cylinder) designs have the motor and bag in a separate canister unit (usually mounted on wheels) connected to the vacuum head by a flexible hose.

3. Wetvacs or wet / dry vacuums - a specialized form of the canister vacuum - can be used to clean up wet or liquid spills. They commonly can accommodate both wet and dry soilage.

4. Back-pack vacs are commonly used for commercial cleaning: They allow the user to move rapidly about a large area. They are essentially canister vacuum cleaners, except that straps are used to carry the canister unit on the user's back.

5. Built-in or central vacuum cleaners move the suction motor and bag to a central location in the building and provide vacuum inlets at strategic places throughout the building: only the hose and pickup head need be carried from room to room. Plastic piping connects the vacuum outlets to the central unit. The vacuum head may either be unpowered or have beaters operated by an electric motor or air-driven motor. The dirt bag in a central vacuum system is usually so large that emptying or changing needs to be done less often.

6. Robotic vacuum cleaners move autonomously, usually in a mostly chaotic pattern ('random bounce'). Some come back to a docking station to charge their batteries, and a few are able to empty their dust containers into the dock as well.

7. Small hand-held vacuum cleaners, either battery-operated or mains powered, are also popular for cleaning up smaller spills.

8. Drum vacuums are used in industrial applications. With such a configuration, a vacuum "head" sits atop of an industrial drum, using it as the waste or recovery container. Electric and
Compressed Air powered models are common.

b) Scrubbing / Polishing Machines

Scrubbing/ Polishing Machines consist of one large or several small brushes which revolve and scrub the floor while water and detergent are released from a tank attached to a machine. With suitable brushes

this versatile machine can be used for shampooing carpets, polishing, spray buffing, spray cleaning or polishing floors

c) Hot Water Extraction Machine

Hot water extraction also known "**steam cleaning**" is the method of deep rinse cleaning of the entire carpet. Hot water extraction is a deep cleaning process that removes embedded soils that have been carried or blown over the carpet. A hot water extraction machine, whether portable or truck mounted, has a pump which dispenses water, under pressure, through spray nozzles into the carpet and a high powered vacuum system that sucks the dirty water into a holding tank within the extraction machine. This system includes a three step process:

1. Pre-spray carpeted area with a detergent that is not too strong (or too alkaline). They may damage the carpet.

2. Agitate with a power scrubber which utilizes a rotary brush to loosen soils. This will not only loosen soils but help cleaning agents penetrate into carpet fibers to deep clean the entire carpet fiber.

3. A complete rinse with softened hot water is used. The clean, softened, hot water is sprayed onto the carpet fibers through spray nozzles. The spray rinses all added chemicals, cleaners, and dirt into an attached high powered vacuum shoe that sucks the dirty solution back into a holding tank on the extraction unit. The removed soil is held in the tank until it may be disposed of later in a sanitary drain, toilet, or proper waste facility.

d) Carpet dryer

It can take anywhere between **8-24 hours** for the carpet to completely dry, depending on the aforementioned variables. Using fans in any rooms cleaned and turning your air conditioning or heating system on, depending on the time of year, can help accelerate drying time.

Selection of Equipment

As equipment are expensive, their selection is of utmost importance. In determining the purchase of equipment, the following need to be kept in mind.

1. Quality of equipment by usage history in other organizations.

2. Reliability of supplier to meet time deadlines.

3. Transportation on time to replenish stocks/ replacements.

4. Equipment should be light, well balanced and easy to manipulate.

5. Availability of future stocks.

6. Sturdiness in terms of usage.

7. Cost factors.

LO 1.3. Maintain and store cleaning equipment

- Content/Topic1: methods of equipment maintenance

Four general types of maintenance philosophies can be identified, namely **corrective, preventive, risk-based and condition-based maintenance.**

Routine maintenance activities are those which relate to the general upkeep of the property, they occur
on a regular (daily or weekly) basis, and require relatively minimal training or skills. They are maintenance
tasks which occur outside of the formal work order system and which require no specific maintenance records (time or materials, examples include cleaning readily accessible windows, cutting grass, shoveling
snow and replacing burned-out light bulbs.

Preventative maintenance consists of three parts: inspection, minor corrections and work order initiation. For many areas within the hotel, inspections are performed by Housekeeping personnel in the
normal course of duties. For example, room attendants may regularly check guest rooms for leaking faucets, cracked caulking around bathroom fixtures and other items that may call for action by Engineering staff. Communication between Housekeeping and Engineering should be efficient so that most minor repairs can be handled while the room attendant is cleaning the guest room. In some properties, a full-time maintenance person may be assigned to inspect guest rooms and to perform the necessary repairs, adjustments, or replacements

The facility shall provide housekeeping and maintenance services necessary to maintain a sanitary and comfortable environment and laundry services, including personal laundry services, to meet the needs of the residents.

1. The facility shall employ sufficient housekeeping and maintenance personnel to maintain the interior and exterior of the facility in a safe, clean, orderly, and attractive manner. The facility shall establish, implement, and update policies and procedures consistent with current standards of practice including procedures to ensure:

a. The facility is kept free from offensive odors, accumulations of dirt, rubbish, dust, and safety hazards;

b. Floors are regularly cleaned, polishes on floors provide a nonslip finish, and throw or scatter rugs have a nonslip backing;

c. Walls and ceilings are maintained, cleaned, and painted as needed;

d. The grounds are kept free from refuse and litter; and

e. Poisons and chemical compounds must be stored away from resident and food preparation and storage areas.

2. The facility shall be maintained free from insects and rodents.

a. Pest control services must be provided by the facility or by contract with a pest control company.

b. Windows and doors must be appropriately screened to exclude insects.

c. Harborages and entrances for insects and rodents must be eliminated.

3. The facility shall have available at all times a sufficient supply of linen in good condition for the care and comfort of residents and ensure there is sufficient trained staff and facilities available to provide these services in a manner that controls the spread of infection.

a. Clean linen and clothing must be stored in clean, dry, dust-free, and easily accessible areas.

b. Soiled linen must be sorted and stored in well-ventilated areas, separate from clean laundry spaces, and must not be permitted to accumulate.

- Content/Topic2: Different storage and pantry areas

A pantry is a room where beverages, food, and sometimes dishes, household cleaning chemicals, linens, or provisions are stored. Food and beverage pantries serve in an ancillary capacity to the kitchen.

- Guest Rooms.
- Guest Bathrooms.
- Public Areas such as Lobby and Lifts.
- Banquets and Conference Halls.
- Parking Area.
- Sales and Admin Offices.
- Garden.

- Content/Topic3: Storage methods:

1. The store should be dry and well ventilated as dampness

causes rust of metal parts or mildew leading to deterioration of equipment.

2. The store should provide enough space for easy access to shelves and to facilitate proper cleaning.

3. There should be adequate racks and cupboards properly labeled for easy identification.

4. Stock records should be maintained showing:

· Date of purchase

· Kind of stock and quantity

· Name of supplier

· Cost per unit

· Date of issue into service

· Remarks on suitability and durability

5. Certain rules must be maintained for the issue of stocks:

· A definite time should be specified for issue

· Issue should be done strictly against worn out equipment.

· Equipment should be clearly marked as to the floor or public area.

6. Storage rooms should be subject to regular inspection.

7. Expensive equipment like vacuum cleaners should be

covered with polythene sheets and kept air-tight.

- **Safety precautions**

Making sure your tools are properly stored, cleaned, and well maintained will save you time and money as well as making your projects and jobs much easier. When it comes to storing your tools you have to work with the space that you have.

- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- Keep cords and hoses away from heat, oil, and sharp edges.
- Disconnect tools when not using them, before servicing and cleaning them, and when changing accessories such as blades, bits, and cutters.

Learning Unit 2: Apply cleaning techniques

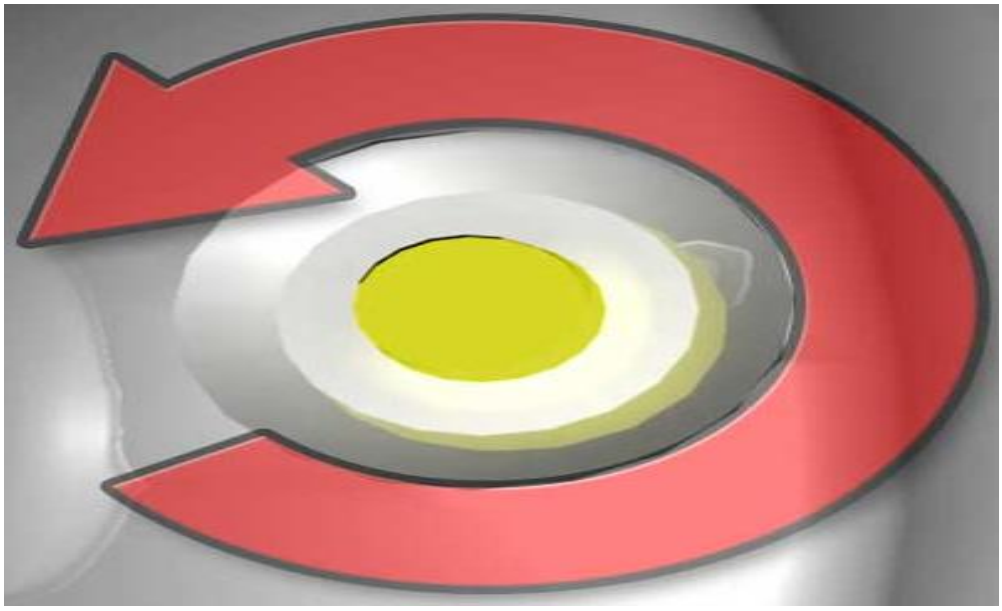
LO 2.1: follow cleaning procedures.

- Content/Topic 1: Cleaning procedures

✓ **Clock - wise:** clean from left side of the surface to right side of it.

✓ **Anti-clock wise**

Anti-clockwise procedure: clean from right side of the surface to left side of i



LO 2.2: clean furniture surfaces

- Content/Topic1: Different types of furniture surfaces

❖ **Plastic:**

Plastics are typically organic polymers of high molecular mass and often contain other substances. They are usually synthetic, most commonly derived from petrochemicals, however, an array of variants is made from renewable materials such as polylactic acid from corn or cellulosic from cotton linters. Fill a bucket with 1 gallon of warm water, then add 1/4-cup clear liquid dishwashing soap. Dip a sponge or soft-bristle brush into the soapy water. Wipe down the plastic furniture to remove dirt and debris. Put on a pair of rubber gloves.

❖ **glass:**

Glass is a non-crystalline, often transparent amorphous solid, that has widespread practical, technological, and decorative use in, for example, window panes, tableware, and optics. If your glass furniture is really dirty, start by lightly dust it with a clean microfiber cloth to remove any larger pieces of dust. Then spray the entire glass table or glass portion of the furniture with your cleaner. Do not use an excessive amount, as doing so may result in streaky residue left behind on the glass.

❖ **metallic:**

Metal is one of the more durable materials and good metal will never show any sign of deterioration against day-to-day wear and tear except if left under heavy pressure or somewhere that allows it to rust. Metal is much harder than its wood counterparts and is one of the few materials that is flame

resistant, making it safer material to work with in your home. Metal is also a very common material, ensuring any metal furniture pricing doesn't involve any hike.

- **wooden:**

You dust and shine your wood furniture regularly, but over time those polishes and dust combine to leave a dark film on tables, chairs and shelves. To keep your furniture looking its best, you need to do a periodic deep cleaning. Here's how to clean wood furniture without damaging its finish. Dust the furniture to remove surface dirt. Now you're ready to remove light soiling. Start with the gentlest cleaner and move up to stronger ones as needed. Try mixing a weak solution of water and dish washing soap. Dip a soft cloth in the solution, wring it out and wipe the entire piece. You want a damp cloth, not a wet one. Don't saturate the wood, and rinse your cloth often. Take a second, clean cloth and dry the piece thoroughly.

- **textile:**

- **Use good cleaning agents:** When stains occur, it is important to use good stain removal detergent. Further down the page you will find detergents that we recommend for removal of stains.

- **Try the detergent on a small surface:** Some detergents are very strong and may not be suitable for certain types of materials. Therefore, always test the detergent on a small surface first to make sure that the agent does not discolor the fabric.

- **Remove the stain quickly:** Try to remove the stain as soon as possible. A stain that stays too long will be harder to get rid of. So try to have detergents nearby in environments where stains easily occur.

- **Dabb the stain, do not rub:** A common mistake for removing stains from eg. Coffee, wine, etc. is to rub the stain. Avoid this as method as it can make the stain worse. Instead, apply detergent, let it work and then press on the stain repeatedly with a clean cloth, tissue or sponge. This causes the stain to be soaked into the cloth / sponge. Different cleaning agents have different uses. Some products should be applied directly to the stain and other agents

should be applied on a cloth and then dabbed on the stain. Read the product manual before using your product for best effect.

- **Removal of chewing gum:** Chewing gum can be hard to remove. We recommend to use a cooling spray. Spray with the cooling spray on the chewing gum and cool it down. Afterwards, you can easily remove it by either cutting it off or crushing the chewing gum and then sweep it up.

❖ **Leather:**

Leather is a durable and flexible material created by tanning animal rawhide and skins. The most common raw material is cattle hide. It can be produced at manufacturing scales ranging from artisan to modern industrial scale. Leather is used to make a variety of articles, including footwear, automobile seats, clothing, bags, book bindings, fashion accessories, and furniture. It is produced in a wide variety of types and styles and decorated by a wide range of techniques.

❖ **ceramic:**

Just wipe the surface with a damp cloth or sponge and a mild detergent, like the soap you'd normally use in the kitchen. Yes, it's that simple! Avoid the use of ammonia-based cleaners which can break down the sealant and possibly damage your garden furniture.

- Content/Topic 2: Different cleaning methods applied to different surfaces

❖ **Clean Plastic:**

Use a nonabrasive, all-purpose cleaner. Rinse with clean water and dry with a clean, soft cloth. Avoid using abrasive cleanser that may scratch the plastic.

- **Cleanse glass:**

Most slides and glass surfaces can be effectively cleaned with soapy water. Prepare a bath of soapy water. Use a lint-free wipe and cotton swab to gently rub the surface clean of dirt and residues. Rinse thoroughly in DI water and blow dry with nitrogen.

- **Dustin and polish metallic:**

Metals and their surface finishes are softer, more porous and more easily damaged than is often imagined. Inappropriate or excessive cleaning is a common mistake. When it comes to cleaning metals, less is more. Work on a padded surface (for example thin foam or cardboard covered with blotting paper) with good lighting. If in any doubt, do not attempt any cleaning and seek advice from a conservator

- **Dustin and polish wooden:**

Cleaning and maintenance depending on the wood and its finishing layer, little impacts, soft scratches and some stains can be equalized by treating the surface done by professionals. As an oiled surface isn't sealed, they're easier to spot repair. Please contact your local dealer for further information. Treat your furniture regularly according to the cleaning and maintenance instructions delivered with your furniture.

For everyday use take a soft slightly damped cloth to wipe the surface. Do not leave liquids or damp items on the top of wooden surface, nor put any hot or edgy item on any of your furniture. Also, protect the surface from adhesive labels and rubber coated objects. Do not use microfiber cloth, abrasive or aggressive detergents for clean (please check the labels of the common household products for contents before use!).

- **Attend to textile:**

Wet *cleaning* or washing. The most familiar *method* of washing everyday *textiles* is to use water and detergent. Water damage & spills. Sampler showing dyes that have run. Vacuuming *textiles*. The safest way to remove loose dust and dirt is by vacuuming. Dry *cleaning*. Traditional *cleaning* remedies should be avoided.

- **Dustin and polish Leather:**

A natural artisanal material used since prehistoric times. Leather has a refined timeless luxury that no other material can replicate. Quality leather is an exquisite durable material that will offer countless years of comfort with a long-lasting sophisticated aesthetic. The leather upholstery looks amazing in your house and is the best choice for houses with pets and children, as it is easy to clean. Clean a leather furniture from time to time with a vacuum cleaner by using a soft furniture brush and occasionally, clean it with a damped cloth. Please do not experiment with unsuitable agents such as shoe polish, floor wax or cosmetics for example. When in doubt, consult a specialist. Never try to remove stains by rubbing them or with solvents (e.g. stain remover, turpentine, petrol)!

Please remove liquids immediately with an absorbable cloth. Do not treat grease stains in natural leather – they are often absorbed into the leather and become invisible after some weeks. Work on the remaining stains with a leather cleaner proposed by each manufacture. Selecting the most appropriate leather requires an understanding of the characteristics of each leather type. The leather type is established early in the production process, directed by the quality of the raw hide. This determines if the leather will end up as an aniline, semi-aniline, pigmented or corrected grain leather and the final cost of the material.

- **Cleaning ceramic:**

Ceramic is an inorganic natural product that do not release any harmful substances. Clay is extremely flexible and soft at its natural state and becomes rock-hard after the firing process. Its color changes according to the chromophore oxides contained in the clays and is UV resistant. It is an extremely versatile surface with a huge visual impact that is resilient, reliable, practical and durable at the same time. Ceramics are food safe, hygienic and very easy to take care of as liquids can´t penetrate the top and remain on the surface. This material is characterized by a small thickness, a good resistance to cleaning products, to chemicals and solvents. The only product that can damage ceramics is

Hydrofluoric acid. It also resists to humidity, thermal shocks, to scratches and surface abrasions. Over the last few years resistant and innovative materials are emerged; one of them is glass-ceramics.

This material is made of one upper layer of ceramics, and a lower layer of glass, which makes it even more sturdy and resistant. The material resulting from this successful coupling is oil/liquid/fat-repellent, it is heat-resistant and acid-resistant. It is scratchproof, easy to clean, non-corrodible and non-toxic. Ceramic surfaces are easy to clean. We suggest the use of neutral and alkaline detergents and the use of a soft cloth. Rinse with water and dry the surface to avoid the formation of stains, which might be caused by detergents residues. Make sure that no hot, too heavy, sharp edged, scratching or wet objects, that cause pressure points or edges, are placed on high quality furniture surfaces. Please immediately clean off spilled acidic liquids, such as fruit juices and alcohol, and do not let them penetrate. Never rub on the spot with great pressure. Please always observe the manufacturer's instructions for the product!

LO 2.3: clean floor surfaces

- Content/Topic1: Different types of floor surfaces

Soft floor

- carpet

Hard floor

- wooden
- tile
- terrazzo
- cement
- concrete
- **Floor cleaning methods Cleaning floors and floor coverings**

Floor Type	Cleaning Agents	Polishes	Caution	Daily Care	Regular Care

Wooden	Liquid furniture polish.	Solvent based wax or polish	Avoid water.	Dust mop, damp mop only if necessary.	Spot clean with diluted detergent. Resurfacing by sanding may be necessary periodically.
Concrete or cement.	Detergents and neutral soap	None		Sweep and damp mop.	Scrub on regular basis, depending on use, to remove stains.
*Vinyl/(Taat)	Soap and detergent	None	Avoid alkalis and coarse abrasives.	Sweep or dry mop with non-oily mop.	Maintain a sufficient wax or polish on floor at all times.
Rubber	Detergent	Wax with Polymertype water emulsion.	Refer to manufacturer's instructions. Avoid grease and oil	Sweep or dry mop with treated mop that leaves no oil. Damp mop with diluted synthetic detergent.	Spot clean in heavy traffic areas with steel wool.
*Linoleum	Neutral soap or synthetic detergent	Water based wax.	Avoid excess water and wax in seams. Avoid alkaline or acid cleaners as	Sweep with chemically treated non-oily mop, damp mop.	Scrub lightly and repeat daily care. Do not remove polish; apply polymeric coating, strip 1

			well as coarse abrasives.		or 2 times a year.
Tiles: Ceramic tiles Plastic floor tiles	Synthetic detergent.	Water based polish or wax with non-slip properties. Water based polish.	Avoid abrasives on tile surfaces.	Sweep, dust mop or damp mop.	Be attentive to loose or broken tiles.
Marble and brick slate. Terrazzo - a mixture of marble and other decorative chippings set in fine cement and laid as pre-cast tiles or slabs.	Neutral detergent	Wax or polymer.	Stains, avoid excess water. Avoid acids and strong alkalis.	Damp mop.	Polish periodically if sealed.

- Floor surfaces must be cleaned often but it is important to understand that there is a variety of floor surfaces found in a hotel and that each one has different cleaning implications.
- **Hard and semi-hard floor coverings**
- It is important when cleaning floors to remember to always use clean hot water as well as clean cloth and containers.
- **Carpets**
- Different types of carpets to be added
- Correct care of carpeting is very important as carpets are expensive, and, unlike tiled floors or other hard floors, need to be replaced. The better they are cared for, the longer they will last, thereby saving replacement cost.
- Maintaining carpets in top condition will require cleaning using water, foam or steam. It is vital that this type of cleaning is performed appropriately to prevent damage.

- Leaving excessive water on carpets after cleaning must be avoided because this could:
  - Increase the re-soil rate
  - Lead to shrinkage or seam splitting
  - Formation of mildew and carpet rot
  - Cause discoloration, i.e. browning.
- **Daily care**

  Superficial dust and crumbs can be removed with a carpet sweeper or vacuum. Dirt and other soiling in the pile can be removed with a suction cleaner, i.e. vacuum cleaner.
  - Blot up liquid spills with clean absorbent paper.
  - Spot clean semi-soiled or greasy materials then wipe the affected area with a damp cloth. Remove any residual stain using solutions appropriate for the nature of the stain.
  - Spring cleaning to be added in the relevant topic
  - Daily care and regular care to be merged
- **Weekly care**
  - Clean the carpet edges. Brush then vacuum with nozzle attachment. Thoroughly vacuum the whole carpet area, this will require furniture to be moved, e.g. under beds, couch etc.
  - Thoroughly vacuum long pile carpets, e.g. shag pile. Shag pile carpet must be vacuumed in 4 directions to ensure thorough cleaning. If the pile is very long it may need to be raked with a rake.
  - Spot clean as required to remove marks and dirt before stains set. This will reduce the necessity to shampoo the carpet.
- **Regular care**

Deep clean the carpet using a method appropriate for the carpet. The deep cleaning method used will depend upon the equipment available in your workplace and organizational requirements. Deep cleaning can be performed using of the following techniques:

- Foam
- Hot water extraction
- Dry particle extraction.

For each of these, follow the manufacturer's instructions, or ensure that you have been trained to use the equipment and the cleaning agents that they may need. Deep cleaning of carpets may be outsourced to professional carpet cleaners.

- Content/Topic 2: Different cleaning methods

- **Moping**: wiping a surface with a damp cloth is called ‘mopping’. The piece of cloth used is known as a ‘mop’ and is generally coarser than a duster. In this process, both the dust, as well as easily removable dirt, is also removed
- **Polishing**: When some reagent is rubbed on a surface to bring out the shine, the process is known as polishing and the reagent applied is known as the ‘polish’. Similarly, many other articles/ decorative items made of brass, wood, marble may be polished. Polishing cloth- these are made of soft absorbent cloth such as flannel. Dry polishing cloth helps to clean and shine the polished surfaces by rubbing them vigorously.
- **Vacuuming**: is a cleaning by using a device that uses an air pump to create a partial vacuum to suck up dust and dirt, usually from floors, and optionally from other surfaces as well. The dirt is collected by either a dust bag or a cyclone for later disposal.
- **Blooming**: is a cleaning by using a bloom on hard surfaces.
- **Scrubbing**: Scrub is defined as to clean by rubbing hard. An example of to scrub is to rub a bathroom with a sponge and cleansing liquid really hard to get it clean. to rub (a surface) hard, with or as if with a brush, soap, and water, in order to clean it.

LO 2.4: Clean walls and ceiling.

- Content/Topic 1: Clean painted walls dust and damp wipe wall paper:

To clean wallpaper, always start by dusting the wall with a lambswool duster or a broom wrapped in a microfiber cloth. Fingerprints and smudges can often be removed by spot cleaning with an artist's gum eraser, but for older or more delicate wallpapers, opt for a “dry sponge” from a hardware store.

- Content/Topic 2: Clean walls fittings and fixtures:

General office cleaning involves ensuring the furniture and fittings are neatly cleaned. The main office furniture includes chairs, workstations, desks, coffee tables, filing cabinets, computers, sofas, telephone handsets, tables, waste bins, and table lamps. Office fittings are the things fixed to the walls, floor or ceiling. They include low height fittings (those below shoulder height): doors, light switches, door handles, blinds, shelves, wall lamps, curtains and high reach fittings (above shoulder height): ceiling fans, air-conditioning vents, recessed lights etc. Cleaning office furniture and fittings depend on their use and what they are made from; for instance whether they are metal or plastic, glass or vinyl etc. there are different ways of cleaning depending on whether it is done routinely or periodically.

Routine cleaning includes spot cleaning, dusting, damp wipe/dry wipe, and vacuuming floors. Periodic cleaning involves polishing high-quality furnishing and boardroom tables and removing dust from fabric and upholstered chairs by vacuuming, especially in the crevasses' and corners.

- Content/Topic 3: Clean ceiling and fixtures according to kind:

To clean table lamps, sconces, and ceiling lights, carefully remove the shades and clean them according to the type of material, Wipe off the bulb and base with a damp cloth. Immerse ceiling-lamp covers in hot soapy water. Wash them gently, rinse, and dry. Finally, be sure to check for frayed wires before attempting any light fixture cleaning. If you notice any damage, have it fixed before cleaning. Instead, gently rub the surface with a damp cloth. Or, contact the manufacturer or the retailer for specific instructions for cleaning your specialty finish. If your piece has been around for a while, that may not be possible, but these light fixture cleaning tips can help. For brass light fixtures without a lacquer finish, cleaning involves little more than wiping the surface with a damp cloth and drying with a soft cloth. Brass light fixtures with a factory-applied lacquer finish require only dusting, and an occasional spot cleaning with a cloth dipped in warm water. Don't use any cleaner on lacquered brass; it can cause the surface to tarnish or become scratched.

Glass fixtures, such as wall sconces, can be safely deep cleaned with a mild cleaner, such as hand dishwashing liquid or glass cleaner applied to the surface using a soft cloth

Always wash by hand glass light fixtures by hand - not in the dishwasher. Overly enthusiastic cleanings and harsh automatic dish-washing detergent can scratch the decorative designs and coating on some fixtures.

Plastic recessed lighting covers, commonly found in kitchen cabinet under-counter lighting fixtures, can be similarly cleaned in the sink with hand dish-washing liquid when the covers appear cloudy with cooking oils and dust.

LO 2.5: Clean glass surfaces

- Content/Topic 1: Cleanse lightly soiled glass

There are many cleaning secrets when it comes to removing fingerprints and smears from glass objects, including using a spritz of gin, which is a popular 1940s household hack. But a new hack, which has been shared on the Facebook group Extreme Couponing and Bargaining, reveals how supermarket fabric softener mixed with warm water can wonderfully clean mirrors and windows — without leaving any streaks, reports *The Metro*. You'll need fabric softener and warm water, mixed well, and then dipped in a cotton cloth, before wringing out. You can clean any windows, mirrors or other mirrored objects and watch your home look (and smell) amazing.

- Content/Topic 2: Periodic cleaning soiled heavily glass.

The glass doors should be cleaned twice a day and where public traffic is high the frequency of cleaning may go up to 4 times in a day. Vinegar and water solution may also be used for glass. Very high ceiling may be dusted once in a month. Flower arrangements should be attended to daily and indoor plants watered as required Chandeliers may be brought down and cleaned once in six months. Glass surface and windows should be cleaned with proprietary glass cleaner daily Wooden furniture should be polished once a week. Doors, door handles, and knobs should be wiped and damp-dusted daily. Carpets should be shampooed once in month; but in case of heavy traffic or heavy soiling, once in a week. Carpeted areas should be vacuum cleaned daily to remove dust and dirt Curtains should be vacuum cleaned once in a week. Furniture should be wiped and occasional tables should be cleaned frequently during day.

LO 2.6: Clean ceramic surfaces

- Content/Topic 1: Cleaning techniques

There are many different cleaning methods. Therefore, it is important for you to be able to choose the correct techniques and methods for specific tasks. The most commonly found dirt and dust are removed by:

- **Washing -** water and a cleaning agent
- **Friction -** using an abrasive
- **Suction** - using a vacuum cleaner or wet pick up machine
- **Force -** using pressurized water
- **Dusting -** using duster to clean

The method chosen will depend on the type and amount of dirt and the surface to be cleaned.
The most appropriate cleaning method should be chosen for the task to be carried out. The main methods are:

1. Damp dusting

This involves taking a clean cloth and dampening it with an all-purpose solution. Take care to wring the cloth in order to avoid drips and streaks, then go over the appropriate surfaces with the cloth.

2. Dry dusting

This is not the most effective cleaning method. It only moves dust around, but does not fully clean surfaces. Only use this method where it is inappropriate to use damp dusting because of the surface.

3. Sweeping

Sweeping has the same effect as dry dusting and is therefore not an effective method of cleaning.

4. Polishing

Polish is primarily used to protect and nourish wood, especially for wood or antique furniture. You should always follow the manufacturer instructions. Bees wax is sometimes advised instead of spray. However, most surfaces are sealed and therefore polish is not effective or even required - damp dusting can be enough.

5. Disinfecting

This type of cleaning kills some types of bacteria, but is used mostly to reduce numbers of bacteria to a safe level. Disinfectants are NOT cleaning agents, but are used AFTER thorough cleaning of a surface.

6. Suctioning

This is the most effective type of cleaning, as dust is socked into a bag and can be disposed of easily.

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