Home Science in Daily Life



9

# CARE AND MAINTENANCE OF FABRICS

A group of students were chatting during lunch break. Charles complimented Joseph for his favourite sparkling white shirt that they had brought together almost two years ago. Just then Purnima said that she was very unhappy about the condition of her silk blouse after one washing. Akbar said he too could not wear his expensive pure wool cardigan after the first wash. Then Kabir told them that he has acquired knowledge regarding care of different types of fabrics in a house keeping course. He told them that they should not wash all types of fabrics with one detergent. He further added that there are different methods of washing and finishing different types of clothes. He advised that a little care can keep their favourite dress as good as new.

Do you know that clothes speak volumes about the wearer's personality? It is good to select clothes carefully. But even more important is to wash and finish them regularly for a well groomed appearance. Let us learn how to take care of clothes so that we have no regrets later.



#### **OBJECTIVES**

After reading this lesson you will be able to do the following:

- explain the meaning and need of brushing, airing and laundering your clothes;
- remove stains using appropriate reagents and techniques;
- check care labels and colour fastness of your clothes before washing;
- launder different fabrics using appropriate cleaning methods and finishing agents and:
- store laundered clothes suitably.

#### ROLE OF SHAKING, BRUSHING, AIRING AND 9.1 LAUNDERING CLOTHES IN CARE AND MAINTENANCE OF FABRICS

We all know that when we wear clothes they become dirty and need laundering. The dirt is due to stains, dust, grease and perspiration. When left on fabrics, these can lead to the following damages:

- Stains and dirt on clothes become medium for the growth of bacteria, fungus or other harmful organisms which may lead to skin problems and poor personal hygiene.
- Dirty clothes lose their freshness and smell unpleasant.
- Left on clothes the dirt and stains reduce the strength of the fabric.
- No one feels good wearing stained and dirty clothes.

Clothes need not be washed every time they are worn. It depends on the weather in which these have been worn and how much sweat they have absorbed. When the weather is good and you do not sweat, you can safely reuse your clothes. But before putting them away for reuse keep the following steps in mind to maintain your clothes.

#### 9.1.1 Shaking, Brushing and Airing

'Shaking' helps in removing loose dust from the fabric. Hold the dress with both hands and shake it vigorously.

Have you seen materials like velvets, corduroy, chenille, blankets and carpets? They are thick and have a pile on their surface which holds dust easily. To remove it we need to gently brush the surface with a soft clothes-brush, in the direction of pile (fuzzy surface).



Fig. 9.1 Brushing

Thus **brushing** is for removing loose dirt from fabrics which have a pile on them suits and coats are also brushed.

'Airing' helps in drying and removing bad odours from fabrics. It is done preferably outdoors in the sun or in a well-ventilated room.

#### 9.1.2 Laundering

Laundering of clothes does not mean only washing of clothes. It consists of the following three steps:

Washing or dry-cleaning garments to remove dirt, perspiration and smell, e.g. your school uniform is washed and your woolen coats and jackets etc. are dry cleaned. **MODULE - 1** 

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- ii. Finishing the garments with stiffening agents like starch and gum, brightening or bleaching agents, drying them then ironing or pressing, folding and hanging garments, e.g. cotton dupattas and sarees are starched.
- iii. Storing the garments for a short or long time, e.g. when the winter season arrives you put away summer clothes and take out woolen shawls, sweaters, coats etc.

**Remember,** washing and dry cleaning are two different processes used for cleaning different types of clothes.

Washing	Dry-cleaning
Means removing dirt using soap/ detergent and water.	Means removing dirt using grease absorbents and solvents.
Colourfast fabrics can be easily washed.	Leather and fur, selected silks and woolens, zari and other costly fabrics are dry cleaned.

#### **INTEXT QUESTIONS 9.1**

I.	Meena has a basket full of soiled clothes. These include her silk blouse, zari saree,
	cotton shirt, cotton payjama and woolen shawl. Which of these would you
	recommend her to wash at home and which clothes should she send for dry
	cleaning? Why?

2. Summer season has set; you have to put away the winter clothes. What steps would you suggest to your friend to ensure that his clothes are clean and ready to store till the next season?

#### 9.2 GETTING READY TO LAUNDER CLOTHES AT HOME

Whenever you are ready to launder clothes at home remember that there are certain preparations required. What are these? Why are these preparations necessary? How and what we need to do, let us find out.

#### **9.2.1** Collection of clothes and supplies:

If you have a set place to keep your dirty clothes and supplies for washing, then this step is already taken care of. If not then collect all the dirty clothes and supplies needed for washing, at one place. It helps to conserve energy while washing. Can you explain how?

#### 9.2.2 Mending damaged garments

The old saying- 'a stitch in time saves nine' stands true in this case. If any garment has been damaged, its handling during washing may make the yarns come out from its torn areas and make the tear larger. It may become very difficult or impossible to mend them neatly. That is why it is advisable to mend (repair) all tears before the garments are washed.

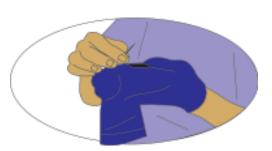


Fig. 9.2 Mending

#### **9.2.3 Sorting**

It refers to separating the clothes on the basis of (i) the type of fabric (ii) colour (iii) size and weight (iv) amount of dirt (v) utility of the article (vi) soaking time (vii) amount of detergent and bleach required as these are all different for different fabrics.

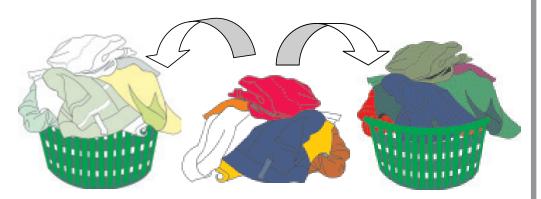


Fig. 9.3 Sorting

If you ignore this sorting, white fabrics may acquire colour stains if the colour of any other garment bleeds. For maintaining good hygiene dusters, kitchen towels and dish clothes, under garments, socks, need to be washed separately.

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#### 9.2.4 Read labels on the garments

Generally, all textiles and textile products carry labels which provide basic information about the product, for example, the contents of the product, its washing and ironing instructions, etc. These instructions are stamped at the beginning and end of the fabric roll or along its selvages. Reading these thoroughly will help you take better care of your fabrics. Following are some of the stitched and stamped labels on garments.



Fig. 9.4 Hanging and sewn tags on readymade garments



#### **ACTIVITY 9.1**

Collect and study 3-4 labels on textile items and fill the following table:

Item on which found	Information contained	Meaning
Cardigan	www.3sindustries.com MADE IN INDIA  80% ACRYLIC 20% WOOL  COLD WASH WASH DARK COLORS SEPARATELY RESIDENCE DO NOT BLEACH DO NOTWRING	Information about -contents -washing and drying

#### 9.3 CHECK STAINS AND REMOVE THEM



Fig. 9.5 some common stains

Ink, lipstick, nail polish, grease, paint tea and coffee, are some marks that may spoil our clothes at one time or the other. A **stain** is an unwanted mark of discolouration on a fabric caused due to contact with another substance. Generally, a stain requires special treatment for removal. If you have ever accidentally spilled tea on your clothes and washed it off immediately you must have realized that the stain gets removed quickly. Old stains take long and also a lot of effort to remove, often with poor results. Hence, the best way to get rid of stains is to remove them as soon as possible. Do not allow these to penetrate deep into the fabric or get dry and set.

**Remember** stains must be removed before washing as some of them may become permanent when exposed to chemicals in soaps or detergents, hot water and ironing.

Different types of stains require specific stain removing techniques and agents, depending on the type of fabric. Use of incorrect stain removing agent can spoil the fabric or its colour. Hence always try to identify the stain and select appropriate techniques and stain removing agent.

Most of the stains can be identified by their colour, smell and feel. Let's find out more about them.

- a) Colour: Every stain has a specific colour. For example, the colour of curry/pickle stain is yellow, a coffee/tea stain is brown, a grass stain is green and so on. Try and collect some more stains with colours.
- **b)** Smell: Most stains have a peculiar smell. Recall the smell of egg or paint or shoe polish. The stain on a fabric will have the same smell.
- c) Feel: Stains can also change the feel of the fabric and can thus be recognized on this basis. Have you ever observed that paint or sugar make the fabric hard and stiff to touch, whereas lipstick or shoe-polish make the fabric feel slippery.



Take an old white cotton cloth and cut out 4 (5x5 cm) pieces. Stain each piece with a different stain and keep it to dry. Now observe the colour, feel and smell of each stain. Stick each stain on a big paper and write its description.

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INTEXT QUESTIONS 9.2

1. State whether the following statements are true or false and justify with reasoning-

	Statement	True/False	Justification
(a)	Dirty clothes are harmful for personal hygiene		
(b)	'Laundering' is same as 'washing' clothes		
(c)	Airing of clothes is useful when they are not to be washed immediately.		
(d)	Stains should be removed from the fabrics before washing.		

#### 9.3.1 Classification of stains

Stains can be grouped on the basis of their origin, e.g., tea and coffee and many oils, vanaspati and ghee come from vegetable source. While removing these stains you can use more or less the same removing agents and method. Let us classify all stains on the basis of their origin.

	Category of stain	Stains
1.	Vegetable stains	Tea, coffee, fruit
2.	Grease stains	Butter, ghee, oil, curry, shoe polish, tar, oil paints
3.	Animal stains	Blood, milk, egg
4.	Mineral stains	Rust
5.	Miscellaneous stains	Dye, ink, mildew, grass, perspiration

#### 9.3.2 Techniques of stain removal

There are two methods of stain removal: (i) Sponging and (ii) Dipping. Let us learn how stains are removed by using these methods.

### **Sponging**

 Place an absorbent paper or fabric under the stain so that the right side of the stain faces the absorbing surface.
 Sponging should always be done on the wrong side of the stain.



Fig. 9.6 Sponging HOME SCIENCE

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- Take a soft cloth, dip it in the stain-remover and gently rub the stain starting from its outer corner moving inwards, towards the centre.
- Use light, circular strokes as these prevent the stain from spreading.
- The absorbent paper or fabric (commonly known as blotter) must be changed as soon as it starts showing the stain.

#### **Dipping**

Dipping is the method in which the entire fabric can be immersed in the stain removing agent. It is suitable if there are many stains or a large stain on the fabric. We can choose the stain removing re-agent depending upon the type of stain.



Fig. 9.7 Dipping

Some of the common reagents used for stain removal are borax powder, ammonia, hydrogen peroxide, oxalic acid and ready to use bleaches.

Type of stains and method of removal			
1. Vegetable stains	Tea, coffee, fruit, etc.	Tea, coffee, fruit, etc.	
Consideration for removal	Use alkaline reagents such as borax powder to remove stains as these are acidic in nature.		
Stains	White Cottons	Coloured Cotton	
Fresh tea/coffee, chocolate, fruit	Pour boiling water on the stain  Old  Dip the stained portion in glycerin. Or spread borax powder over stain and pour boiling water while holding the stained portion on the mouth of a mug or pan.	Soak in warm water and borax (2 cups of water + ½ teaspoon of borax)  Same as for white cottons	

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henna (Menhdi)	fresh	
	dip in warm milk for half an hour	same as for white cotton
	old	
	repeat the above two or three times	same as for white cotton

2. Animal stains	blood, milk, egg, etc.	
Consideration for removal	Avoid heat as these stains contain protein which gets fixed on heat treatment.	
Stains	white cottons coloured cotton	
blood, egg, meat	fresh	
	Wash with cold water and soap	same as for white cottons
	old soak in salt water (2 table spoons of salt + ½ bucket of water), or in diluted ammonia	same as for white cottons

3.Grease stains	Butter, ghee, oil, curry, shoe polish, tar, oil paints, etc.	
Consideration for removal	Use grease absorbents and solvents like chalk, talcum powder to remove greasy matter and then, remove the colouring matter.	
Stains	White Cottons Coloured Cotton	
butter, ghee, oil, curry	fresh wash with hot water, and soap. Dry on grass or shrub/plant in the sunlight  old	same as for white cottons, but leave it in shade
	Make a paste of soap and water and apply it on the stain. Leave it wet in the sunlight until it is removed	same as for white cottons but leave in shade

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paint, shoe polish, nail polish, lipstick, ball pen	fresh Scrape all the excess stain (a) Sponge gently with methylated spirit or kerosene (b) Sponge with turpentine	same as for white cottons
	old  Repeat the above method two or three times	same as for white cottons

4.Mineral stains	Rust and some medicines	
Consideration for removal	These stains contain metallic compounds and therefore, require treatment with mild acidic reagents followed by alkaline solutions to neutralise.	
Stains	white Cottons	coloured cotton
iron rust	fresh	
	rub lime juice and salt	same as for white cotton
	Old	
	apply dilute oxalic acid and neutralize with dilute borax solution	same as for white cotton

5. Miscellaneous stains	dye, ink, mildew, grass, perspiration, etc.	
Consideration for removal	Give specific treatment to each of these stains.	
Stains	white cottons	coloured cotton
grass	fresh	
	Wash with soap and water	same as for white cotton
	old	
	Sponge the stained portion with methylated spirit	same as for white same as for white

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betal leaf (paan)	fresh	
	apply a paste of onions and leave in the sunlight	same as for white cottons but leave in shade
	Old	
	repeat above method two or three times	same as for white cotton
ink	Fresh	
	wash with soap and cold water	same as for white cotton
	Old	
	(a) soak in sour butter milk (lassi) for half an hour	same as for white cotton except do not leave in sun, put it in shade
	(b) apply lime juice and salt and leave in the sun	
	(c) bleach the stain	

### 9.3.3 Precautions while removing stains

- As far as possible, remove the stain when it is still fresh.
- For delicate and/or coloured fabrics, first try out the chemical on a small portion of the fabric on the inner side of the seam or some portion of the garment which is not visible when worn. In case the fabric or its colour gets damaged, do not use the chemical.
- Use dilute and mild reagents as these are less harmful, though it may take a little longer to remove the stain.
- Rinse the fabric several times after the removal of the stain, or the reagent may damage the fabric on drying.



#### **ACTIVITY 9.3**

Shyna wore a very beautiful white silk suit for an interview. She was very cautious about protecting it all through. After the interview she came home and changed her clothes. While she was folding her suit she noticed a big curry stain on it. She was very

tired hence she did not do anything about it. Next morning she dusted talcum powder on the stain and left it for a little while. Then, she soaked the suit in a strong hot detergent solution for an hour. She hung the suit on the line until it dried. The stain was still there though a little less prominent. She treated the stained portion with hydrogen peroxide. The stain had disappeared. She rinsed the suit many times to remove all traces of the chemical and then dried it in shade.



List each step that Shyna followed to handle the stain and comment if it was correct or incorrect. Give reason for your answer.

S.No.	Steps	Correct	Wrong	Reason
1				
2				
3				



### **INTEXT QUESTIONS 9.3**

- 1. For removing each of the following stains, tick ( $\sqrt{ }$ ) the most appropriate option:
  - (i) Old tea stain on white cotton fabric:
    - (a) Use salt water
    - (b) Soak in glycerin
    - (c) Soak in lime juice
    - (d) Pour boiling water over borax
  - (ii) Old blood stains on coloured cotton fabric:
    - (a) Soak in salt water
    - (b) Soak in glycerin
    - (c) Soak in hot water
    - (d) Wash with soap and hot water

#### (iii) Lipstick stain:

- (a) Use of salt water
- (b) Soak in ammonia
- (c) Sponge with methylated spirit
- (d) Wash with hot water and soap

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#### (iv) Rust stain:

- (a) Use of salt water
- (b) Use lime juice and salt
- (c) Soak in methylated spirit
- (d) Wash with soap and cold water

#### (v) Nail polish stain on polyester fabric:

- (a) Sponge with methylated spirit
- (b) Soak in warm borax water
- (c) Rub lime juice and salt
- (d) Soak in warm water and soap

After removing stains, the next step is laundering. General laundering is dealt with here while specific washing of different fabrics has been dealt with later in the lesson.

#### 9.4 LAUNDERING

Laundering of clothes involves the following steps:

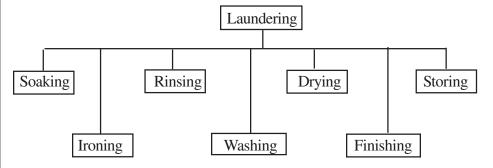


Fig. 9.8 Process of Laundering

#### 9.4.1 Soaking

Soaking of fabric in water loosens the non-greasy dust particles because of up and down movement of water molecules. Fabrics which become weak when wet must not be soaked for long. Do not soak too many clothes in one bucket. There must be a room for dirt to disentangle from the fabric. Fabrics must not be soaked for longer than half an hour otherwise loosened dust will resettle on the fabrics.



Fig. 9.9 Soaking

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#### 9.4.2 Washing

As said earlier, soaked clothes must be washed soon. The process of washing involves removal of dirt that has been loosened from fabrics by soaking. There are many ways to do this and the choice depends on the fabric being washed. You will now learn about these methods and their suitability to various types of fabrics.

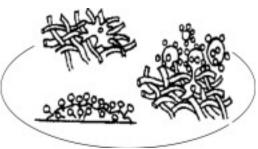


Fig. 9.10 Removal of Dirt by

#### **Methods of Washing**

- i. Friction method: For washing strong fabrics like cotton and linen this is the right method. You can apply friction in any of the following three ways.
  - **Hand friction:** This is the most common method of washing clothes. Rub dirty areas vigorously with the hand till the dirt is removed. It is suitable for cleaning very soiled small sized areas in the garment like cuffs, collar and bottom of the lower garments, handkerchief and lace.
  - Scrubbing brush: While cleaning kitchen dusters which are very soiled use a brush to remove dirt, grease and stains. Remember to place the fabric on a flat hard surface before scrubbing. Hard scrubbing can clean the fabric well but wears it out. Have you noticed



Fig. 9.11 Scrubbing

that if you use brush on shirt collars they get worn out? Therefore, scrubbing has to be used as per the nature of the fabric.

- **Beating stick:** While washing large clothes like bed sheets and towels use a wooden beating stick to provide friction. Remember that this is done only on a clean, flat and hard surface. Spread the fabric on the floor, apply soap and then beat it with the stick, constantly changing the surface of the fabric with the other hand.
- ii. Washing by kneading and squeezing: This method is for delicate fabrics like silk, wool, rayon, etc. This does not damage the fabric or change its shape because only gentle pressure is applied repeatedly with hands. While it is still in the soapy solution. While using this method dip the cloth in soap solution, take it out and squeeze



Fig. 9.12 Kneading and Squeezing

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gently and again dip in the soap. In between rub the dirty areas gently between two hands. Repeat till clean.

iii. Washing in machines: 'Washing machine' a labour saving device and provides all the friction required for cleaning the clothes. The washing time varies with the type of fabrics and amount of soiling. For example, wool fabrics take less time for cleaning than cottons. Washing machines available in the market



Fig. 9.13 Washing machine

are automatic, semi-automatic and non-automatic. The advantage of using automatic washing machine is that it has a spinner which can wring the clothes after washing to the extent that these are almost dry. This is especially useful while washing large and heavy articles like bedcovers, curtains, etc. The instructions about using the machine should be read carefully before using it. One should be careful while loading clothes for washing in a machine as the colour of some fabrics may bleed and spoil the other clothes in the machine.

#### **9.4.3 Rinsing**

Washed fabrics must be rinsed at least thrice or till they leave behind clear water. Why do we need to do that? If not rinsed well the contents of leftover detergent would harm the fabric.



#### 9.4.4 Finishing Agents

Fig. 9.14 Rinsing

Some of your clothes require the application of a finishing agent before they are spread for drying. A finishing agent is nothing but something which helps to brighten and/or stiffen the fabric and give it a brighter and fresher look. You know what starch and/or blue your white cotton clothes need. Both these are finishing agents for cottons. For silks, a different starch is used. It is called 'gum arabic'. Similarly, there are 'blues' and brightening agents to brighten you white clothes. You will know more about these in the chapter on fabric finishes.

#### **9.4.5 Drying**

Clothes should preferably be dried outside in fresh air and sun. Use a clothes line and pegs or clips to hold the clothes or a clean stain free metal rack. Hang or spread the clothes and place the rack in the sun or shade depending on the type of clothes you have washed. Remember to



Fig. 9.15 Drying

turn clothes inside out if they are coloured. If you are using a clothes line, see that you spread your clothes on it in such a way that it allows air to pass through them. Not only do the clothes dry up much faster this way, it is an environment friendly method. Sunlight also kills some germs. Hence, it is recommended that under garments and the clothes used as sanitary napkins must be sun dried.

#### 9.4.6 Ironing or steam pressing and folding

This process is applied on clothes to give them a smooth look. An electric or coal iron is used to carry out this job. There are various types of electric irons available in the market. Those with metal heating surface, Teflon (non-stick coated surface or steam irons) You can buy any of them and learn to use them from the instructions given along in the package.

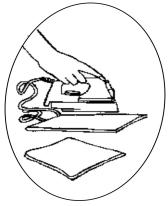


Fig. 9. 16 Ironing

#### **9.4.7 Storing**

Remember that clothes are stored back in a cupboard or box only after they are completely dry. Since you need to dampen the clothes for ironing, spread the clothes again in fresh air after ironing till they are completely dry. Put them back in the cupboard or box for final storage.

Moist clothes should not be stored because they will allow fungus and bacteria to grow on them.



#### **ACTIVITY 9.4**

One winter evening, Venkat wore a beautiful khadi kurta and went to a party. He enjoyed the party thoroughly. On the way back home it started raining suddenly and his kurta got damp. Since that was his favourite kurta, he immediately took it off, folded it and kept in the cupboard. When he took it out a few days later, he was shocked to see stains and a white powdery substance on the kurta. Besides, it smelt awful. Venkat was upset because he knew that his favourite kurta was totally spoilt.

# Discuss the problem with your friends or other learners during the personal contact programme and answer the following questions:

- 1. What do you think, went wrong with Venkat's kurta?
- 2. If you were in his situation, what would you have done to save your khadi kurta?

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#### 9.5 LAUNDERING OF SPECIFIC FABRICS

You have learnt the basics of laundering clothes. Is this information sufficient to launder all types of clothes you use at home? Let us now use this knowledge for laundering dirty clothes at home and see what more we need to know.

Collect all the dirty clothes in your house and see what you have. Do you remember the pre-preparation you need to do before washing and finishing these clothes? Let us see. Here is a pile of dirty clothes. What is your first step? Yes you are right it is **sorting** out the clothes. So you make the following piles after sorting:

- i) Cottons clothes consisting of white inner garments, payjama, salwar, petticoat, shirts, dusters from kitchen, bedsheets, pillow slips, and so on.
- ii) Coloured cottons like saree, blouse, salwar suits and dupattas.
- iii) Synthetics consisting of shirts, saree, blouse, dupatta and socks, etc.
- iv) Silk saree, blouse, shirt, etc.
- v) Woolen sweater, muffler and a shawl.

Separate very dirty clothes from less dirty ones, see if there are any repairs to be done and then see if there are any stains to be removed. If there is a care label attached, read it because it will tell you about the "do's" and "don'ts" while washing the item. You are now ready for the next step. Let us handle each pile you have separated, one by one.

#### **Laundering of cottons**

- i) Soaking: How and why will you soak your cotton items? Only white cottons are soaked to loosen the dirt settled or stuck to the fabric. They are soaked preferably in warm or hot water for half an hour depending on how dirty they are. Soak very dirty clothes separately. Yes, for two reasons, one because these are soaked for longer duration and in hot water and soap/detergent. Secondly, the loosened dirt from very dirty clothes will settle on the less dirty ones and make them dirtier. It is much easier to clean soaked fabrics. Do not put too many clothes together. Do you know why?
- ii) Washing: Dip all white clothes in soap/detergent solution. Apply extra soap on the heavily soiled areas and rub. Wash the light weight and lightly soiled cotton fabrics by using knead and squeeze method and big and heavy clothes using a stick. Rub areas which are very dirty with hands or with a brush. Do you remember why?
- **iii) Rinsing:** Why should we rinse clothes after washing? You have already learnt about it earlier in the lesson. If you do not remember go back and refer to it.
  - Cottons require application of a **whitening agent** in the last rinse. Why? What could you use for whitening? Yes you are right. You use blue which is available

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as powder or liquid. These days you get chemicals like optical brighteners in the market. These are colourless florescent dyes which turn pale fabrics white and make then look brighter temporarily.

**iv) Starching:** Putting starch on the white clothes is another procedure which must be carried out before they are spread for drying. It is done to give cottons a smooth and shining fresh look. Also, starched articles do not get dirty that easily.

2 table spoons of starch mixed in 5 liters of water is sufficient for starching 4-5 clothes

You can prepare your own starch using arrowroot.

- Dissolve arrowroot in a little cold water to prepare a thick batter. Add boiling hot
  water to this batter stirring all the time till it changes colour to transparent. Your
  starch is ready.
- Now add some of this starch paste that you have made in a basin of water and mix well. The strength of starch depends on the thickness of fabric and stiffness required. To make the fabric very stiff, dilute the full strength starch with 2-3 times water. But add 4-6 times water to get reasonably good stiffness.
- Before starching a garment turn it inside out, open and dip it in water for even spread of starch in it. Wring out the excess water and then dip it in the starch solution.
- Squeeze the fabric well and hang it in the sun to dry.

#### Note:

- The amount of stiffness is a matter of personal preference. Generally, we starch table linens like mats, tray cloths and napkins, heavily and inner wear garments lightly.
- ii) Do not starch under garments and those garments which are close fitting like a blouse, as the starch it may cut into your skin and make you uncomfortable.
- iii) If the articles have to be starched as well as blued, do it together in one solution, by adding blue to the diluted starch and water solution.

**Remember**: If the article gets over blued, dip it in plain water with a few drops of white vinegar or lime juice. The extra blue will get removed.

iv) **Drying:** After rinsing, starching and bluing the clothes are dried. Hang the clothes by their strongest part along the clothes line. Articles dried in the sun should be removed as soon as they dry. Over exposure to sunlight can weaken the fabric and cause yellowness.

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- v) Ironing: Cotton clothes are ironed best when they are evenly damp. But if they are starched they must dry completely before they are brought in. Sprinkle water evenly on them, role them tightly and leave them for some time. Now open them one by one and iron with a hot iron. Leave them for some time to dry before storing.
- vi) Storing: Remember, fungus grows quickly on cotton fabrics. Hence, while storing cottons make sure that they are completely dry.

#### **Laundering of coloured cottons**

- Do not soak cottons, especially when their colour bleeds.
- Use mild or neutral soap for washing.
- Wash using kneading and squeezing method.
- Rinse thoroughly and apply starch after turning clothes inside out in the last rinse.
- Dry in shade.
- Iron clothes after making then evenly damp.
- Store clothes when completely dry.



#### INTEXT QUESTIONS 9.4

Fill	in the blanks with the most appropriate word from those given in brackets:
i.	Soaking clothes for some time helps to dirt. (loosen, fix, settle).
ii.	Starching is done to give cotton clothes alook. (dull, crisp, shinning).
iii.	should not be starched. (table linen, saris, undergarments).
iv.	Coloured cotton articles should be dried in the (sun, shade, daylight).
v.	Long exposure to sunlight makes fabrics (bright, weak, dull).
vi.	should be used to wash very dirty white articles (hot water, boiling water, luke-warm).
vii.	When cotton articles are stored moist, they develop (dullness, brightness, mildew).
viii.	Fabric that is not properly rinsed becomes (weak, yellow, bright).
ix.	Clothes must be before washing. (blued, repaired, ironed).
х.	articles should not be soaked before washing. (coloured, white, dirty).

#### **Laundering of Synthetics**

Nylon, polyester and acrylic are synthetic fibers. Hence laundering synthetics is slightly different.

- Use luke-warm or cold water. Do not use hot water as synthetics will wrinkle very badly. Do you remember why? Yes, they soften and melt easily.
- Use any good soap, light pressure and light rubbing while washing.
- Rinse well in cold water to remove soap completely.
- To avoid wrinkles, do not squeeze tightly.
- Preferably dry on a hanger. It will help to maintain the original shape.
- When dry, if necessary, iron with a warm iron and not a hot one (Refer to ironing temperature chart given later in the lesson). Do you recall why?
- Store when completely dry.

**Remember:** While washing you can treat terrycot as synthetic fabrics.

#### Laundering of silks

- Use luke-warm or cold water, a good neutral soap, light pressure and light rubbing while washing. There is no need to soak silks.
- Rinse well in cold water to remove soap completely.
- Apply starch (gum arabic) and dry in shade.
- Pick up the clothes when evenly damp and iron with a warm iron. Do can you
  remember why? Yes you are right, silk gets stained if water is sprinkled on dry
  clothes.
- Store preferably on hangers when completely dry.

#### **Laundering of Woolen Clothes**

Woolens are more delicate than any of the fabrics used in the house. Wool has hairy surface which causes felting if handled roughly. Hence woolens need utmost care while washing.

Knitted woolen clothes lose shape when wet hence these need to be put back to shape after washing and need to be dried on a flat surface. Following steps should be followed for washing woolens:

- Take outline of the knitted dress on a paper before washing.
- Use mild alkaline soap/detergent dissolved in luke warm water all through.
- Use kneading and squeezing method to wash.

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Rinse thoroughly.

- Knitted items must be brought back into shape by putting them back on the paper draft taken earlier and dried on flat surface in shade.
- Steam press if necessary.
- Store them when completely dry in a dry place either on a hanger or on a flat surface and along with naphthalene balls or odonil tablets.

#### 9.6 HANDY HINTS FOR IRONING

Prepare an ironing table. Cover it with an old blanket and then with a white cotton sheet. Keep the height of the table comfortable so that you need not bend or stretch while ironing. Usually, an 80 cm high table is very comfortable.

- Keep some water handy. Spraying water on cotton and linen produces good results.
- Sleeves, collars, laces, etc., should be ironed first.
- Iron laces, buttons, hooks, embroidered and embossed clothes from the wrong side. The embroidery will stand out and look more beautiful. It will also not break or melt due to high temperature.
- Iron the fabric along the length as the yarns are stronger in this direction.

**Important**: Follow ironing instructions on the **labels**, if any. Otherwise follow the ironing temperature chart given below.

Temperature		Fibre
Warm	150°C	Wool, silk, polyester and nylon
Hot	180°C	Cotton and rayon
Extra hot	200°C	Cotton and linen



#### **INTEXT QUESTIONS 9.5**

1	700° 1 1 /1		C 4.1 C	1 4 4 4
1	Tick mark the	statements that are true.	Correct the tal	ice statements

1.	Neutral liquid soaps should be used for wasning sliks.	True/Faise
ii.	Cold water should be used while washing woolen articles.	True/False

#### **Care and Maintenance of Fabrics**

iii.	Wool articles should be soaked in water.	True/False
iv.	Wool articles can be cleaned with any detergent solution.	True/False
v.	Friction cannot be applied to clean woolen articles.	True/False
vi.	Synthetics are squeezed well before drying	True/False
vii.	Synthetics are ironed, if necessary, with a warm iron.	True/False

#### 1. Match the columns:

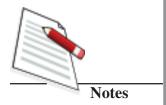
	Column A		Column B	Ans.
1	Wet silk or wool	a	Strength decreases	
2	Wet cotton	b	Neutral detergents	
3	Coloured cottons	c	Detergent powders/cake	
4	Silk	d	No effect on strength	
5	Wet viscose rayon	e	Strength increases	
6	White cotton	f	Liquid detergent	
		g	Alkaline detergent	

# **MODULE - 1**

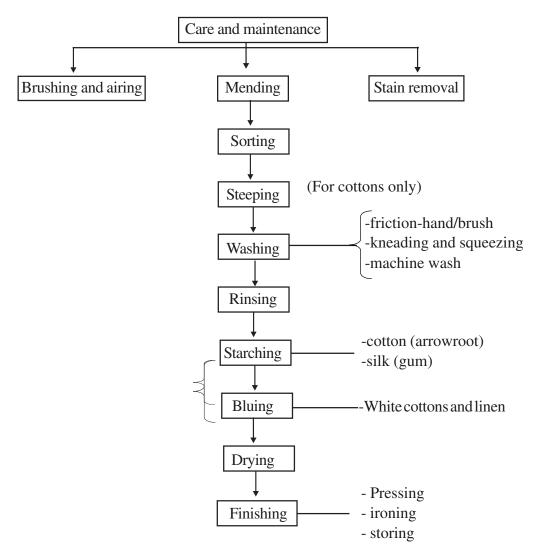
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# WHAT YOU HAVE LEARNT

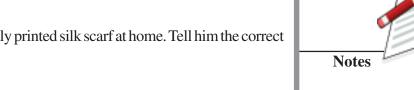


# TERMINAL QUESTIONS

- 1. Explain the meaning of the word 'laundering'.
- 2. What is a stain? How would you classify stains?
- 3. Describe the steps for removing the following stains from a cotton fabric. (i) Ghee (ii) Nail polish (iii) Red ink (iv) Grass (v) *Paan* (Betal leaf)
- 4. How will you wash a white cotton garment? Explain with reasons
- 5. How does the laundering of synthetics differ from laundering of cottons?

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- 6. Shelly bought a white woolen cardigan. After wearing it twice she washed it together with other clothes in a washing machine. Predict the effect on the cardigan and the reasons for it.
- 7. Rehman wants to wash his brightly printed silk scarf at home. Tell him the correct procedure.



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#### ANSWER TO INTEXT OUESTIONS

- 9.1 wash at home- cotton shirt, cotton payjama dry clean- silk blouse, zari saree, woolen shawl
  - 2. Refer text
- 9.2 1. (a) true, dirty clothes become medium for growth of bacteria or fungus (b) false, laundering consists of washing or dry cleaning, finishing and storing
  - (c) true, airing helps in drying and removing bad odours.
  - (d) true, stains may become permanent when exposed to chemicals in soaps or detergents
- 9.3 1. (i) d (ii) a (iii) c (iv) b (v) d
- (i) loosen (ii) shining (iii) under garments (iv) shade (v) weak (vi) hot water (vii) mildew (viii) yellow (ix) mended (x) coloured.
- 9.5 1. (i) True (ii) False – Luke warm water should be used for washing woolen articles (iii) True (iv) False - woolen articles can be cleaned with mild alkaline detergent solution (v) True (vi) False – synthetics should not be squeezed and dried on a hanger. (vii) True

2.

	Column A		Column B	Ans.
1	Wet silk or wool	a	Strength decreases	2
2	Wet cotton	b	Neutral detergents	5
3	Coloured cottons	c	Detergent powders/cake	6
4	Silk	d	No effect on strength	3
5	Wet viscose rayon	e	Strength increases	1
6	White cotton	f	Liquid detergent	4
		g	Alkaline detergent	