

Lesson Number	Title of the Lesson	Skills	Activity
27	Care and Maintenance of clothes	Creative thinking Decision Making	Draw symbols depicting care of clothes and explain their meaning
		Problem solving Critical Thinking	

## Summary

Clothes get dirty with use. The dirty look can be due to the grease, dirt, perspiration stains etc. The clothes start looking dull and non-appealing when dirty. The stains of dirt, grease, perspiration get fixed on the fabric and hence must be removed timely. Clothes must be laundered regularly to make them clean. Laundering includes solvents/grease absorbents. Detergents are used to remove grime and grease while laundering. Products other than cleansers are also required to give good finish to the laundered fabric. These are called **Auxiliaries**. White cottons and linens lose whiteness and become yellow after a few washes. Hence Blue is applied to counteract the yellowness of the fabric. Blue is a chemical used as a fabric whitener. Optical brighteners are also used to give brightness to white clothes. They are colorless dyes. They are fluorescent compounds which give very bright colors when applied to the fabric and dried in the sun. Bleaching agents are also used for whitening a fabric. Their action can be oxidizing or reducing. Sometimes the clothes get stained. Stains are marks other than dirt for e.g. pickle mark, coffee, grass, blood etc. The stain must be first identified before choosing the process of stain removal. Precautions must be taken while removing stains so that the fabric does not get damaged. Properties of fabrics must be kept in mind while laundering them. Cottons can be rubbed but rayons must be treated gently. Clothes must be stored with care after washing so that they do not get damaged or attacked by moths. Special care must be taken while storing expensive clothes and fabrics. When fabrics and clothes are well looked after and stored properly, they last long and retain their sheen.

## Principal Points

### Steps In Laundering



## Build your understanding

### 1. Difference between Soaps and Syndets

Soap	Syndet
<ul style="list-style-type: none"> <li>Wets the fabric readily</li> </ul>	<ul style="list-style-type: none"> <li>Wets the fabric more readily than soap</li> </ul>
<ul style="list-style-type: none"> <li>Does not dissolve well in cold water</li> </ul>	<ul style="list-style-type: none"> <li>Dissolves well in cold water</li> </ul>
<ul style="list-style-type: none"> <li>Foams well with soft water</li> </ul>	<ul style="list-style-type: none"> <li>Foams well even with hard water</li> </ul>
<ul style="list-style-type: none"> <li>Does not have a distinct smell</li> </ul>	<ul style="list-style-type: none"> <li>Very sweet smelling</li> </ul>
<ul style="list-style-type: none"> <li>Bluing required after washing</li> </ul>	<ul style="list-style-type: none"> <li>No bluing required, contains optical whiteners</li> </ul>

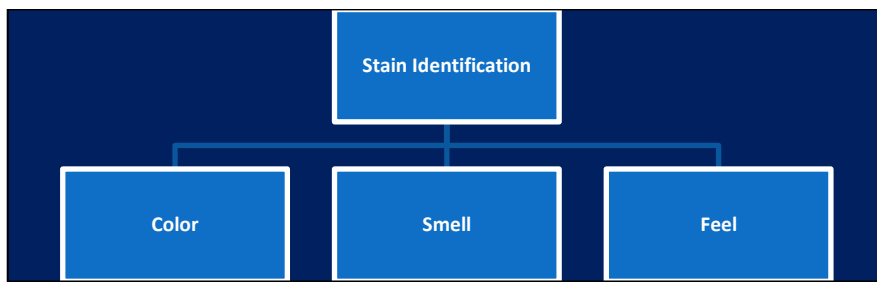
• Clothes become dull after repeated washing	• Does not leave any deposit
• Leads to deposits on the cloth's surface	• Expensive but economical in the long run
• Inexpensive	

## 2. Auxiliaries used in Laundering

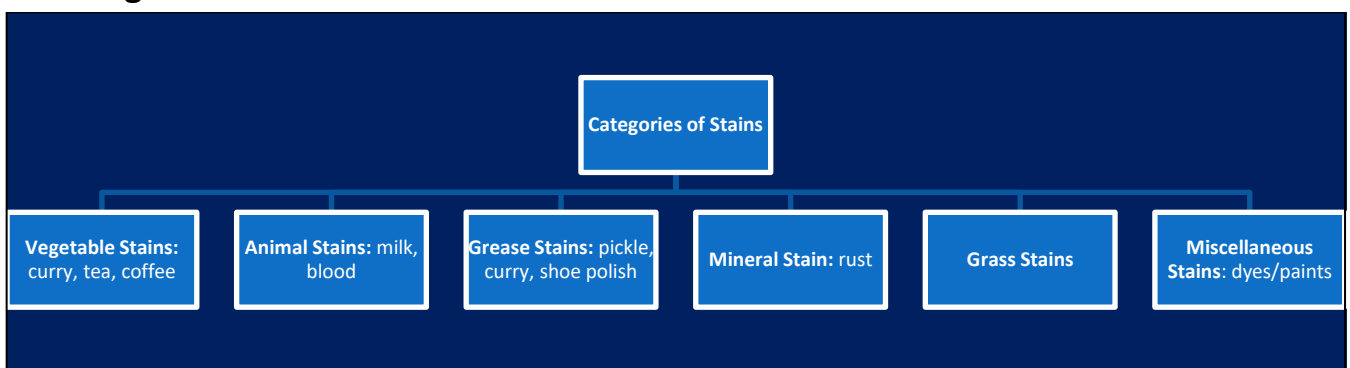
Blues	Optical Brightening Agents	Chemical Bleaches
<ul style="list-style-type: none"> <li>Sources- chemicals, vegetables, minerals</li> </ul>	<ul style="list-style-type: none"> <li>OBA/FDA</li> </ul>	<ul style="list-style-type: none"> <li>2 Types-oxidizing and reducing</li> </ul>
<ul style="list-style-type: none"> <li>Application- Before the last rinse</li> </ul>	<ul style="list-style-type: none"> <li>Absorb light from UV regions and reflects in the visible region</li> </ul>	<ul style="list-style-type: none"> <li>E.g. of oxidizing bleaches: Javelle water</li> <li>KMnO<sub>4</sub></li> <li>Oxalic acid</li> <li>H<sub>2</sub>O<sub>2</sub></li> <li>E.g. of reducing bleaches</li> <li>Sodium HydroSulphite</li> <li>Sodium bi-Sulphite</li> </ul>
<ul style="list-style-type: none"> <li>No chemical action</li> </ul>	<ul style="list-style-type: none"> <li>No chemical action</li> </ul>	<ul style="list-style-type: none"> <li>Bleaches can be used on cotton, rayon, linen</li> </ul>
<ul style="list-style-type: none"> <li>Safe on clothes</li> </ul>	<ul style="list-style-type: none"> <li>Safe on clothes</li> </ul>	<ul style="list-style-type: none"> <li>Chemical action</li> </ul>
		<ul style="list-style-type: none"> <li>Overuse can damage clothes</li> </ul>

## What is Important to Know

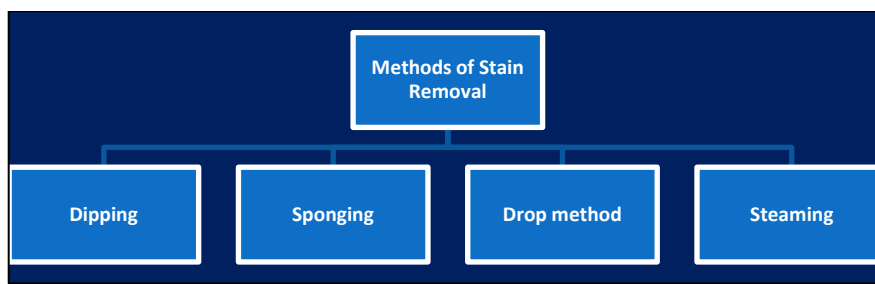
### 1. Stain Identification



### 2. Categories of Stains



### 3. Methods of Stain Removal



#### 4. Process of Stain Removal

Stains	White Cotton	Colored Cotton	Silk and Woolens	Synthetic Fibers
Tea/Coffee	Fresh- Pour boiling water on the stain 2 cups of water +1/2 cup Borax Old- Dip the stain in glycerin	Fresh- Soak in warm water and Borax Old- Same as for whites	Fresh- Same as colored cottons Old- Pour Hydrogen Peroxide solution (H <sub>2</sub> O <sub>2</sub> ) and gently rub	Fresh- Same as for colored cottons Old- Dip in warm water and add a few drops of Sodium Perborate
Blood/Egg/Meat	Fresh- Wash with cold water and Soap Old- Wash with salt water	Fresh- Same as white cotton Old- Same as White cotton	Fresh- Same as white cotton Old- Same as White cotton	Fresh- Same as white cotton Old- Same as White cotton
Butter/Ghee/Oil/Curry	Fresh- Wash with hot water and Soap Old- Make a paste of soap with water, apply on the stain, leave in sunlight	Fresh- Same as white cotton Old- Same as White cotton but leave in shade not in sunlight	Fresh- Wash with water and Soap Old- Same as for white cotton but use a mild soap	Same as for silk and woolens
Paint/Shoe Polish/Nail polish/lipstick/ball pen	Fresh- Scrape out all excess stain, rub gently with spirit/kerosene Old- Same as above but repeat method 2-3 times	Same as White cotton	Same as White cotton	Same as White cotton
Grass	Fresh- Wash with soap and water Old- Dip the stained portion in methylated spirit	Same as White cotton	Same as White cotton	Same as White cotton
Betel Leaf	Fresh- Apply a paste of onion and leave in sunlight Old- Same as above but repeat 2-3 times	Same as white but leave in shade	Same as White cotton	Same as White cotton

Mehndi	Fresh- Dip in warm milk for half an hour Old- same as above but repeat 2-3 times	Same as White cotton	Same as White cotton	Same as White cotton
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## 5. Precautions while Removing Stains

- Remove stain when fresh
- Identify the origin of the fabric then apply the stain remover
- Identify the nature of the stain.
- For unknown stain start from simple to complex process
- Choose the chemicals which do not damage the fabric
- For delicate fabrics do the spot test
- Repeated use of mild agents is better than one-time use of strong reagent
- Wash all fabrics with detergents to remove the traces of chemicals
- Dry fabrics in the sun

## 6. Methods of Washing

Friction Washing	Suction Washing	Kneading and Squeezing	Machine Washing
By hand	Suction washer	By hand	Labor saving devices for all types of fabrics
By brush	Towels	Delicate fabrics	
By stick			
Cotton clothes			

## 7. Storage of Textiles

- Empty out pockets and brush the dust
- Sun and air the garments
- Wash and dry clean before storing
- Do not store damp clothes
- Use insect repellent like tobacco, camphor, dried neem leaves, mothballs, sandalwood, dry eucalyptus leaves.

## Did you know

### 1. Methods of Washing and Drying Different Fabrics

Fabric	Soaking	Washing	Rinsing	Stiffening	Bluing	Drying
Silk	Do not soak Use mild liquid soap	Use Lukewarm water Use light pressure	Rinse out all soap in cold running water Do not squeeze	Add gum water	-	Roll in hand towel to remove excess water and iron at

			Add a few drops of white vinegar in the last rinse for luster			once Large articles to be dried in the shade and ironed before they are completely dry
Woolens	Do not soak	Use Lukewarm water Use light pressure	Rinse in cold running water Do not squeeze hard	-	-	Put the article on a paper on a flat surface in the original shape Dry in shade Steam press
Synthetic	Do not soak	Use cold water Use light pressure	Rinse in cold running water Do not squeeze hard	-	-	Dry on a hanger Iron only if necessary
Cotton	Use sufficient water for soaking	Use warm to hot water for white clothes Cold for colored Use friction method For embroidered cotton wrap a cloth around the brush and then rub	Rinse thoroughly in cold running water	Use starch	Done only for white articles	Hang the clothes by the strongest point Whites to be dried in the sun Colored- in shade

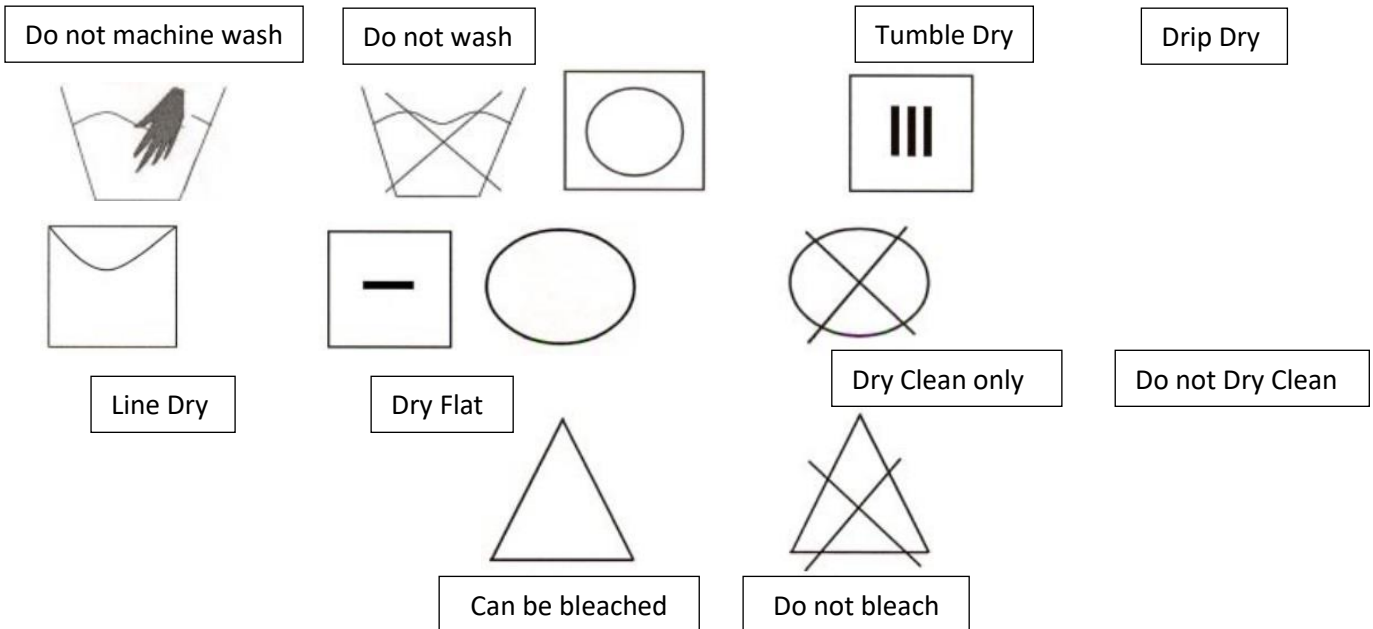
## 2. Dry Cleaning

- No washing required
- Dirt removed by solvents and grease absorbents
- No adverse effects on fabric and colour
- Material does not shrink or lose shape

- **Common grease absorbents are:** French chalk, fuller's earth, moong powder, besan, talcum powder, magnesium carbonate
- **Common grease solvents are:** White petrol, benzene, carbon tetrachloride, methylated spirit

## Extend your Horizon

### Care Symbols



### Evaluate yourself

- Why is friction washing not recommended for delicate fabrics?
- Why should clothes be dried and cooled before storing?

### Maximize your marks:

- Attempt all the exercises given in the lesson
- What advantages do syndets have over soaps?