Without the ability to measure, it would be difficult for scientists to conduct experiments or form theories. Not only is measurement important in science and the chemical industry, it is also essential in farming, engineering, construction, manufacturing, commerce, and numerous other occupations and activities. Measurements play an important role in daily life because they are useful to do basic tasks, such as take a child's temperature with a thermometer, make time estimations, measure out medicine and find weights, areas and volumes of different materials or substances and to decide how much fabric to buy for a particular dress. When it comes to sewing it is important that you take accurate measurements in order to ensure the final stitched garment fits properly. Not only will an accurate measurement and proper cutting, help to ensure a proper fit, but it'll also help you to create professionally good looking and well finished garments.
After studying this lesson, you will be able to:

• explain the importance of accurate measurements and cutting in tailoring;

• identify and use appropriate measuring tools in tailoring;

• identify and use appropriate cutting tools in tailoring;

• list the types of measurement required for different garments;

• adopt the correct procedure of taking measurements;

• design a measurement recording chart; and

• observe the prescribed precautions in measuring and cutting for tailoring

7.1 IMPORTANT OF ACCURATE MEASUREMENT AND CUTTING IN TAILORING

Taking measurements is one of the most important steps of making a dress, and a good tailor pays attention to every small detail. There are multiple and diverse reasons why it is important for tailors to take accurate body measurements and observe correct cutting procedures. Deviations of even a few centimeters from a customer's size can have a direct impact on how good the person looks in the tailored dress. For example, a too long dress can make a woman look like a child wearing adult clothes, while a too tight one can be uncomfortable or even make it look like a borrowed dress. Taking accurate measurements does not only affect style, but also the appearance of the garment. For example a big man wearing a small jacket - this will restrict the movements
the person or even tear the back or cause the buttons to pop off. Accurate body measurements are important for the tailor as well, as the fabric doesn't come for free. Each suit or dress requires a certain amount of material and if tailors use too much, then the cost of the dress will be more. Besides once you make a cut the fabric/material you cannot undo it. And if it's not correct, the material will be ruined forever.

7.2 MEASUREMENT TOOLS
In order to save yourself time and money, proper sewing measuring tools are essential. Each type of measurement requires a different type of tool to obtain an accurate measurement. Sewing measuring tools are essential for pattern alterations and body measurements to ensure a good garment fit. Measurements should be taken often and accurately. There are some key measuring tools that should be part of every sewing box. Come let us study them.

1. Tape measure

A flexible sewing tape measure usually measures about 60 inches long and 5/8 inches wide. It is generally reversible with inches on one side and centimeters on the other to help take a more accurate measurement. The flexible material will not stretch, and
can easily be rolled up when not in use. Because of its flexibility, it is a must-have tool for taking accurate body measurements. It is used to measure around measurements easily.

2. Yardstick

A yardstick has both inches and centimeters and comes in handy to measure the grainline of the fabric when laying out the pattern. This tool comes in handy for measuring the amount of fabric you need. You see them being used at the fabric stores all the time when you go to purchase fabrics. A yardstick made of hardwood or metal is used for marking hemlines and checking grain lines.

![Fig. 7.2 Yardsticks](image)

3. Ruler

Rulers usually come in 12” or 18” lengths and are used for general markings such as straight lines. It's a great tool to have for a number of activities.

![Fig. 7.3 Ruler](image)
4. See-through ruler

A see-through ruler usually measures about 12" or 18" and allows you to see your previous markings. It is great for marking straight edges and parallel lines, buttonholes, tucks and pleats. It can also be used to check the grainline of the fabric.

![Fig. 7.4 See-through Ruler](image)

5. Seam gauge

A seam gauge is a small ruler about 6" long with a sliding marker. It has inches on one edge and centimeters on the other edge. It is a great tool to help make accurate measurements for seam allowances, hems, pleats, buttonholes, and for various alterations.

![Fig. 7.5 Seam gauge](image)

6. See-through T-Square

A See-through T-square is great for locating cross grains, altering patterns and squaring off straight edges.

![Fig. 7.6 T-square](image)
7. Curve Runner

The curve runner is great for measuring curved areas on the fabric. It is see through, which makes it super easy to measure accurately.

8. Ring Ruler

A ring ruler helps you to measure out circles of various sizes. It's a great tool to have on hand if making round pillows and other home decor projects.

7.3 Cutting Tools

Just what do we mean by cutting tools? We are referring to scissors, shears, clippers, rotary cutting tools and seam rippers. These cutting tools should be kept in good working order by periodic sharpening. Ewing cutting tools are very important to moving the sewing project along to completion. Sewing cutting
tools should be of the best quality that you can afford. The best quality cutting tools are made of high grade stainless steel.

1. Bent handled shears

Bent handed dressmaker shears are good for cutting the actual pattern/fabric together. The shape of the blade, especially the lower blade allows the fabric to lay flat on the cutting surface. The size should be at least seven or eight inches. Heavy duty stainless steel dressmaker shears should be used for cutting heavy fabrics and a lighter weight pair of these shears can be used to cut lighter weight fabrics

2. Pinking shears

Pinking shears, not to be confused with dressmaker shears, have serrated or jagged edges that cut a zigzag pattern on the fabric.
These shears are used to finish seams and to finish raw edges, and to create decorative edges. The edge that they produce is resistant to raveling.

3. Scissors

Sewing scissors should consist of those for cutting fabric and those for cutting paper such as pattern paper and cutting the actual pattern that is going to be used away from the pattern sheet. Scissors for cutting fabric should never be used for cutting paper, because this can dull these scissors. Sewing scissors are also referred to as trimming scissors, because they are used to trim and clip seams and facings and also to trim away excess fabric. These scissors generally have about a six inch blade.

4. Seam ripper

Seam rippers are specifically designed for ripping out stitches from seams, either as a result of an error or during alterations. They should be used carefully to prevent damage to the fabric.
5. Thread clippers

![Thread Clippers](image1)

Thread clippers are a handy little spring loaded cutting tool that allows for the snipping of threads. These clippers are specifically used to snip threads and are not designed to do anything but snip threads, they are not designed to cut fabric and feel very awkward if one tries to use them for cutting fabric.

6. Paper Scissors

![Paper Scissors](image2)

As dressmaker's shears shouldn't be used for cutting paper, its best practice to have an ordinary pair of scissors in your dressmaking kit so you're able to cut out patterns as and when you need to.
7. Rotary Cutter

A rotary cutter is a tool that can save you hours of time. As the blade rotates, it makes it easy to cut layers of fabric simultaneously, while giving you a clean cutting edge.

**INTEXT QUESTIONS 7.1**

Fill in the blanks

1. Sewing scissors are also referred to as _________ scissors
2. A seam gauge is a small ruler about 6? long with a _________.
3. Pinking shears, have _________ or jagged edges.
4. The flexible material of the _________ _________ will not stretch, and can easily be rolled up when not in use.
5. Thread clippers are a handy little _________ _________ cutting tool that allows for the snipping of threads.

**7.4 TYPES OF MEASUREMENTS**

There are several parts of the body to be measured. These are taken in:

- Horizontal measurement
- Vertical measurement
- Circumferential measurement
**NOTE:**

**Girth Measurements** - taken horizontally and most of them go around the entire circumference of the body.

**Vertical measurements** - are taken from the top of the body to the base.

**Circumferential measurements** - are taken around the body.

**Length Measurements** - are taken vertically and their primary purpose is to measure the distance between reference points of the body.

**Horizontal measurements** - are taken from the left of the body to the right.

---

**Procedure in Taking Body Measurements:**

There are several parts of the body to be measured. These measurements are as follows:

**Shoulder** - Measurement is taken from the tip of the left shoulder to the tip of the right shoulder, arching slightly to cover the cervical prominence.

**Bust Point Width/Apex Distance** - Measurement is taken across from the tip of the left bust point to the tip of the right bust.

**Bust** - Measurement is taken around the bust with the tape measure running on the same level in front, at the back and on the sides.

**Waist** - Measurement is taken around the smallest part of the torso.
**First Hip** - Measurement is taken around the hip level where the stomach is fullest.

**Second Hip** - Measurement is taken around the hip level where the buttocks are fullest. Circumferential Measurements

**Armhole** - Measurement is taken around the armhole.

**Arm girth** - Measurement is taken around the arm.

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**Fig. 7.14 Procedure of Measurement**
**Measurement And Cutting For Tailoring**

**Figure Back** - Measurement is taken from the center of the back shoulder over the blade down to its base.

**Figure Front** - Measurement taken from the neck point passing over the bust down to the waistline level

**Bust point Height/Apex Height** - Measurement is taken from the neck point down to the highest

**Length of Sleeve** - Measurement is taken from the shoulder point down to the desired length in the arms

**Length of Skirt** - Measurement is taken from the waist down to the desired length of skirt

**Pants Length** - Measurement is taken from the waist down to the desired length of pants

Remember that accurate body measurements help produce correct patterns and well-fitted garments. It should not be tight or loose.

### 7.5 SEQUENCE OF TAKING MEASUREMENTS AND RECORDING

It is important that we take the measurements in a sequence. This ensures a smooth movement during the whole procedure of taking measurements. This also makes recording easy and more easy to follow. Take the body measurements in this order:

First the vertical measurements -

1. Body length
2. Waist length
3. Shoulder to shoulder length
4. Armlength
then the horizontal measurements -
1. Bust round
2. Waist round
3. Hip round
4. Neck depth
5. Arm round.

Record the measurements immediately after taking them. Do not depend on your memory. One can always design a Measurement recording chart and record the measurements at once to avoid errors. A sample chart has been given below for you.

**MEASUREMENT CHART**

<table>
<thead>
<tr>
<th>Parts of the body</th>
<th>Measurements (Inches/Cms.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bodice</strong></td>
<td></td>
</tr>
<tr>
<td>1. Neck</td>
<td></td>
</tr>
<tr>
<td>2. Shoulder</td>
<td></td>
</tr>
<tr>
<td>3. Shoulder width/back width</td>
<td></td>
</tr>
<tr>
<td>4. High Chest Measurement</td>
<td></td>
</tr>
<tr>
<td>5. Bust</td>
<td></td>
</tr>
<tr>
<td>6. Waist</td>
<td></td>
</tr>
<tr>
<td>7. High Hip</td>
<td></td>
</tr>
<tr>
<td>8. Hip</td>
<td></td>
</tr>
<tr>
<td>9. Armscye/Armhole</td>
<td></td>
</tr>
<tr>
<td>10. Front waist length</td>
<td></td>
</tr>
<tr>
<td>11. Shoulder to bust</td>
<td></td>
</tr>
</tbody>
</table>
12. Distance between bust points
13. Back waist length
14. Front neck depth
15. Back neck depth

**Sleeve Measurements**

16. Upper arm
17. Lower arm
18. Elbow
19. Wrist
20. Sleeve length

**Skirt Measurements**

21. Waist to hip
22. Skirt length

**Pant Measurements**

23. Pant length
24. Inseam
25. Leg circumference
   a. Thigh
   b. Knee
   c. Calf
   d. Ankle
26. Crotch depth
27. Crotch length
7.6 PRECAUTIONS FOR TAKING BODY MEASUREMENTS

Some general guidelines for taking body measurements

- The person being measured should stand straight, on both feet, feet about 15 cms apart.

- It is better to wear fitted clothes when measuring. Avoid baggy clothes. These can effect the measurements.

- It will be good if you can wear lingerie you intend to wear with the final garment, while taking the measurement. This is especially important for perfectly fitted clothes like a tight gown, fitted blouse/corset.

- If you plan to wear heels and you are making a long gown, do not forget to wear the heels or a similar one when taking measurement

- Choose a good and accurate tape measure. Keep it level (parallel to the ground) all the time you are taking horizontal measures

- Adhere to the old saying - Measure twice and cut once

- If you can get another person to take your measurements, it is the best

- The person taking the measurement should be on the right side of the person

- All circumference measurements should be taken with tape measure parallel to the floor and with enough slack in tape to just slide 2 fingers under tape.
Measurement And Cutting For Tailoring

7.7 PRECAUTIONS FOR CUTTING

Cutting is separating of the garment into its components and in a general form, it is the production process of separating (sectioning, curving, severing) a spread into garment parts. Factors affect the cutting process for fabrics are as follows:-

- Nature of fabric (grainline, shade, twill etc.)
- The thickness of fabric.
- Design characteristics of the finished garment.

Before you actually start cutting into your fabric, make sure all of your pattern pieces are laid out correctly and you've taken into account that some pieces may need to be cut out twice, or even four times like pockets and waistbands etc. Make sure your pins and scissors are sharp. Dull pins can be damaging on delicate fabrics, and sharp scissors make a big difference in the accuracy of your cutting.

The most common scissors used for cutting fabric are dressmakers shears, which have a bent handle. This makes it easier to keep the fabric lying flat while you cut. Use your scissors only for fabric to keep them nice and sharp.

The objective of cutting is to separate fabric parts as replicas of the pieces in the marker plan. To achieve this objective, requirements that must be fulfilled are:

- Precision of cut
- Clean edges
- Consistent cutting
Precautions to be taken while cutting

- Use sharp shears with long blades and use long smooth strokes while cutting instead of smaller ones.
- Cut accurately on the pattern cutting line.
- Hold the pattern flat with one hand as you cut with the other. Do not lift fabric off the table or cutting surface while cutting.
- Cut out notches. These help in aligning the pattern pieces during assembling.

Some tips on caring for your sewing fabric cutting tools

- Always keep your cutting tools clean. Wipe each of them with a clean dry soft cloth if you feel it is dirty or has lint on it.
- Keep them in their casing when not in use. These tools are really sharp if they are any good and can harm kids and pets if not stored safely.
- Oil them to prevent rust. I use my sewing machine oil for this. Just a single drop on the screws are all that is needed. Do not forget to wipe off excess thoroughly off the tools with a dry cloth.
- Sharpen them professionally or yourself if you know how to if you feel some dullness in the blades. Dull blades can damage the fabric.

INTEXT QUESTIONS 7.2

Explain the following in one sentence only:

1. Girth Measurements
2. Vertical measurements
3. Circumferential measurements
4. Horizontal measurements
5. Length measurements

WHAT HAVE YOU LEARNT

- The importance of accurate measurements and cutting in tailoring;
- Measuring tools in tailoring;
- Cutting tools in tailoring;
- The types of measurement required for different garments;
- The correct procedure of taking measurements;
- Designing a measurement recording chart
- Precautions to be observed in measuring and cutting for tailoring

TERMINAL QUESTIONS

1. Why is it important to take accurate measurements in tailoring?
2. List and briefly and describe the tools used for measuring in tailoring.
3. List and briefly and describe the tools used for cutting in tailoring.
4. Name the different types of measurements required for garment making.
5. What precautions will you observe while taking measurements?

6. How will you take care of your cutting tools?

### ANSWERS TO INTEXT QUESTIONS

**7.1.**

1. Trimming
2. Sliding, marker
3. Serrated
4. Measuring tape
5. Spring, loaded

**7.2.**

1. Girth Measurements - taken horizontally and most of them go around the entire circumference of the body
2. Vertical measurements - are taken from the top of the body to the base.
3. Circumferential measurements - are taken around the body
4. Horizontal measurements - are taken from the left of the body to the right
5. Length Measurements - are taken vertically and their primary purpose is to measure the distance between reference points of the body