



Parts of a Machine & Sewing Equipment

Identify sewing machine parts and their function, safety, and maintenance. Members will identify sewing equipment and explain how to use them.

Time

45 minutes total

Activity 1 Materials

- Scavenger Hunt worksheet for each student
- Thread
- Seam gauge
- Scissors
- Sewing machine
- Seam ripper
- Tailor's chalk
- Serger
- Scraps
- Shears
- Bobbins
- Tracing wheel and paper
- Pins
- Pinking
 - Shears
- Rotary cutter, ruler, and mat
- Tools and feet
- Buttons
- Tape measure
- Numbered sticky notes #1-#19

Activity 2 Materials

- Machine Parts Note Guide
- Sewing Machine

Space Required

Room with table space for each youth and a sewing machine. Additional tables or space to lay out sewing equipment.



Before the Meeting

Put sewing equipment throughout the room for the scavenger hunt. Set up a sewing machine in good working condition for members. Easiest with one machine per member. Youth will collect their handouts after the introduction.



Background

In order to construct clothing or alter ready to wear purchases, you need to know what sewing equipment is available and their purpose. In this activity, members will work toward finding the most commonly used equipment. Beyond these supplies, there are more equipment available with all different purposes. While sewing can happen with a simple needle and thread, these supplies will help the process go smoother. Sewing professionals use these equipment to create garments from basic pajamas to extravagant wool suits. With knowledge and application, you can too!



Activity 1 Instructions (25 minutes)

1. **Scavenger Hunt:** there will be 19 pieces of equipment around the room with numbers attached. The members will go around the room and identify the equipment. Their worksheet has a list of the equipment on the back.
2. **Compare:** The members will pair up with a partner and compare answers.
3. **Demonstration:** The leader will demonstrate and explain how to use the equipment on the list.
 - a. What is the equipment used for?
 - b. What are safety precautions for each piece of equipment?
 - c. Where can you find all the small equipment provided by the school?
 - d. What is the process of getting the sewing machine ready each day?
 - e. Where will you find the ironing boards and irons?
 - f. Where will you find the rotary mats, cutters, and rulers? What do you do with them when you are done?
5. Discuss reflect and apply questions.



Reflect and Apply Questions

1. Review the equipment and the uses.
2. Have each student stand by a piece of equipment and tell the class what the name of that equipment is and what is for. When everyone has had a turn, have the members put the equipment away.

Activity 2 Instructions (20 minutes)

1. The leader will explain the parts of the sewing machine. The members will be able to move and touch the parts.
2. Members will fill in the blanks on page one of the sample packet while sitting in front of the sewing machine.
3. Select Different Stitches. Points to Discuss--
 - How to select different stitches, straight, zigzag, decorative
 - How to lengthen or widen a stitch
 - How to change needle position
 - Partner Time.
4. Members need to pair up and quiz each other on the parts and functions of the sewing machine.

Reflect and Apply Questions

1. If I switch the stitch width to 5 what will happen to my stitch?
2. What happens when my stitch length is on 5?
3. If I want the sewing machine to make a standard straight stitch what number does my stitch length need to be on?
4. Always turn the hand wheel _____ you.

Other Related Resources:

Sewing Equipment Scavenger Hunt & Sewing Machine and Equipment Worksheet

References

Adapted from: Utah Education Network



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Scavenger Hunt

- Thread
- Seam Gauge
- Scissors
- Seam Ripper
- Tailor's Chalk
- Scraps
- Serger
- Shears
- Bobbins
- Tracing Wheel and Paper
- Pins
- Pinking Shears
- Rotary Cutter
- Rotary Mat
- Tools and Presser Feet
- Rotary Ruler
- Iron
- Tape Measure



Activity 1 Scavenger Hunt Can You Name the Sewing Equipment?

Directions: Roam around the room and write the name of all of the equipment. Do not leave anything blank. You do not have to start with number 1.

- | | |
|-----------|-----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |
| 7. _____ | 8. _____ |
| 9. _____ | 10. _____ |
| 11. _____ | 12. _____ |
| 13. _____ | 14. _____ |
| 15. _____ | 16. _____ |
| 17. _____ | 18. _____ |
| 19. _____ | |



Activity 2 Sewing Machine & Equipment

Directions: Describe the functions of the following basic parts of a sewing machine.

SEWING MACHINE PARTS:

- Needle stitch plate: _____
- Feed dog system: _____
- Presser foot: _____
- Bobbin case: _____
- Spool pin: _____
- Upper thread tension: _____
- Presser foot lifter: _____
- Thread take-up lever: _____
- Foot pedal: _____
- Hand wheel: (which way do you turn it?) _____
- The flat side of the machine needle goes which direction when being replace _____

BASIC SEWING EQUIPMENT:

- What are notions: _____
- Seam ripper: _____
- Pins (dressmaker): _____
- Shears/Scissors: (what is the difference?) _____
- Rotary cutter: _____
- Seam gauge: _____
- Tape measure: _____
- Transparent rulers: _____
- Marking pens/pencils: _____





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Activity 1 Reflect and Apply Questions

Answer Key is provided as an additional resource



Activity 2 Reflect and Apply Questions

Answer Key is provided as an additional resource

1. If I switch the stitch width to 5 what will happen to my stitch?
It will get wider (zig zag)
2. What happens when my stitch length is on 5? It will get longer
3. If I want the sewing machine to make a standard straight stitch what number does my stitch length need to be on? 3
4. Always turn the hand wheel _____ towards _____ you.

Sewing Machine and Equipment Answer Key

SEWING MACHINE PARTS:

Needle stitch plate: plate under presser foot with stitch guide lines

Feed dog system: feeds the fabric through the machine

Presser foot: raises and lowers, puts pressure on the fabric.

Bobbin case: holds the bobbin

Spool pin: holds thread in place

Upper thread tension: guides the upper thread, if not properly adjusted, stitching will appear uneven and puckered

Presser foot lifter: raises and lowers the presser foot

Thread take-up lever: moves the thread through the upper thread tension discs

Foot pedal: controls the speed at which the fabric moves through the machine

Hand wheel: (which way do you turn it?) turn it towards you. It allows you to manually move the needle up and down.

The flat side of the machine needle goes which direction when being replaced? towards the back of the machine

BASIC SEWING EQUIPMENT:

What are notions: items used to make an outfit such as buttons, zippers, thread, hook and eye, etc.

Seam ripper: used to remove stitches

Pins (dressmaker): holds fabric together while sewing

Shears/Scissors: (what is the difference?) shears—large scissors used to cut fabric
scissors—smaller; used to cut out patterns, etc.

Rotary cutter: Round cutting tool with a sharp blade

Seam Gauge: 6" ruler used to gauge hems and small measurements

Tape measure: 60" flexible tool used to take body measurements

Transparent rulers: used with rotary cutters, and pattern alterations

Marking pens/pencils: used to make marks on fabrics, should be able to remove easily without damaging fabrics.

REFLECT AND APPLY
ANSWER SHEET



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