

Objective

By the end of this lesson, you will be able to apply basic math skills to sewing projects and understand how math is used in sewing.

Materials and Prep

- Fabric
- Scissors
- Needle
- Thread
- Tape measure
- Pencil
- Ruler
- Sewing machine (if available)
- Paper and pen for taking notes

Before starting this lesson, make sure you have a basic understanding of addition, subtraction, multiplication, and division.

Activities

1. **Measure and Calculate:** Choose a fabric and measure its length and width using a tape measure. Write down the measurements and calculate the total area of the fabric by multiplying the length and width.
2. **Pattern Practice:** Find or create a simple sewing pattern, such as a square or a rectangle. Measure the dimensions of the pattern pieces and calculate the total length of fabric needed to make the pattern.
3. **Seam Allowance Math:** Discuss the concept of seam allowance, which is the extra fabric added to the edges of a sewing project for sewing seams. Measure and mark a seam allowance on a fabric piece, and calculate the total length of seam allowance needed for the project.
4. **Fraction Fun:** Introduce the concept of fractions by cutting a fabric piece in half and discussing halves. Explore other fractions by cutting the fabric into different equal parts and discussing their values.
5. **Pattern Scaling:** Take a small sewing pattern and scale it up or down by using multiplication or division. Discuss how changing the size of a pattern affects the measurements and fabric requirements.

Talking Points

- "Math is an important skill to have when it comes to sewing. It helps us measure and calculate fabric, understand patterns, and make adjustments."
- "When measuring fabric, we use tools like a tape measure, ruler, and sometimes a pattern to determine the length and width."
- "To find the total area of a fabric piece, we multiply the length and width together."

- "Patterns are like templates that guide us in cutting and sewing fabric. We need to measure the pattern pieces and calculate the total fabric needed to make the pattern."
- "Seam allowance is the extra fabric we add to the edges of our sewing projects. It helps us sew seams and prevent fraying. We measure and mark the seam allowance on the fabric."
- "Fractions are a way to represent parts of a whole. We can cut fabric into equal parts to explore fractions like halves, thirds, or quarters."
- "Scaling a pattern means making it bigger or smaller. We can do this by using multiplication or division. Changing the size of a pattern affects the measurements and fabric requirements."
- "Remember to take accurate measurements, double-check your calculations, and have fun with your sewing projects!"