



Year 8 Textiles Monster Project

Fibres, Fabrics & Properties

Exploring different textiles and how their properties affect their use



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Different fabrics
for different
purposes!

1. WHAT ARE TEXTILES?

Textiles are materials made from fibres. They can be used to make fabrics, which are then used to create a wide range of products, such as clothing, accessories, home furnishings and toys.



TEXTILES
ARE
EVERYWHERE!

2. FROM FIBRE TO PRODUCT

Textiles go through a process before they become a finished product.



3. TYPES OF FIBRES

Natural fibres

Come from plants or animals. They occur naturally in nature.



Synthetic fibres

Man-made fibres produced from chemicals.



4. COMMON FABRICS AND THEIR PROPERTIES

Different fabrics have different properties, which make them suitable for different uses.

Fabric	Type	Key properties	Common uses
	Cotton	Natural	Soft, breathable, absorbent, comfortable
	Wool	Natural	Warm, insulating, absorbent, durable
	Linen	Natural	Strong, cool, breathable, absorbent
	Silk	Natural	Smooth, lightweight, luxurious, strong
	Polyester	Synthetic	Strong, durable, crease-resistant, quick-drying
	Nylon	Synthetic	Strong, lightweight, water-resistant
	Acrylic	Synthetic	Warm, lightweight, soft, quick-drying
	Elastane	Synthetic	Very stretchy, flexible

5. KEY PROPERTIES OF FABRICS

The properties of a fabric help us decide what it can be used for.

Absorbent Soaks up liquid.	Waterproof Repels water.	Breathable Allows air to pass through.	Durable Strong and long-lasting.
Soft Feels smooth and comfortable.	Warm Helps to keep heat in.	Stretchy Can be stretched and return to shape.	Lightweight Easy to wear and carry.

7. NATURAL OR SYNTHETIC?

Both natural and synthetic fabrics have advantages and disadvantages.

Natural fibres	Synthetic fibres
• Come from renewable sources • Often biodegradable • Breathable and comfortable	• Strong and durable • Often water-resistant • Can be stretchy and lightweight
• Can be more expensive • May crease easily • Can be less durable	• Made from non-renewable sources • Not biodegradable • Can be less breathable

6. CHOOSING THE RIGHT FABRIC

Designers choose fabrics based on:

- ✓ The product's purpose
- ✓ The user (age, needs and preferences)
- ✓ The fabric's properties
- ✓ Appearance (colour, pattern and texture)
- ✓ Cost and availability
- ✓ Sustainability and environmental impact

The right
fabric makes
a better
product!

8. KEY VOCABULARY

Textile	A material made from fibres.
Fibre	A thin strand used to make yarn and fabric.
Yarn	Fibres twisted together.
Fabric	Material made by weaving or knitting yarn.
Natural fibre	A fibre that comes from a plant or animal.
Synthetic fibre	A man-made fibre produced from chemicals.
Property	A characteristic of a material.
Absorbent	Able to soak up liquid.
Durable	Strong and long-lasting.
Breathable	Allows air to pass through.
Waterproof	Repels water.
Elastane	A very stretchy synthetic fibre.



Year 8 Textiles Monster Project

Hand Sewing & Sewing Equipment

Learning key hand sewing skills to help you make your textile monster



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1. WHY USE HAND SEWING?

Hand sewing is a useful skill for making, repairing and decorating textile products. It allows you to join fabrics, add details and create unique designs.

Key benefits:

- ✓ Helps you make strong and neat products.
- ✓ Allows you to add decorative details.
- ✓ Useful for joins that are hard to reach with a sewing machine.
- ✓ A skill you can use for life!
- ✓ Supports creativity and personalisation.

*Small stitches
make big ideas!*



2. HAND SEWING EQUIPMENT

These are the basic tools you will use for hand sewing.



Needle

Used to push thread through fabric.



Thread

Joins fabric together.



Scissors

Used to cut fabric and thread.



Pins

Hold fabric pieces together.



Quick unpick

A tool used to quickly remove stitches.

3. SAFE USE OF EQUIPMENT

It is important to use sewing equipment safely.

- ✓ Always walk with scissors, pointing downwards.
- ✓ Keep needles in a pin cushion when not in use.
- ✓ Do not leave pins in fabric when not working.
- ✓ Use a thimble to protect your finger.
- ✓ Be careful when using sharp tools.
- ✓ Keep your workspace tidy.
- ✓ Report any damaged equipment.

*Be safe,
be sensible,
be creative!*



4. KEY HAND SEWING TECHNIQUES

You will learn three important hand sewing techniques for your monster project.

Running stitch



A simple stitch that passes repeatedly over and under the fabric.

Uses:

- Temporary joins
- Gathering fabric
- Simple decorations

How it looks:



Backstitch



A strong hand stitch where each new stitch goes back towards the previous stitch.

Uses:

- Strong, permanent joins
- Areas that need extra strength
- Decorative outlines

How it looks:



Appliqué



Attaching one piece of fabric onto another to create a shape or decoration.

Uses:

- Adding shapes and details
- Personalising your product
- Creating decorative features

How it looks:



5. STITCH TECHNIQUES STEP-BY-STEP

Follow these diagrams to help you sew each stitch.

Running stitch



Bring the needle up through the fabric.



Take a small stitch and push the needle down.



Repeat, keeping the stitches the same length.

Backstitch



Bring the needle up through the fabric.



Take a stitch forwards, then bring the needle back through the end of the last stitch.



Repeat to create a continuous line.

Appliqué (blanket stitch)



Place your fabric shape in position.



Bring the needle up through both layers.



Sew around the edge with even stitches to attach the shape.

6. CHECKING YOUR STITCHES

Use these success criteria to check the quality of your work.

Running stitch

- ☐ Similar stitch lengths
- ☐ Similar gaps
- ☐ Straight
- ☐ Secure

Backstitch

- ☐ Similar stitch lengths
- ☐ Continuous line
- ☐ Straight
- ☐ Secure

Appliqué

- ☐ Fabric cut neatly
- ☐ Positioned accurately
- ☐ Securely attached
- ☐ Stitching is neat

7. KEY VOCABULARY

Needle	A thin, pointed tool used to sew fabric.
Thread	A long, thin strand used to join fabric.
Running stitch	A simple stitch that passes repeatedly over and under the fabric.
Backstitch	A strong hand stitch where each new stitch goes back towards the previous stitch.
Appliqué	Attaching one piece of fabric onto another to create a shape or decoration.
Pin	A thin, sharp piece of metal used to hold fabric together.
Scissors	Used to cut fabric and thread.
Quick unpick	A tool used to quickly remove stitches.
Embellishment	Something added to decorate or enhance a textile product.



8. CHECK YOUR KNOWLEDGE

1. What is the difference between running stitch and backstitch?
2. Name two pieces of hand sewing equipment and explain what they are used for.
3. How can you check that your appliqué is good quality?
4. Why is it important to use sewing equipment safely?



PRACTICE • IMPROVE • BE CREATIVE • MAKE SOMETHING AMAZING!

STITCH YOUR IDEAS TO LIFE!



Year 8 Textiles Monster Project

Buttons, Beads and Embroidery

Adding decorative details to make your monster unique



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1. WHY USE DECORATIVE TECHNIQUES?

Decorative techniques such as buttons, beads and embroidery help you to make your textile product more interesting, personal and unique. They can add colour, texture and detail, making your monster more appealing to your chosen user.

Key benefits:

- ✓ Makes your product look more professional.
- ✓ Adds personality and character.
- ✓ Helps you target your chosen user.
- ✓ Can be used to create texture.
- ✓ Lets you be creative!



Small details
make a big
difference!

2. EMBROIDERY

Embroidery is decorative stitching used to create patterns, images or details on fabric.



Straight stitch

Simple stitch used to make lines, shapes and details.



Chain stitch

Creates a linked chain effect. Useful for outlines.



French knots

Small raised dots used for texture and detail.

Uses:

- ✓ Adding facial features (eyes, mouth, details)
- ✓ Creating patterns and textures
- ✓ Personalising your monster

Top tips:

- ✓ Use embroidery thread or stranded cotton.
- ✓ Keep your stitches neat and even.
- ✓ Practice on a scrap piece of fabric first.

3. BUTTONS

Buttons can be used to decorate your monster or as a functional feature (e.g. for eyes).



Key points:

- ✓ Buttons come in different sizes, shapes, colours and materials.
- ✓ They can be used for decoration or fastening.
- ✓ They need to be sewn on securely.
- ✓ Choose buttons that are suitable for your user (e.g. avoid small buttons for young children).

4. BEADS

Beads can add colour, texture and detail to your textile product.



Key points:

- ✓ Beads can be sewn onto fabric.
- ✓ They add texture and interest.
- ✓ Use a strong thread and sew them on securely.
- ✓ Think about your user – small beads may not be suitable for very young children (choking hazard).

5. APPLIQUÉ AS DECORATION

Appliqué is attaching one piece of fabric onto another to create a shape or decoration. It can be combined with embroidery, buttons or beads for extra detail.



Key points:

- ✓ Cut fabric shapes neatly.
- ✓ Position accurately.
- ✓ Sew securely (e.g. running stitch or backstitch).
- ✓ Can be layered with other decorative techniques.

6. COMBINING TECHNIQUES

You can combine different techniques to make your monster even more creative and unique!



Appliqué + button



Embroidery + beads



Buttons + embroidery

7. SUITABILITY FOR THE USER

When choosing decorative techniques, think about who your monster is for and what is appropriate.

User	Considerations	Suitable techniques
Young children (0–5)	- Avoid small parts - Keep it safe - Use strong fixings	Large buttons Simple embroidery Fabric shapes (appliqué)
Children (6–12)	- Bright colours - Fun and playful - Durable	Buttons Beads (fixed well) Embroidery Appliqué
Teenagers	- Modern styles - Personal interests - Good quality finish	Embroidery Beads Appliqué Creative button use
Adults	- More detailed designs - Subtle colours - High quality finish	Embroidery Beads Unique button choices Layered techniques

8. ACCESS FM

ACCESS FM helps designers make the right choices when adding decorative features.

A	Aesthetics	How will it look? Colour, style, personalisation.
C	Cost	Are the materials affordable?
C	Customer	Is it suitable for your chosen user?
E	Environment	Can you use recycled or scrap materials?
S	Size	Are the beads/buttons the right size for the product and user?
S	Safety	Is it safe to use (e.g. no small parts for young children)?
F	Function	Does it add to the product's use or is it purely decorative?
M	Material	Are the materials suitable and durable?

9. KEY VOCABULARY

Embroidery	Decorative stitching used to create patterns, images or details.
Appliqué	Attaching one piece of fabric onto another to create a shape or decoration.
Embellishment	Something added to a textile product to decorate or enhance it.
Button	A small disc, often with holes, used for fastening or decoration.
Bead	A small decorative object, often sewn onto fabric.
Stitch	A loop of thread used to join or decorate fabric.
Decorative	Added to make a product look more attractive.
Texture	The feel or surface quality of a material.

10. CHECK YOUR KNOWLEDGE

- What is embroidery?
- Give two reasons why designers might use buttons.
- Why might small beads not be suitable for a very young child?
- How could you use embroidery on your monster?
- Which ACCESS FM points are most important when decorative features? Explain your answer.



BE CREATIVE • ADD DETAIL • DESIGN FOR YOUR USER • TURN IDEAS INTO AMAZING PRODUCTS

MAKE IT UNIQUE!



Year 8 Textiles Monster Project

Sustainability & Textile Waste

Small changes make a big difference!



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Good
design
kinder to
our planet!

1. WHAT IS TEXTILE WASTE?

Textile waste is unwanted fabric and textile products that are thrown away.

It can include:

- Offcuts from manufacturing
- Old clothes
- Damaged or worn-out textiles
- Leftover fabric from projects
- Unwanted fashion items



Textile waste
is a growing
problem
around
the world.

2. WHY IS IT A PROBLEM?

Textile waste can harm the environment because:



It often ends up in landfill where it can take years to break down.



Making new fabrics uses energy and produces carbon emissions (CO₂).



It can use large amounts of water and chemicals to produce new textiles.



It uses natural resources such as oil (for synthetic fabrics) and plants/animals (for natural fibres).



By reusing and recycling textiles, we can reduce waste and help protect our planet.

3. THE 3 Rs

A simple way to remember how to be more sustainable.

REDUCE



- Use only the fabric you need.
- Plan your designs carefully.
- Avoid wasting materials.

Think before
you cut!

REUSE



- Use scrap and leftover fabrics.
- Give old textiles a new purpose.
- Be creative with what you already have.

Someone else's
waste can be
your treasure!

RECYCLE



- Recycle old clothes and textiles.
- Use recycled fabrics (e.g. fabrics made from plastic bottles).
- Donate unwanted textiles.

Keep textiles
in use for
longer!

4. USING SCRAP FABRIC IN YOUR MONSTER PROJECT

You can make an amazing monster using leftover and scrap fabrics.



Use small pieces for appliqué shapes.



Turn offcuts into eyes, mouths, spikes or ears.



Mix different textures and colours.



Be creative – different scraps can make your monster unique!



Combine fabrics to create new and interesting effects.



Small pieces can make a big impact!

5. SUSTAINABLE CHOICES AS A DESIGNER

Here are some ways you can make more sustainable choices:



Use scrap and leftover fabrics where possible.



Choose recycled or eco-friendly fabrics.



Design products that are high quality and durable.



Repair or upcycle old textiles instead of throwing them away.



Think about the end of the product's life – could it be recycled or reused?



Avoid buying new materials if you already have suitable ones.

7. KEY VOCABULARY

Sustainability	Meeting our needs without harming the environment.
Textile waste	Unwanted fabric or textile products.
Recycle	Process used to turn waste materials into new products.
Reuse	Using materials again instead of throwing them away.
Upcycle	Turning unwanted materials into something new and better.
Offcut	A small piece of fabric left over after cutting.
Eco-friendly	Having a lower impact on the environment.
Durable	Strong and long lasting.
Landfill	A site where waste is buried.

6. EXAMPLES OF SUSTAINABLE TEXTILE MATERIALS



Recycled fabric
Made from old textiles.



Organic cotton
Grown with fewer chemicals.



Hemp / jute
Fast growing and natural.



Upcycled fabric
Made from waste materials.



8. CHECK YOUR KNOWLEDGE

1. What is textile waste?
2. Give two reasons why textile waste is bad for the environment.
3. What do the 3 Rs stand for?
4. How could you use scrap fabric in your monster project?
5. Why is it important to design products that are durable?

Be creative.
Be responsible.
Make a difference!



REDUCE WASTE • REUSE MATERIALS • RECYCLE TEXTILES • BE CREATIVE • HELP PROTECT OUR PLANET

SMALL SCRAPS. BIG POSSIBILITIES!



Year 8 Textiles Monster Project

Sewing Machine

A useful tool to help you make your textile products



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1. WHAT IS A SEWING MACHINE?

A sewing machine is a tool that uses two threads (top and bobbin) to make strong, even stitches quickly. It helps you join fabric pieces and can be used to make and decorate textile products.

Key benefits:

- ✓ Faster than hand sewing.
- ✓ Produces strong, even stitches.
- ✓ Useful for lots of different fabrics.
- ✓ Helps you create neat and professional finishes.

A sewing machine is a useful tool, but you still need to plan, pin and prepare your fabric!



2. PARTS OF A SEWING MACHINE

Here are the main parts you need to know.



3. FOOT PEDAL

The foot pedal controls the speed of the machine.

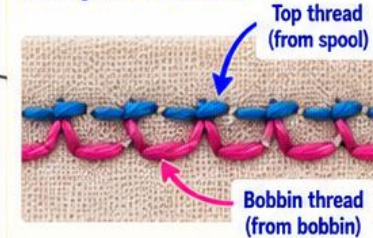


Key points:

- ✓ Press gently to start.
- ✓ The harder you press, the faster it sews.
- ✓ Take your foot off to stop.
- ✓ Keep the area around the pedal clear.

4. HOW A STITCH IS FORMED

The machine uses two threads that lock together in the fabric.



The top and bobbin threads interlock inside the fabric to make a strong stitch.

5. TYPES OF STITCH

The main stitch you will use is a straight stitch.

Straight stitch

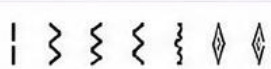


- ✓ Most commonly used.
- ✓ Good for joining fabric pieces.
- ✓ Even stitch length.
- ✓ Strong and neat.

Other stitches



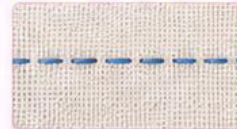
Zigzag stitch
(can be used for decoration or to help stop fabric edges from fraying)



Your machine may have different stitches – check the stitch selector dial.

6. GOOD MACHINE STITCHING

Follow these tips to make a neat and successful stitch.



- ✓ Even stitch length



- ✓ Follow your seam allowance



- ✓ Secure the beginning and end (use reverse)



- ✓ Keep the fabric flat and feed it gently (don't pull or push)

7. STAY SAFE

Always use the sewing machine safely.

- ✓ Listen carefully to your teacher's instructions.
- ✓ Keep your fingers away from the needle.
- ✓ Make sure the presser foot is down before sewing.
- ✓ Stop the machine before making any adjustments (e.g. changing the needle, presser foot or fabric).
- ✓ Keep the work area clear – no loose threads or objects.
- ✓ Tie back long hair and remove jewellery.
- ✓ Use the foot pedal carefully.
- ✓ Report any problems or damage.

A safe workspace helps you and others!

8. KEY VOCABULARY

Sewing machine	A tool that makes stitches using two threads.
Needle	A sharp part that moves up and down through the fabric.
Presser foot	Holds the fabric in place.
Bobbin	A small reel of thread that sits inside the machine.
Top thread	The thread from the spool on top of the machine.
Stitch	A loop of thread used to join fabric.
Stitch selector	A dial used to choose different stitches.
Reverse	A control that makes the machine sew backwards.
Foot pedal	Controls the speed of the machine.



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Sewing skills help bring your ideas to life!

