Textiles

Unit 3 · Materials · matches the "Textiles" lesson slides (about 60 minutes)

Teacher notes for someone teaching this lesson without a Design and Technology background, including a cover or supply teacher standing in for the usual class teacher.

IF YOU ONLY DO ONE THING (RUSHED COVER LESSON)

If you only do one thing: make sure every pupil can say what "Natural fibre" means in their own words before the lesson ends. A fibre from plants or animals, such as cotton or wool. Ask two or three pupils to explain it back to you - do not just ask "does that make sense?".

Key facts in plain language

These are the facts this lesson depends on. They are written in plain English, not subject jargon, so you can say them in your own words while you teach.

Natural fibre:
A fibre from plants or animals, such as cotton or wool.

Synthetic fibre:
A fibre made from oil-based polymers, such as polyester.

Woven fabric:
Yarns interlaced at right angles; stable and strong.

Knitted fabric:
Interlocking loops of yarn; stretchy.

Common misconceptions

Drawn from the wrong answers pupils pick in this lesson's own question bank, paired with the explanation that is already written for the right answer.

Pupils may think: "Acrylic" is correct.
Why it is wrong: the correct answer is "Wool". Wool comes from sheep.

Pupils may think: "It is rigid and keeps its shape" is correct.
Why it is wrong: the correct answer is "It stretches and is comfortable". Interlocking loops let it stretch.

Pupils may think: "To make the fabric naturally fireproof" is correct.
Why it is wrong: the correct answer is "To combine the best properties of each fibre". Polycotton is comfortable like cotton but crease-resistant and quick-drying like polyester.

Pupils may think: "Cotton" is correct.
Why it is wrong: the correct answer is "Wool". Wool traps air and is slow to ignite, while cotton burns readily.

Pupils may think: "Embroidered" is correct.
Why it is wrong: the correct answer is "Non-woven". Felt and interfacing are non-woven fabrics.

Talking points to follow the slide deck

The slide deck for this lesson follows the usual DT Classroom shape: a retrieval starter, then each key term below in turn, worked examples, exam-style practice, then an exit ticket. Use these lines as you reach each part - they are the same facts as above, just phrased as something you can say out loud.

When the deck reaches "Natural fibre": say — A fibre from plants or animals, such as cotton or wool. Ask: "can someone give me an example?"

When the deck reaches "Synthetic fibre": say — A fibre made from oil-based polymers, such as polyester. Ask: "can someone give me an example?"

When the deck reaches "Woven fabric": say — Yarns interlaced at right angles; stable and strong. Ask: "can someone give me an example?"

When the deck reaches "Knitted fabric": say — Interlocking loops of yarn; stretchy. Ask: "can someone give me an example?"

Worked answers to this lesson's questions

The same question bank used for this lesson's knowledge organiser self-check and worksheet exam practice. Use this page as the answer key, or cover the right-hand explanation and hand out the questions as a silent task (see the cover lesson box below).

1. Which is a natural fibre?

a) Acrylic, b) Polyester, c) Nylon, d) Wool

Answer: d) Wool. Wool comes from sheep.

2. Why is a knitted fabric used for T-shirts?

a) It is rigid and keeps its shape, b) It is stiffer than a woven fabric, c) It is waterproof and windproof, d) It stretches and is comfortable

Answer: d) It stretches and is comfortable. Interlocking loops let it stretch.

3. Why are fibres blended, such as polycotton?

a) To make the fabric naturally fireproof, b) To turn a synthetic fibre into a natural one, c) To combine the best properties of each fibre, d) So that the fabric no longer needs dyeing

Answer: c) To combine the best properties of each fibre. Polycotton is comfortable like cotton but crease-resistant and quick-drying like polyester.

4. Which fibre is warm and naturally flame-resistant?

a) Cotton, b) Wool, c) Nylon, d) Polyester

Answer: b) Wool. Wool traps air and is slow to ignite, while cotton burns readily.

5. Which fabric construction is made from fibres bonded with heat or adhesive?

a) Non-woven, b) Embroidered, c) Knitted, d) Woven

Answer: a) Non-woven. Felt and interfacing are non-woven fabrics.

READY-TO-RUN COVER LESSON

Project the existing lesson slides as normal; read the key facts and talking points above before the lesson starts.

Low-prep silent task (needs no workshop tools or machinery): write or display the numbered questions above without the "Answer:" line, and have pupils answer them in silence on paper. Mark from the answers above at the end, or next lesson.

If the lesson plan calls for tools, machinery, heat or anything hands-on, do not run that part as a non-specialist cover teacher - set the silent task above instead and leave the practical for the subject teacher. See the general workshop safety guide in the Teachers hub.