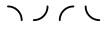**WORKSHEET**

Smart Material Choices

🖶 A4

Learn to make smart material choices by asking the right questions. These steps will help you make better choices about what materials go into your products as well as their impact on the wider system.

Materials play an essential role in a circular economy, so we need them to be made of safe ingredients that can be continuously cycled. By designing products with materials that come from, and safely flow, into their respective nutrient cycles, you can be part of creating an optimised materials economy that eliminates the concept of waste. So let's get materials savvy!

STEPS

1   Consider what parts your product is made of (tags, zipper, basic fabric, buttons etc.)

2   Look at the individual parts and create a list of the raw materials and components required to build or manufacture your product.

3   Now using the decision tree in the worksheet, see if you can estimate the value of what goes into your product and how smart your material choices are.

4   If any material(s) are not yet fit for the circular economy, ask yourself: "What would be better alternatives?" "Is it possible to meet the user need without wasteful materials?" For examples of materials that have been assessed for material health, material reutilization, renewable energy, water stewardship and social fairness see the **Cradle to Cradle Certified**™ **Materials for Designers** resource.

5   If you'd like to go next level and learn more about materials we have a few suggestions for you:

- EU REACH Regulation provides a list of substance of very high concern.

- The Cradle to Cradle Banned List provides a list of known hazardous materials so that you can avoid these from the beginning.

- Take your knowledge to the next level by participating in the free Cradle to Cradle Certified™Catalyst Programme.
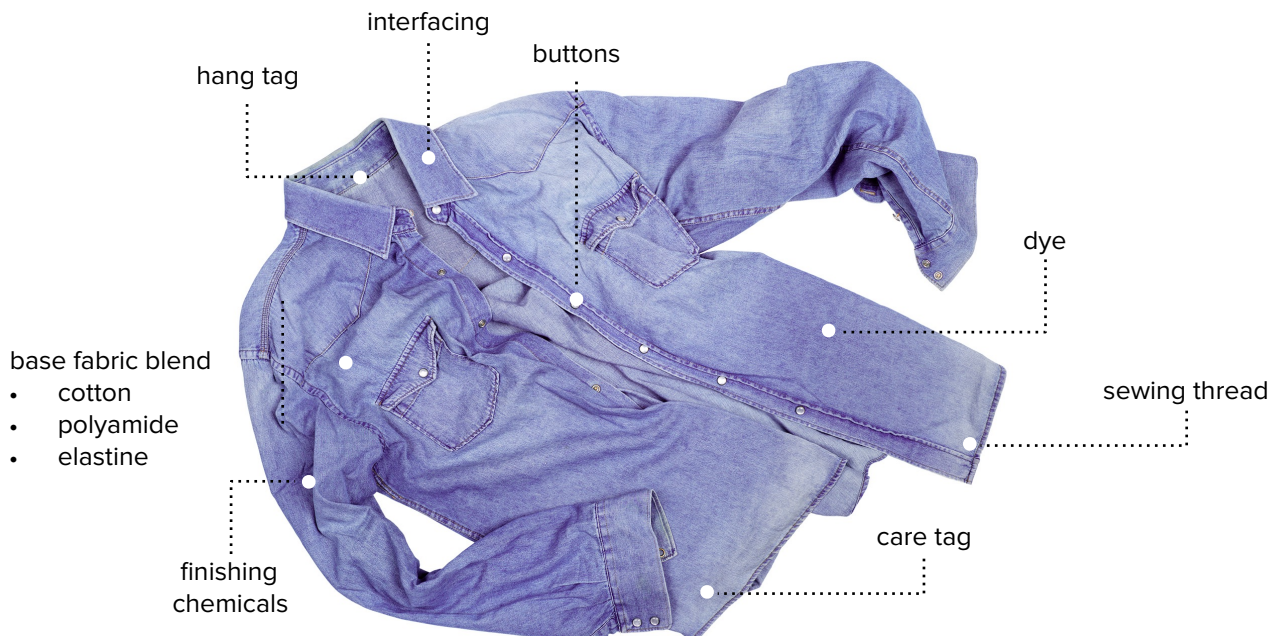
WORKSHEET

Smart Material Choices

🖨 A4

✏

List the materials in your product. Remember to consider whether any of these materials can be separated

Once you have a comprehensive list of materials, pick on material at a time and run through the decision tree on the next page.

1 ....

2 ....

3 ....

4 ....

5 ....

6 ....

7 ....

8 ....

9 ....

10 ....

interfacing

hang tag

buttons

dye

base fabric blend
• cotton
• polyamide
• elastine

sewing thread

finishing chemicals

care tag

Fashion Positive / Cradle to Cradle Products Innovation Institute

IDEO

ELLEN MACARTHUR FOUNDATION
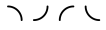
Where do each of your materials go after the current use cycle?

= Material is **not** fit for the circular economy

= Material **is** fit for the circular economy

1 Material is toxic / non-marketable waste.

yes ⟶ Can this be avoided by choosing a different material?

no

2 Material going to waste.

yes ⟶ What's stopping this material from being useful? (toxicity, legislation / policy?)

Can this be avoided by choosing different materials?

And who will pay for the processing of this material?

no

3 Material adds value to the biosphere as biological nutrient.

yes ⟶ How can you make sure that the material is returned to biosphere safely?

no

4 Material is brought back to my business and cycled.

yes ⟶ What is the business model / collection system?

Will the material be upcycled or downcycled?

no

5 Material could be used by another organisation to create value.

yes ⟶ Who uses the material and how do they benefit?

Will the material be upcycled or downcycled?