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| **Tie dyeing a picnic blanket** | | |
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| Creating a design on a picnic blanket by tie dyeing | | |
| **Subject(s):** Design & Technology  **Approx. time:** 70 - 100 minutes |  | **Key words / Topics:**   * colour * fabrics * finishing techniques * manufacturing processes * patterns * samples * textiles * tie dyeing |
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| **Suggested Learning Outcomes** |  |  |
| * To understand what is meant by tie dyeing and its applications. * To be able to produce samples for picnic blankets using different tie dyeing techniques. * To be able to produce a full-size picnic blanket using tie dyeing. | | |
| **Introduction** |  |  |
| This is one of a set of resources designed to allow learners to use summer themes to develop their knowledge and skills in Design & Technology, Engineering, Science and Mathematics. This resource is part of a group for the Summer that could be carried out either in school or at home. It involves producing a summer picnic blanket using tie dyeing techniques.  Tie dyeing is a great way of adding colour and visual appeal to fabrics. Can you use this to produce a fun and interesting picnic blanket? | | |
| **Purpose of this activity**  In this activity learners will produce samples for a picnic blanket using different tie dyeing techniques to add visual interest. They will then produce a full-sized version using their favourite technique or design.  This activity could be used as a main lesson activity to teach learners about dyeing techniques within textiles, or part of a wider scheme of learning covering manufacturing processes and finishing techniques. | | |
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| **Activity** |  | **Teacher notes** |
| **Introduction to tie dyeing (5-10 mins)**  Teacher to ask learners what they think is meant by the term ‘tie dyeing’, then discuss what they think it is used for and why.  Teacher to explain the definition of tie dyeing using the teacher presentation.  **Introduction to design task (10-15 minutes)**  Teacher to explain that learners are going to produce a summer picnic blanket using tie dyeing. Discuss the considerations that they need to take into account:   * the final pattern they want to create. * the colour of the fabric. * the colours of dye to be used.   **Making samples (30-40 minutes)**  Teacher to demonstrate folding, bulls eye and knotting techniques for tie dyeing by making samples of each. Learners to make samples using these techniques.  **Making the final picnic blanket (30-40 minutes)**  Teacher to handout resources and equipment required for the task.  Learners to follow the steps on the teacher presentation to make their final picnic blanket:   * Step 1 - Create the pattern on the fabric using the elastic bands/string. * Step 2 - Make up the dye according to the instructions. * Step 3 - Add dye to the fabric from the bottles and   leave the material to soak for 6 to 8 hours.   * Step 4 - Rinse the material in cool water and wash separately in a washing machine.   The examples on the teacher presentation can be shown to act as inspiration. Final example 1 shows a multi coloured design using knots and swirls. Final example 2 uses a knot in each corner which is then made into a bulls eye - loose end green, main area blue. |  | This activity could be carried out individually or in pairs.  The material used in the examples is calico and sized 900 x 900 mm. The sizing can be altered according to the resources available. The average picnic blanket on the high street is 1500 x 2000 mm, but this may be too large for general classroom work.  **Making Samples**   * Folding - start at one end, fold the material like a fan, secure with string/elastic bands. Can dye using one colour or with each segment a different colour. * Bulls eye - pinch the fabric in the middle, or where you would like the middle of the pattern. Pull up the material and place rubber bands tightly around the material, as close or as far apart as you wish. Keep the fabric damp/re-apply dye if the design is bulky. * Knotting - pull up the area of material where you want the knot, secure with the elastic band. Repeat as required.   **Making the final picnic blanket**  Sample and example slides could be used to provide inspiration. Make sure the material is damp before the dye is applied.  The example shown in the teacher presentation uses a readily available general fabric dye with salt and warm water. Wear gloves when handling the dyes as it can stain the skin and other materials. Make sure the material is damp before the dye is added.  In step 3, for colour intensity, reapply dye as required, especially if using a thick material. If using just one colour, leave in the container to soak.  Wear gloves when handling the material in step 4, as hands and other materials can be stained. An iron can be used if available to remove creases. |
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| **Differentiation** |  | |  |
| **Basic** |  | | **Extension** |
| * Pre-cut materials to correct size. * Pre-prepare dyes. * Limit lower ability learners to simpler, more achievable shapes and techniques. |  | | * Learners could research ways of making the picnic blanket water or damp proof. * Learners could think of ways of adding extra visual appeal, such as embellishments. * Learners could design a range of accessories to complement their picnic blanket. * Learners could tie dye other textile products. |
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| **Resources** |  | | **Required files** icon-docicon-pdficon-ppt |
| * Squeezy bottles * Fabric dye * Elastic bands/string * Plastic gloves * If available: washing up bowl * If required: salt |  | | icon-ppt Teacher presentation – Tie dyeing a picnic blanket |
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| **Additional websites** |  | |  |
| * **Treasure blog:** Step by step instructions for producing tie dyed products. <https://blog.treasurie.com/how-to-tie-dye/> * **Parent’s website:** Eight different tie dye patterns and instructions for using them. <https://www.parents.com/fun/arts-crafts/kid/tie-dye-with-kids/> , <https://www.parents.com/fun/arts-crafts/kid/how-to-tie-dye-shirts/> * **YouTube – How to tie dye T-shirts:** Video showing different methods of producing tie dyed T-shirt designs. <https://www.youtube.com/watch?v=dS3QsQWWFy8> | | | |
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| **Related activities (to build a full lesson)** |  | |  |
| **Starters** (Options)   * Discuss the purpose of tie dyeing, its typical uses, and its benefits/limitations. | | **Extension** (Options)   * Learners could research ways of making the picnic blanket water or damp proof. * Learners could think of ways of adding extra visual appeal, such as embellishments. * Learners could design a range of accessories to complement their picnic blanket. * Learners could tie dye other textile products.   **Plenary**   * Students swap work with each other and perform what went well (WWW) and even better if (EBI) activity. | |
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| **The Engineering Context** film |
| * Our clothing is available in a wide range of colours – it would be very monotonous if everything was the same colour! Engineers and designers apply finishing techniques to a wide range of materials, including textile fabrics. |

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| **Curriculum links** | |
| **England: National Curriculum**  Design & Technology   * KS3 1e, 2a, b   **GCSE D&T**  AQA D&T   * 3.1.6.1, 3.2.5, 3.2.9, 3.3.11   Edexcel D&T   * 1.11.1b, 6.2.1b, 6.3.1, 6.6.3   Eduqas D&T   * Core: 12 * Textiles: 1, 2, 7   OCR D&T   * 1.2a iv, 5.1e i, 6.2a, 7.3a ii | **Northern Ireland Curriculum**  Technology & Design   * KS3 Knowledge, understanding and skills: Manufacturing – – selecting and using materials fit for purpose; safe use of a range of tools and processes appropriate to materials, demonstrating accuracy and quality of outcome. |
| **Scotland: Curriculum for Excellence**  Technologies   * TCH 3-04b, TCH 4-04c | **Wales: National Curriculum**  Design and Technology   * KS3 Skills: Making 1, 2, 3 |
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| **Assessment opportunities** | | |
| * Informal teacher assessment of making skills through observation of learners. * Formal teacher assessment of the samples and final products produced. * Self/peer assessment of samples and products produced. | | |
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