



FUN PALACE 2018 T-Shirt printing

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FUN PALACE 2018 T-Shirt printing

Print your own design on a t-shirt with inks that change colour with temperature and join the 80s fashion revival.

Activity Details

Type Ticketed (15 per session)

Duration 30 minutes

Deliveries 4

Learning Outcomes

Participants are able to print their own thermocolour T-Shirt. The process involves using thermochromatic pigment to create coloured ink that will change depending on the ambient temperature. Participants should be able to explain what happens when the print is exposed to heat.

Session Plan

10 min - Show the participants a printed shirt and demonstrate how the thermochromatic pigment works (heating of the pigment changes the colour). Before doing this ask the group what they think will happen to the print when the T-Shirt is heated?

5 min - Guide the participants through mixing the ink formula, following the directions listed below.

15 min - Guide the participants whilst printing onto the T-Shirt. Once printed allow them to dry on the required drying rack or clothes line.

Facilitator Notes

Thermochromatic pigment changes colour the hotter it gets. Working with heat reactive colour pigments to create prints that will react to ambient temperature change.

Where else have you seen a colour changing print caused by heat? (Novelty mugs).

Thermochromatic pigment is similar to that of a thermometer but instead of expanding or contracting to symbolise change they change in colour.

When the molecules are hot they stay really close together reflecting light a certain way. When the material cools down the molecules start to separate changing the way it reflects light.

Materials Required

Mixing

- Medium

- Thermochromatic Pigment
- Chromacryl Textile Medium (5ml to 100ml of Medium)

Printing

- T-Shirt (loaded up, aligned and ready to print)

Equipment Required

Mixing

- Mixing Plate (expanded PVC board or glass)
- Palette Knives

Printing

- Template Block
- Soft Brayer (Soft rubber roller)
- Scissors
- Print Bed
- Foam Sheet

Drying

- Clothes Line (Set up and ready to go)
- Pegs
- Drying Rack

Cleanup

- Tub with Water

Instructions

Mix Pigment and Medium to Make Ink

1. Measure out 1 or 2 level teaspoons of medium on to the mixing board/glass with a palette knife. Make a valley/depression in the middle of your chunk of medium.
2. Measure out 1 or 2 level sherbet spoons of pigment into the depression.
3. Carefully fold the pigment into the medium until it is a consistent mix.

Printing

1. Using the soft rubber brayer, roll out the ink onto you mixing board/glass until the ink is spread thin across an area of the board. If you have the right consistency ink and it is spread correctly the roller will start making a sticky sound as you roll over the ink. Once you have this, you are

ready to start printing.

2. Load the positive of your block with ink.
3. Place a sheet of foam inside the T-Shirt to avoid ink transferring to the back.
4. Line up the block on the T-shirt.
5. Lower and align the print block down onto the T-Shirt.
6. Press the block down with your body weight
7. Carefully pull the block off the shirt and admire your handy work.
8. Carefully remove the T-Shirt and allow to dry.

Files

Related link: [workshops:prototypes:electro_graphic_wallpaper:start#electro-graphic_wallpaper](#)

Reflections Learnings

Overall the activity was very successful and very popular with both the children and the parents. On the day it was raining so the activity was shifted inside. Due to space constraints inside The Edge, the activity was split between the walkway. This proved challenging with the number of people attending the printing but also the other activities at the event. Because of this issue I had extra help to ensure that the inked templates were not dropped or made contact with passers by.

Participants were also allowed to create their own templates using foam sheets. We were originally going to use spray glue and cardboard to stick the foam to the board to make the templates easier to print but because the activity was moved inside we were unable to use the spray glue. Younger children found this more challenging so they continued to use the premade templates. The activity is worth doing again at future Fun Palace events but would be easier if the event was outside. Providing the T-Shirts was handy however in the later sessions the range of sizes had slowly lessened causing problems for some participants as they were unable to have the correct size T-Shirt. This problem could be eliminated with participants bringing their own size shirt to the event.

Gallery



