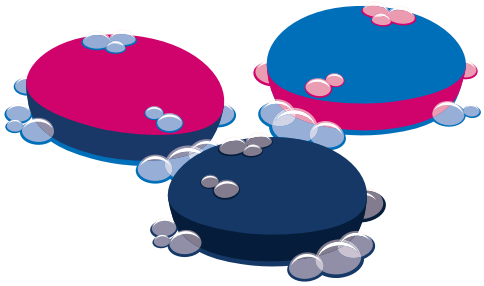
Formech
Perfectly formed

Scented Soap

Completion time: 2 Lessons



Materials and Resources:

- Potatoes
- Knife
- 200g melt and pour soap base (clear or white)
- Microwave proof jug
- Microwave
- Spoon
- Cling film
- 2 – 4ml essential oil or oils
- Formech vacuum forming machine
- Any suitable plastic material (1mm thickness HIPS or ABS recommended)
- https://formech.com/case-studies/vacuum-forming-artisan-chocolatier

Skills at a glance:

Mathematics

Timing

Language

Reading

Listening

Thinking Skills

Adhering to a given brief

Independent thought

Choosing elements based on a theme

Science

Heating plastics and effects

Plastic/polymer material knowledge

Project Outline:

Students get the chance to make their very own scented soap bars, customising them with their desired fragrances, natural colourants, and exfoliators. Keeping it simple and using a simple potato as a mould will allow students to achieve this in just 2 lessons. Students will produce beautiful soap bars which look like they came from an expensive store. Perfect for gifts, sales, or just for themselves at home.

Method:

Students can begin by taking a medium sized potato and cutting it in half length ways, creating two rustic dome shapes. These shapes can be taken straight to the Formech vacuum forming machine to be formed over, or alternatively students might continue to cut slices off the halved potato, changing its shape to their liking, whilst maintaining its flat base.

Placing the potato moulds in the Formech vacuum forming machine at least 2cm apart, they can be vacuum formed using any available plastic material, although 1mm HIPS or ABS is recommended.

The potato moulds can now be pushed out of the formed plastic, leaving students with a moulded plastic sheet within which soap will be poured and shaped.

Moving on to the soap making element of the project, students must cut 200g of melt and pour soap base into ice cube sized chunks, place in a microwave proof jug, and cover with cling film. This will make 2 or 3 small bars of soap.

This can be placed in a microwave and heated in 30 second intervals, checking it each cycle to observe its progress. The solid material will turn into liquid form. Take care not to boil or scorch the liquid.

When working with melted soap material, please consider all necessary safety precautions for students, including eye and skin protection.

Students can now add an essential oil of their choosing, or a combination of complimentary oils. The ratio 2 - 4ml of oil per 200g of soap base is recommended. This needs to be stirred thoroughly.

This mixture can now be carefully poured into the soap mould created earlier, and allowed to cool completely. Soap bars will be solid and ready to be turned out within a couple of hours, although will need a few days of further drying to become perfectly solid, and ready to be enjoyed.

Homework Tasks:

Why not incorporate a history element into this project, and ask students to research the origin of modern day soap? Soap has a fascinating and surprising history which dates back to early man, and makes for an interesting research topic. Presenting their findings, students have opportunity to develop their research, reading, and speaking skills.

Optional Extras:

Soaps often include a range of natural colourants and exfoliators which add an extra dimension to the soap product. For example, if using a vanilla scent, then perhaps using some cocoa powder for colour and ground coffee as an exfoliator would be a good combination. Students might be tasked with researching and choosing appropriate additions to their soap recipes.

Student Accomplishments:

- The production of bespoke and individual scented soap bars
- Making design choices in line with a prescribed brief
- Using existing objects as a principal material
- Practical hands on experience using a vacuum forming machine, and understanding its wider application

Teachers notes:

Share pictures and videos of your Formech project across social media, using **#formechmade**

Need materials for this project?

Visit **https://formechdirect.com**

Download your free Vacuum Forming Guide for the Classroom

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