



# Cornflour Goo (Non-Newtonian fluids) Lesson plan

## Aim

To help young people learn about science-based job roles, getting them to experiment with non-Newtonian fluids in order to see how they can be applied in everyday life.

## Mapping

CES 'I Can' Statements	CMS Themes
<ul style="list-style-type: none"> <li>★ I can discuss the relevance of skills to the wider world and make connections between skills and the world of work</li> <li>★ I can demonstrate and apply the skills I have learnt across the curriculum in relation to the world of work</li> </ul>	<ul style="list-style-type: none"> <li>★ Horizons</li> </ul>

## Learning Outcomes

Young people will:

- ★ Learn about non-Newtonian fluids – what they are and how they act
- ★ Understand the different types that can be found in the home
- ★ Using corn flour and water, make their own non-Newtonian fluid
- ★ Learn about job roles that explore the use of non-Newtonian fluids in everyday items.

Activity on next page...



## Instructions

### Before you start

- ★ Print off, or have on screen, the worksheet for cornflour goo.
- ★ We've created a video guide to help with this activity and you can [view it here](#) (1)
- ★ To do the activity you will need:
  - Cornflour
  - A jug of water
  - Food colouring (optional)
  - Plastic mixing bowl
  - Kitchen roll
  - Wipeable surface
- ★ An adult should oversee the experiment

## Follow-up

This activity looks at job roles related to non-Newtonian fluids. There are a range of different job

profiles listed on [My World of Work](#) (2) that the young person can have a look at:

[Physicist](#) (3), [Medical Physicist](#) (4), [Material Engineer](#) (5), [Design Engineer](#) (6), [Automotive Engineer](#) (7), [Product Designer](#) (8), [Production Manager](#) (9), [Project Manager](#) (10), [Quality Control Technician & Manager](#) (11), [Sport and Exercise Scientist](#) (12), [Garment Technologist](#) (13)

They can find out more about apprenticeships at [Apprenticeships.scot](#) (14)

Foundation Apprenticeships: [Scientific technologies](#) (15), [Food and drink technologies](#) (16)

Modern Apprenticeships: [Food and drink operations](#) (17), [Food and drink technical](#) (18)

Graduate Apprenticeships: [Engineering: design and manufacturing](#) (19)

## Website references

1. Cornflour Goo activity guide film <https://bit.ly/3daH3Ec>
2. My World of Work [www.myworldofwork.co.uk/](http://www.myworldofwork.co.uk/)
3. Physicist <https://bit.ly/2zW7Nue>
4. Medical Physicist <https://bit.ly/3bQ9Fly>
5. Material Engineer <https://bit.ly/2ynGCZ8>
6. Design Engineer <https://bit.ly/36gCR3Z>
7. Automotive Engineer <https://bit.ly/2zfdK5l>
8. Product Designer <https://bit.ly/2ZujdX>
9. Production Manager <https://bit.ly/2To5mHQ>
10. Project Manager <https://bit.ly/2ZouemP>
11. Quality Control Technician <https://bit.ly/2LMf7LQ>
12. Sport and Exercise Science <https://bit.ly/2z6nz61>
13. Garment Technologist <https://bit.ly/2WQxGF5>
14. Apprenticeships.Scot [www.apprenticeships.scot/](http://www.apprenticeships.scot/)
15. Scientific Technologies Foundation Apprenticeship <https://bit.ly/2XhMT0F>
16. Food and Drink Technologies Foundation Apprenticeship <https://bit.ly/2LLJr9p>
17. Food and Drink Operations Modern Apprenticeship <https://bit.ly/36kNXF7>
18. Food and Drink Technical Modern Apprenticeship <https://bit.ly/3bQ0cL5>
19. Engineering: Design and Manufacturing Graduate Apprenticeship <https://bit.ly/2ToxBq3>