

Teacher brief

DESIGN A LAB COAT Makaton Activity

In honour of COP-26 and the UN's Sustainability Goals, the theme of this activity will be food and food waste.

This is open to interpretation by the students – for example they could focus on:

- Their favourite food
- Food and nutrition
- Growing food and farming
- How food is wasted

And remember: The more creative, the better!

Did you know that, in the UK, one third of our food goes to waste? This is enough food to provide all chronically undernourished people with 10 meals per day, every day – and yet it is wasted. Coupling the projected 20% arable land degradation and 17% harvest losses caused by climate change with the burgeoning population that is expected to reach 10 billion by 2050 and changing food demands that require a 50% increase in food production, food shortages are an incredibly important focus in STEM. So, engaging students with the idea of food waste will help tackle this issue.

The aim of this competition is to get students thinking about what they themselves could do to reduce food waste. Within this resource you will find:

- 1) Power-Point with Makaton Translation
- 2) Printable symbol translation
- 3) Lab Coat Template
- 4) Feedback form, to help us understand how we might use Makaton in the future

Lesson plan:

Learning Objectives:

- Understand that a scientist solves global problems
- Understand that a scientist can look like anything
- Understand that food waste contributes to climate change

Slide	Content	Resources
1-3	Title slides and Contents - run students through the lesson agenda	n/a
4-5	Defining a Scientist - focus on the idea that scientists can look like anything	n/a
6	Drawing a Scientist - encourage imagination in the students as they each draw what they think a scientist looks like	Sheet of paper each, colourful pencils per table
7	Guessing the scientists - focus on the idea that it is a game of luck, since scientists can look like anything	n/a
8	Global Issues - ask your students to make a list of all of the problems they think scientists face currently and will face in the future	n/a
9	Answer! Celebrate if correct! Can mention COP26, and any other current stories that they may have heard about.	n/a
10-11	Climate Change - add detail if desired, if the class has already studied the topic in their Science lessons.	n/a
12-13	Food Waste - details minimising food wastage as a solution to climate change.	n/a
14	Quiz!	Mini Whiteboard set each
15-16	Bayer Introduction as a company tackling food insecurity.	n/a
17-21	Lab Coat Competition - aim to enthuse students, with the competition now being topically themed.	n/a
22	Template - depicts the template on which the students will draw their designs. Ensure they do not forget to draw both front and back!	Template each
23	Theme Ideas. The list is not exclusive – students should be encouraged to draw whatever they like! Remember, the more creative, the better.	n/a
24	Inspirational Message - a little inspirational message for your students, designed to break down the barriers of joining STEM, and the stereotypes they might have been exposed to in the media and pop culture. Encourage your students to think of each of their interests, no matter how 'ordinary' or 'eccentric', as science. Encourage them to think of all of their endeavours of curiosity as scientific inquiry. You may want to cycle back to the very first questions posed by the power-point, impressing upon your students the idea that scientists look like anything, and that global problems need solving – perhaps they could be the ones to do it! This is all about leaving a positive message.	n/a
25	Run the Competition. Consider evaluating your LOs with your class.	Colourful pencils, rubbers

5 minutes

10 minutes

15 minutes

40 mins



Baylab

Ri The Royal Institution
Science Lives Here

FRONT DESIGN TEMPLATE

Turn over for
BACK DESIGN TEMPLATE

DESIGN A LAB COAT competition



Name
(all names if a team)
and age
(all ages if a team)

Age category
*(of the oldest
team member)*



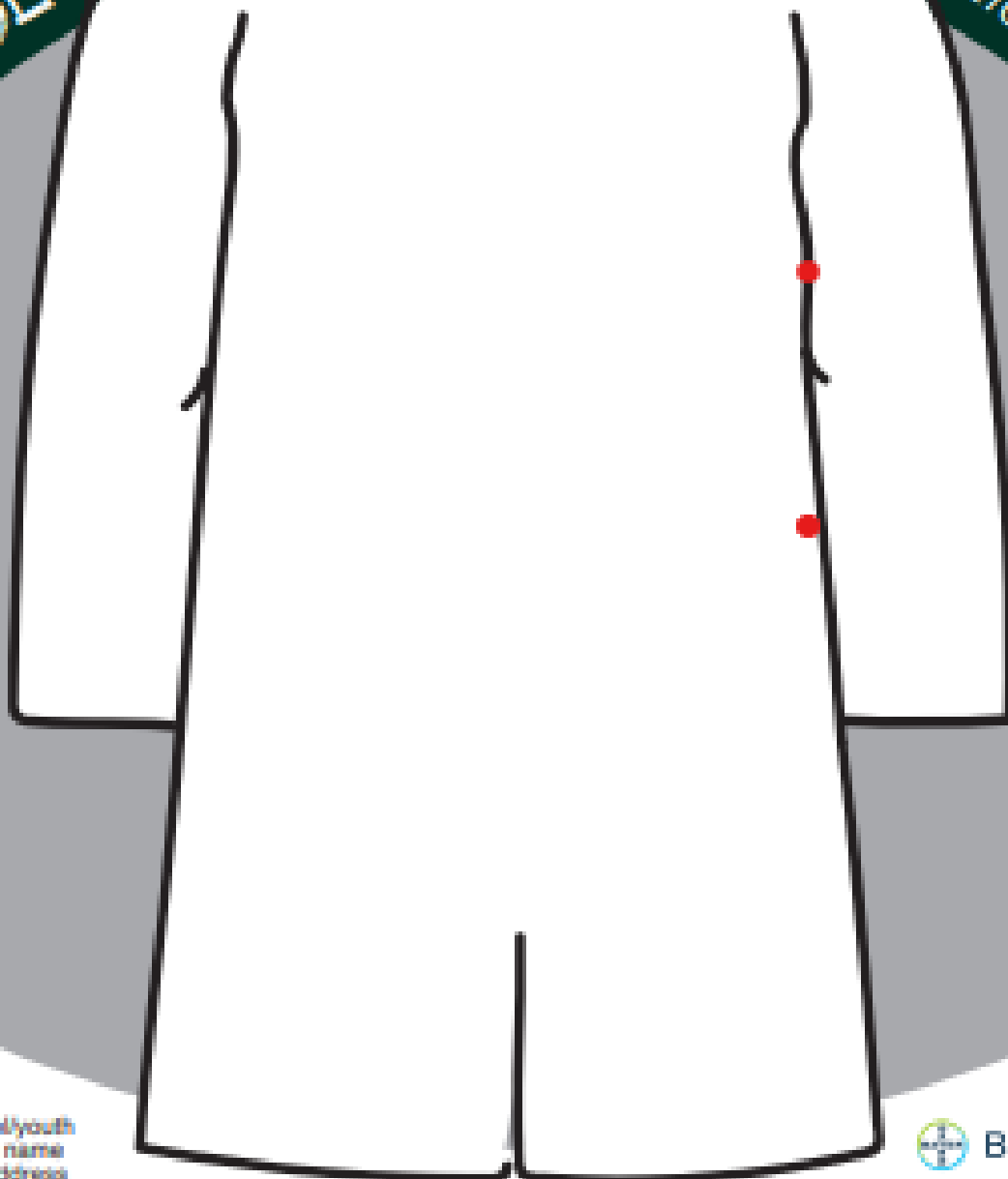
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BACK DESIGN TEMPLATE

Suggestion -
cut out dotted line
and hang on a line
to view designs

DESIGN A LAB COAT competition



School/youth
group name
and address



Baylab

How many students in your class/year used this resource?

How would you rate this resource on a scale of 1-10?

Do you feel this resource increased the accessibility and inclusivity of the Baylab's lab coat competition, allowing a widening participation?

Strongly agree / Agree / Not sure / Disagree / Strongly disagree

Do you feel this resource increased your students awareness and knowledge of STEM subjects and/or careers?

Strongly agree / Agree / Not sure / Disagree / Strongly disagree

Do you feel this resource dismantled any misleading or damaging stereotypes surrounding STEM subjects and/or careers?

Strongly agree / Agree / Not sure / Disagree / Strongly disagree

Do you feel this resource empowered your students confidence in approaching STEM subjects and/or careers?

Strongly agree / Agree / Not sure / Disagree / Strongly disagree

Please include any verbatim feedback from your students, and any other comments about how we might use Makaton in the future, below:

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