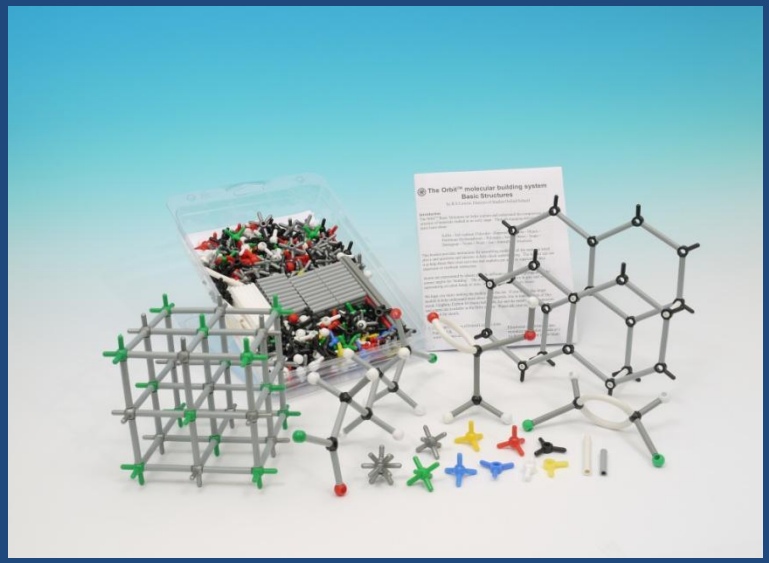
RSC | Advancing the Chemical Sciences

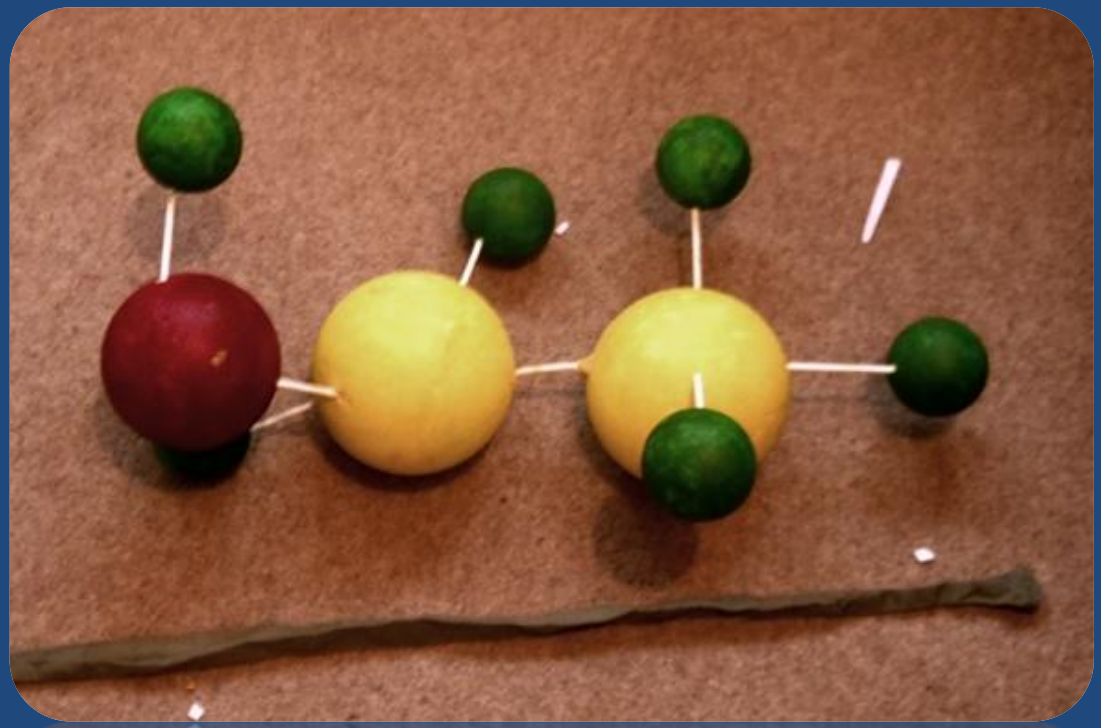
Thames Valley Local Section

Phil Smith Trophy 2011 – Molecule Model Madness!

The Challenge for local Year 7, 8 and 9 school pupils:
Create a molecular model of a molecule of your choosing (25 atoms MAX), using common household materials (e.g. straws, bluetak, foam, plasticine, cocktail sticks) and take a photo of your finished model (preferably with a ruler or another item to put the model to scale). Please also provide one sentence of why you chose your molecule.



ALCOHOL

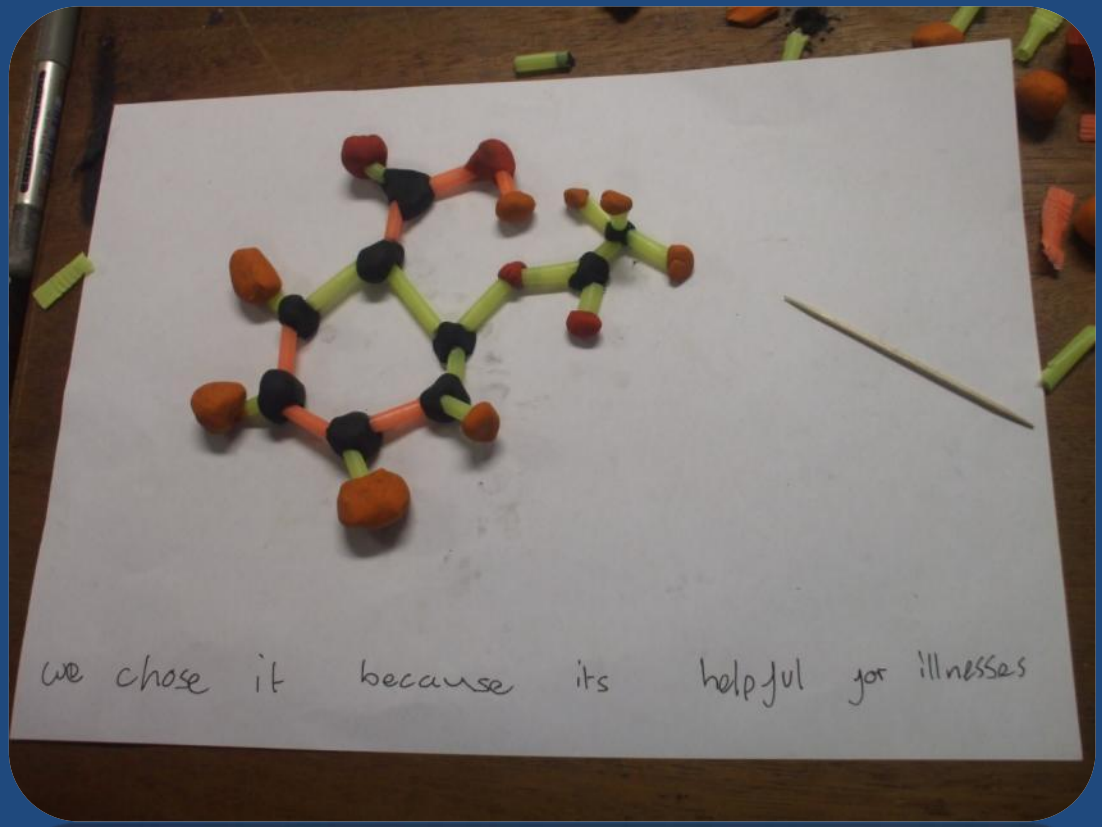


"This is the molecular structure of $C_2H_5O_H$ (Alcohol). I chose this because it is used in everyday life, and is a common drink. Therefore I found it interesting to see its molecular structure."

Niharika Dey

- Kendrick School -

ASPIRIN

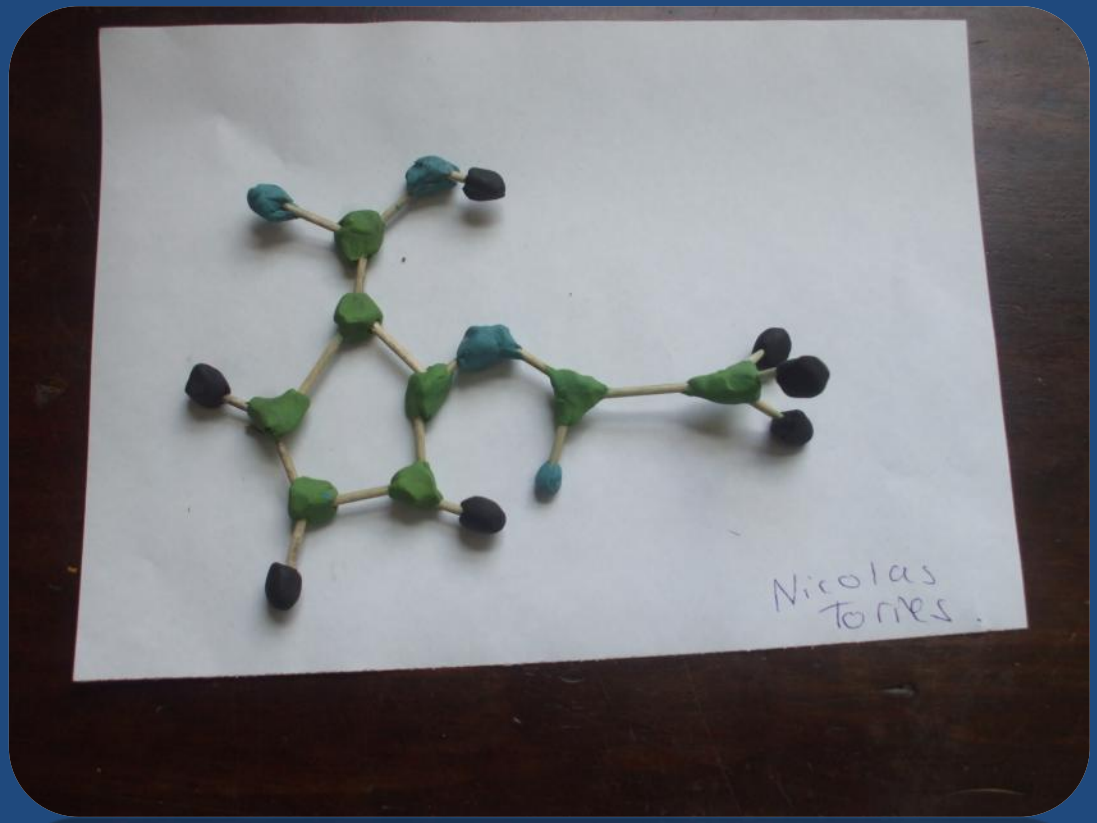


"We chose it because its helpful for illnesses."

Bradley Wiskin
Robert Grootz

- Fitzharrys School -

ASPIRIN

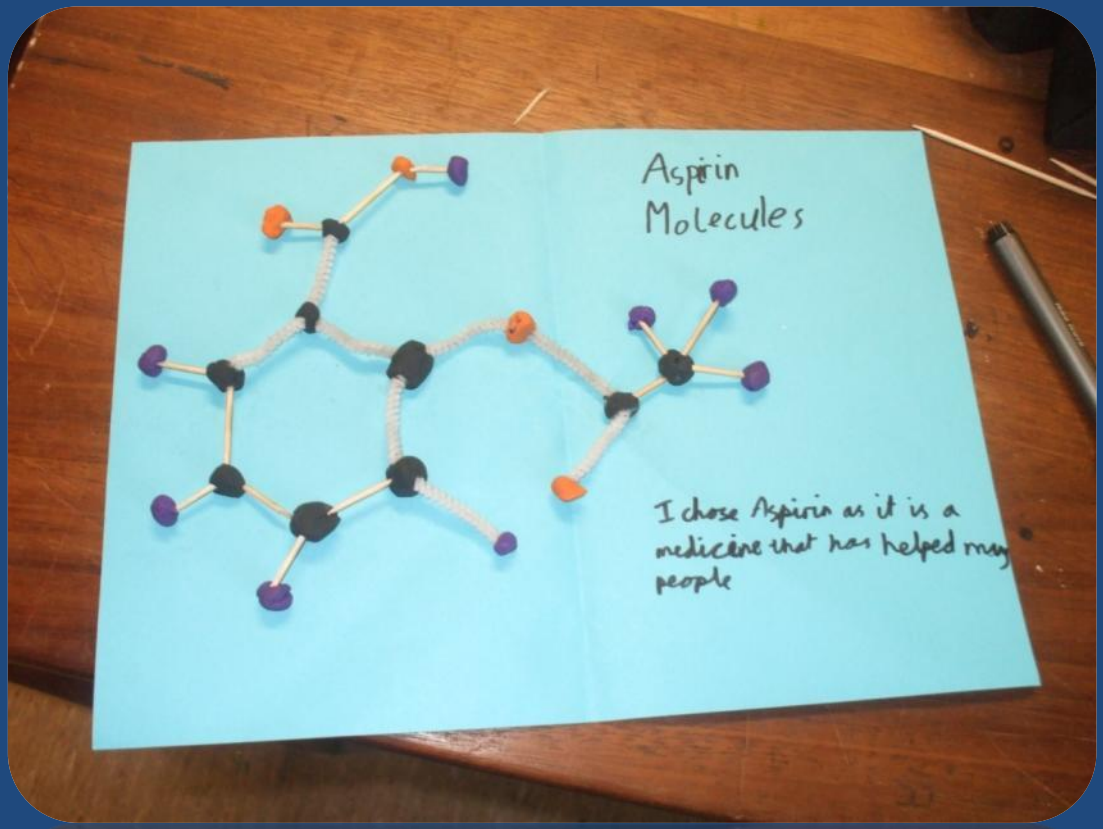


"I chose aspirin because it is a simple molecule that makes a lot of goodness to people."

Nicolas Torres

- Fitzharrys School -

ASPIRIN

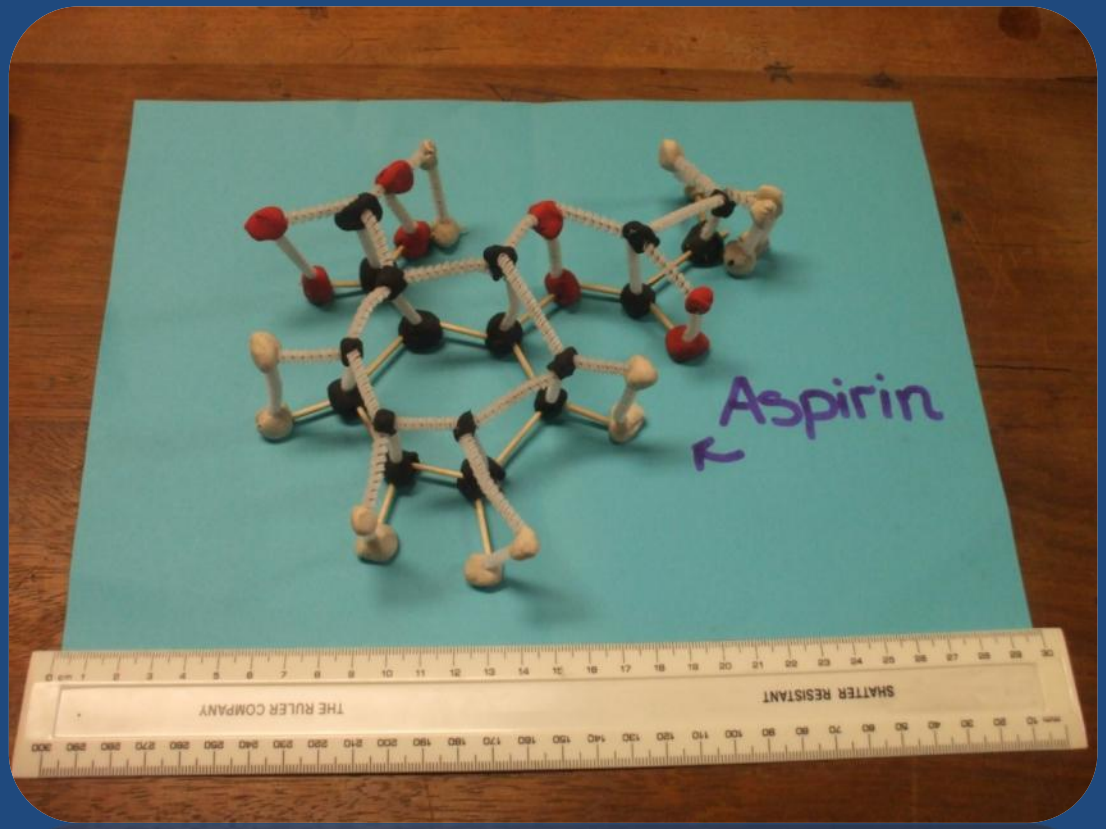


"I chose Aspirin as it is a medicine that has helped many people."

Sam Yates

- Fitzharrys School -

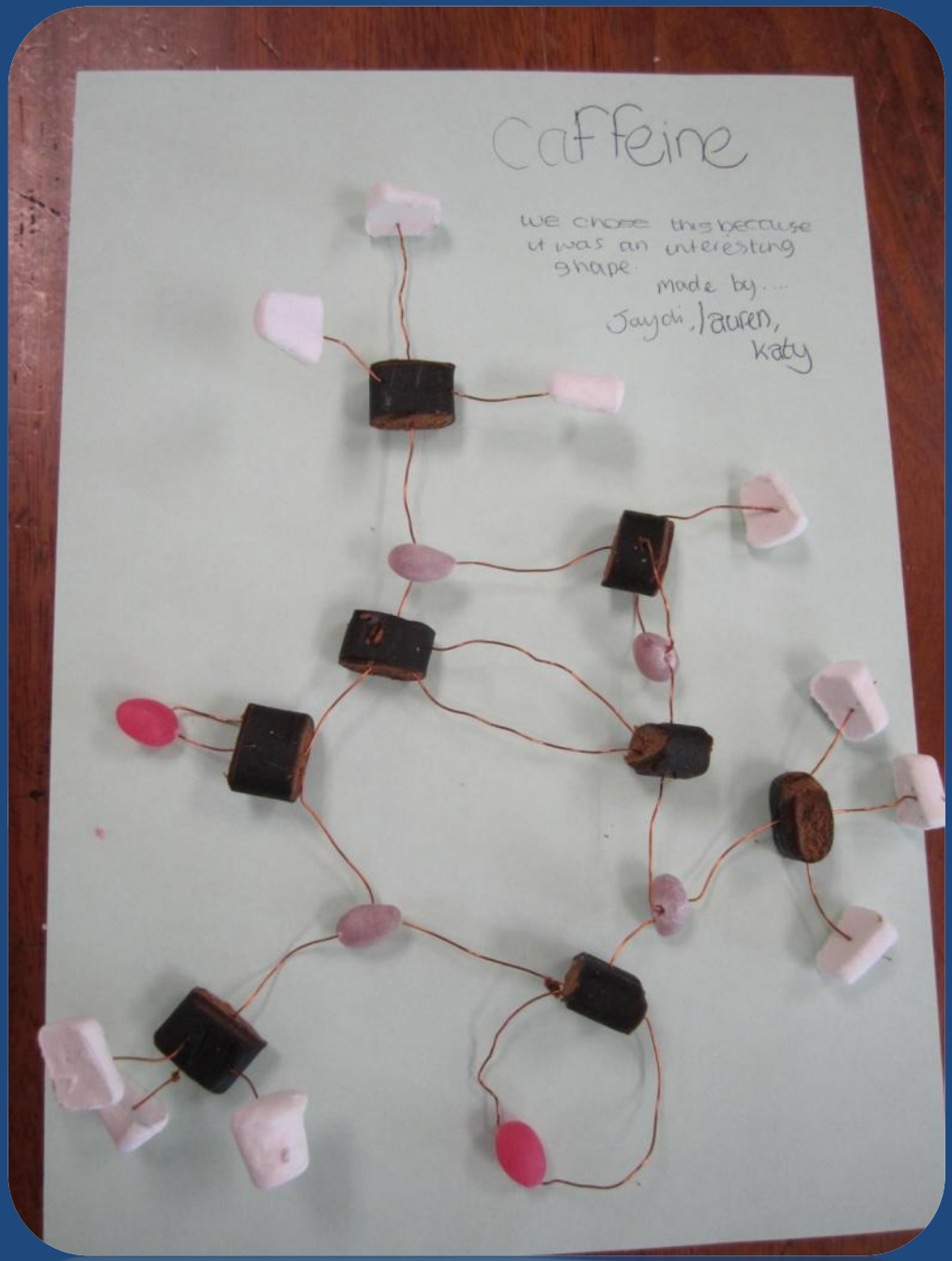
ASPIRIN



"We chose Aspirin because we thought it was a challenge, not many people did it. We thought our design was very structured and laid out."

Daisy Stoyle
Katie Taylor

- Fitzharrys School -



CAFFEINE

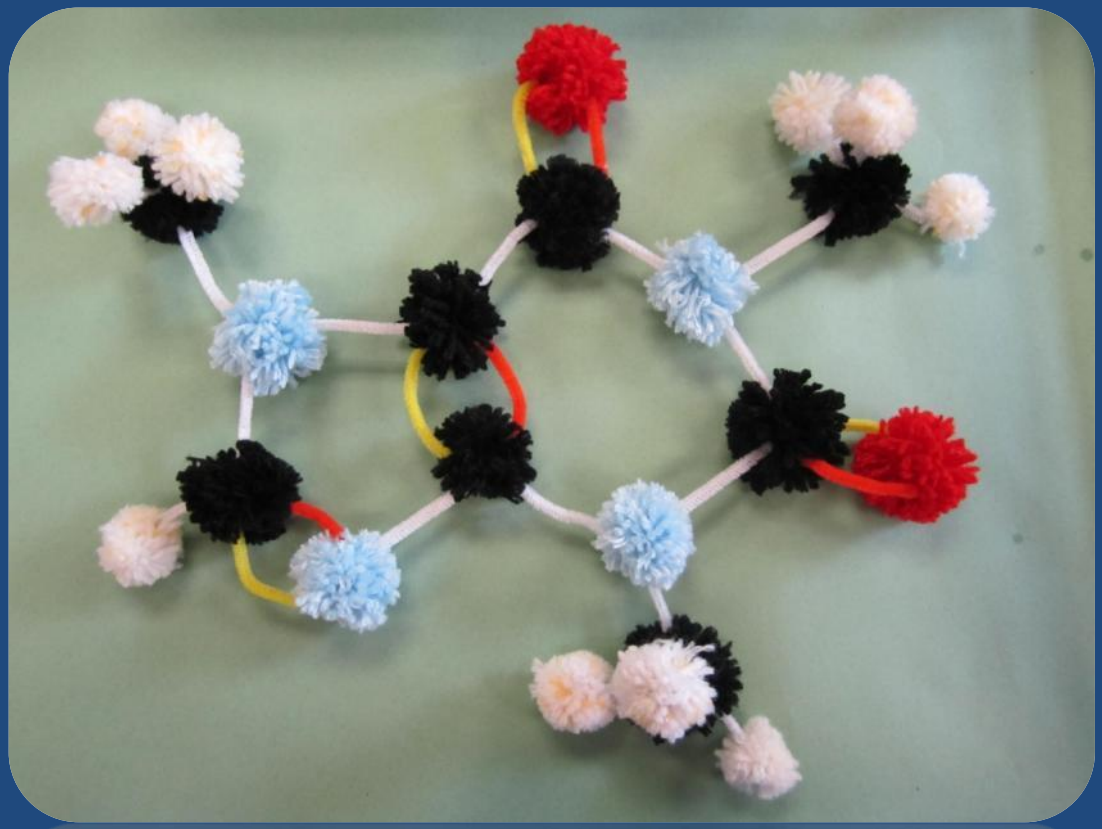
"We chose this because it was an interesting shape."

Jaydi
Lauren
Katy

- Didcot Girls' School -

CAFFEINE

2nd

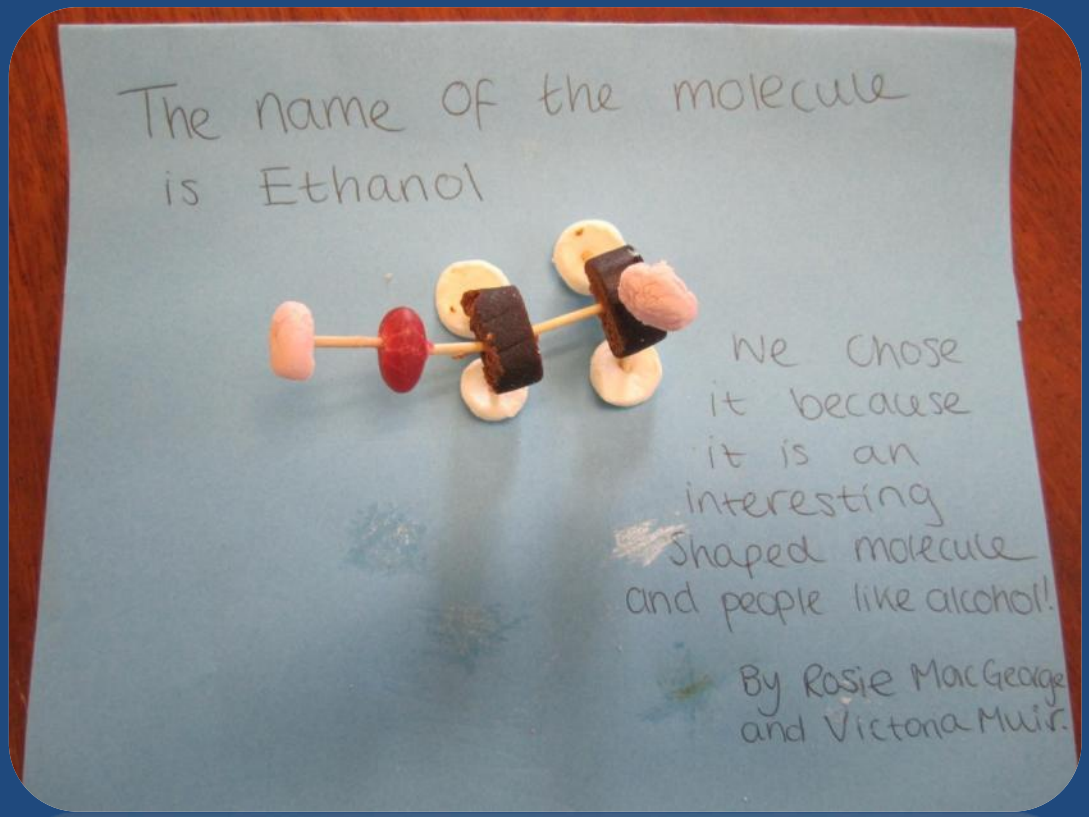


"$C_8H_{10}N_4O_2$: we chose the caffeine molecule because we love coffee and coke!"

Chloe Winterbourne
Sharon Gaffka
Rebecca Mathews
Liane Wilson

- Didcot Girls' School -

ETHANOL



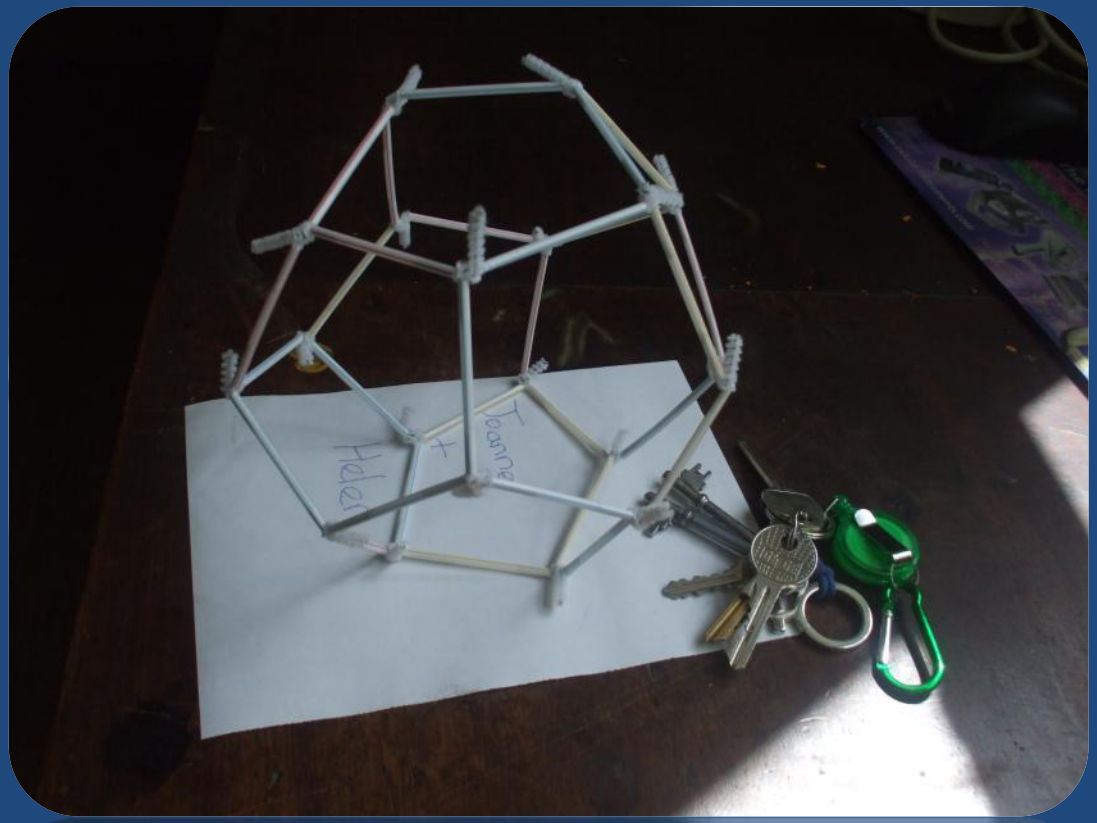
"We chose it because it is an interesting shaped molecule and people like alcohol."

Rosie MacGeorge
Victoria Muir

- Didcot Girls' School -

FULLERENES

1st

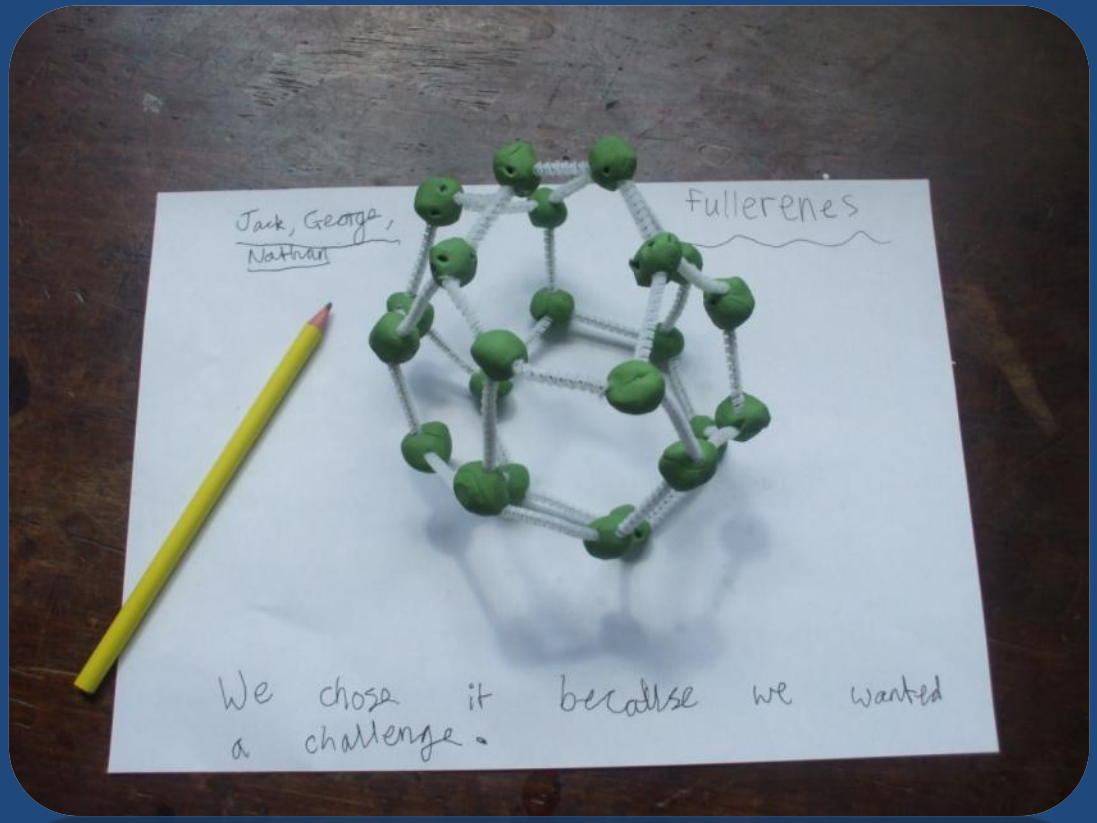


"We chose fullerene because it is an unusual structure and is used in nanotechnology."

Joanne McCabe
Helen Wiggins

- Fitzharrys School -

FULLERENES

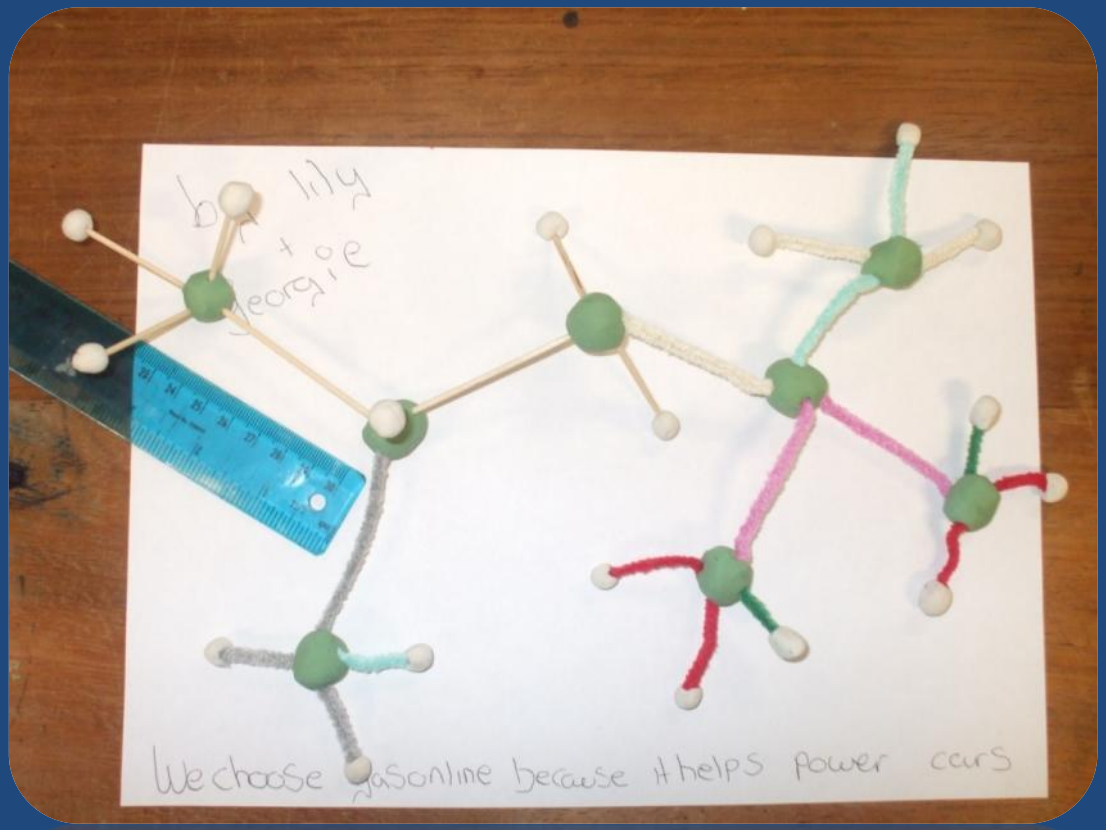


"We chose it because we wanted a challenge."

Jack Murray-Bedding
George Goodenough
Nathan Major

- Fitzharrys School -

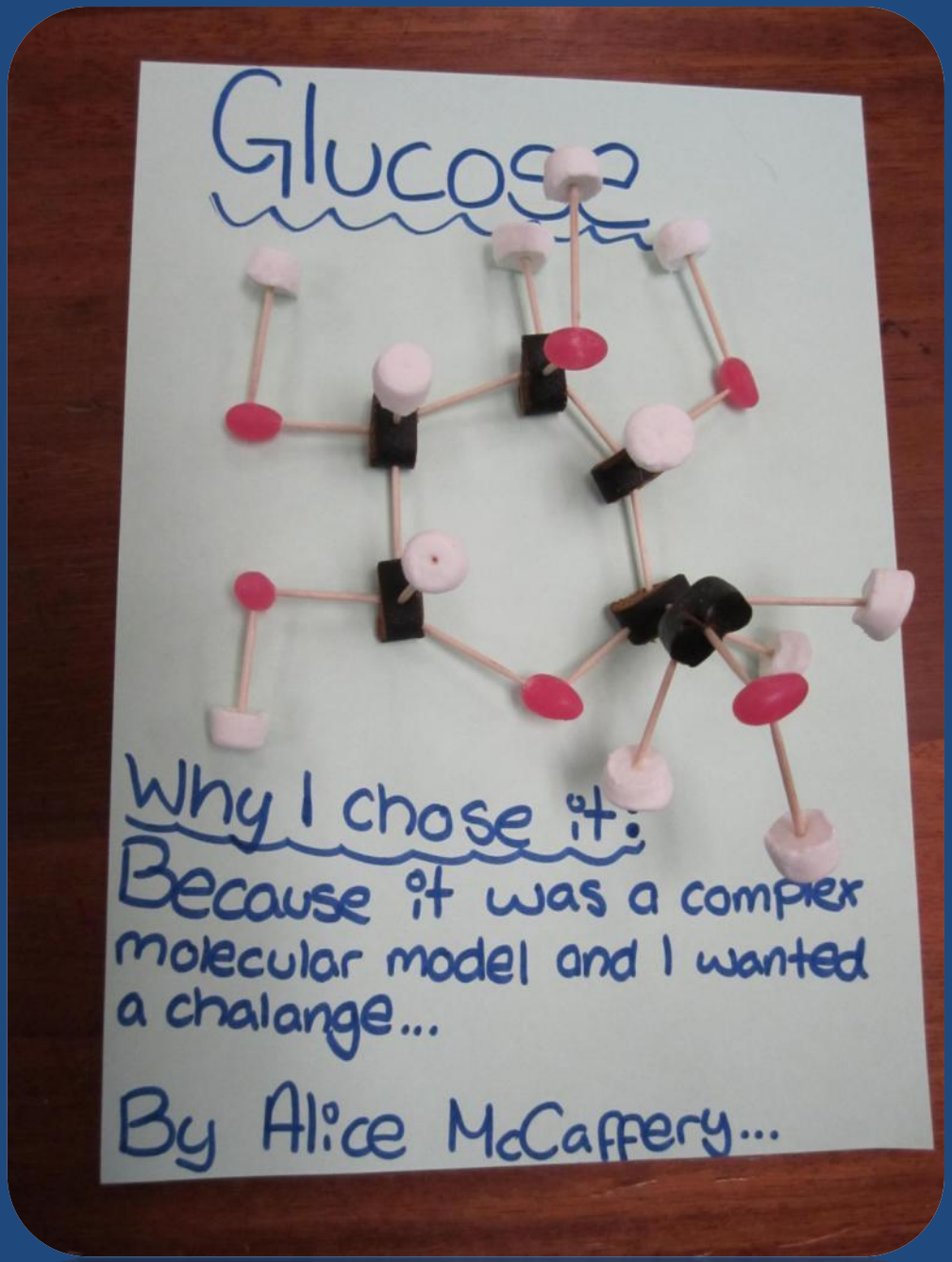
GASOLINE



"We chose gasoline because it helps power cars."

Lily Croney
Georgie Nutt

- Fitzharrys School -

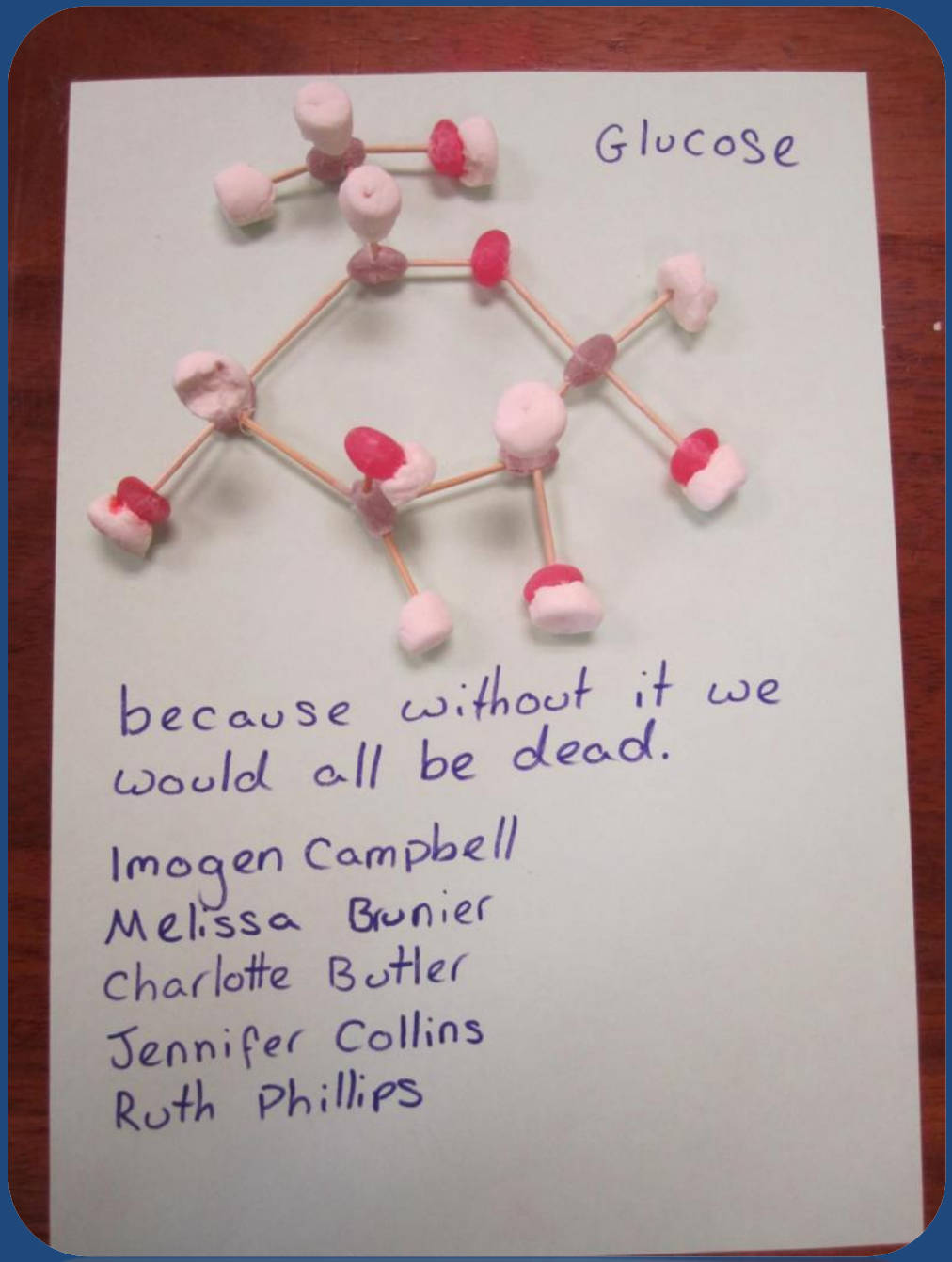


GLUCOSE

"Why I chose it: because it was a complex molecular model and I wanted a challenge…"

Alice McCaffery

- Didcot Girls' School -



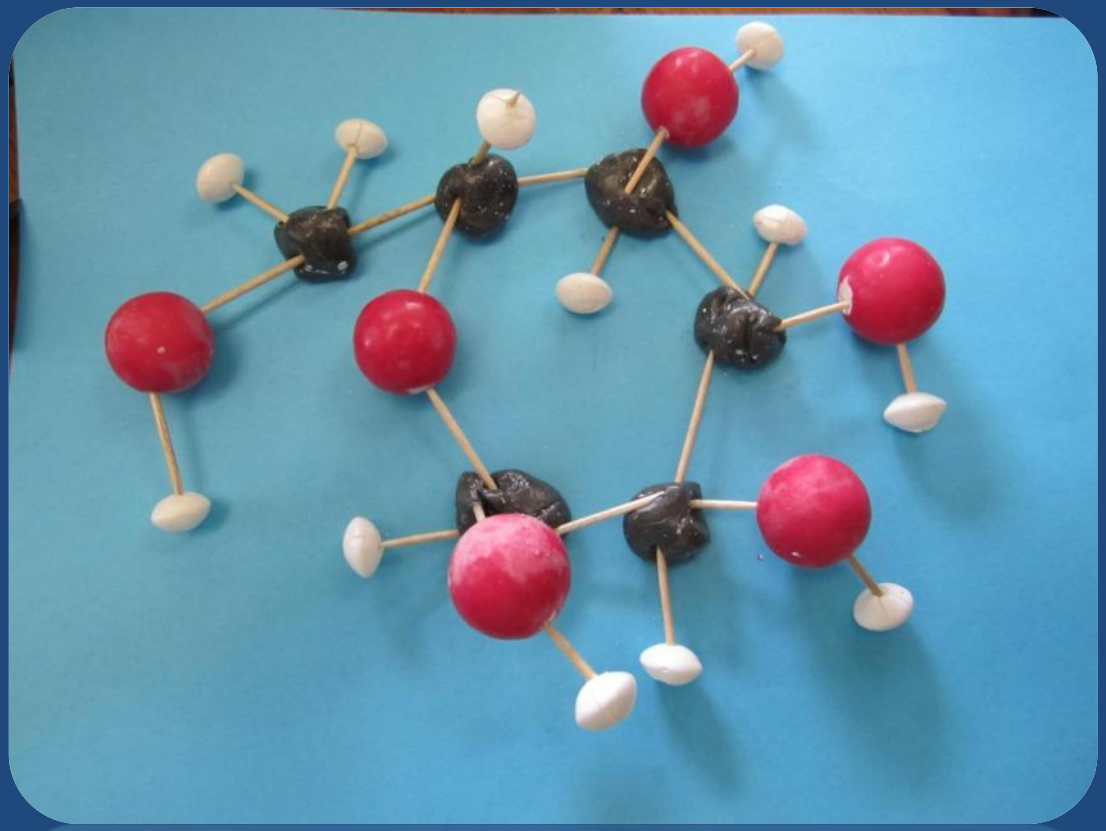
GLUCOSE

"Because without it we would all be dead."

Imogen Campbell
Melissa Brunier
Charlotte Butler
Jennifer Collins
Ruth Phillips

- Didcot Girls' School -

GLUCOSE

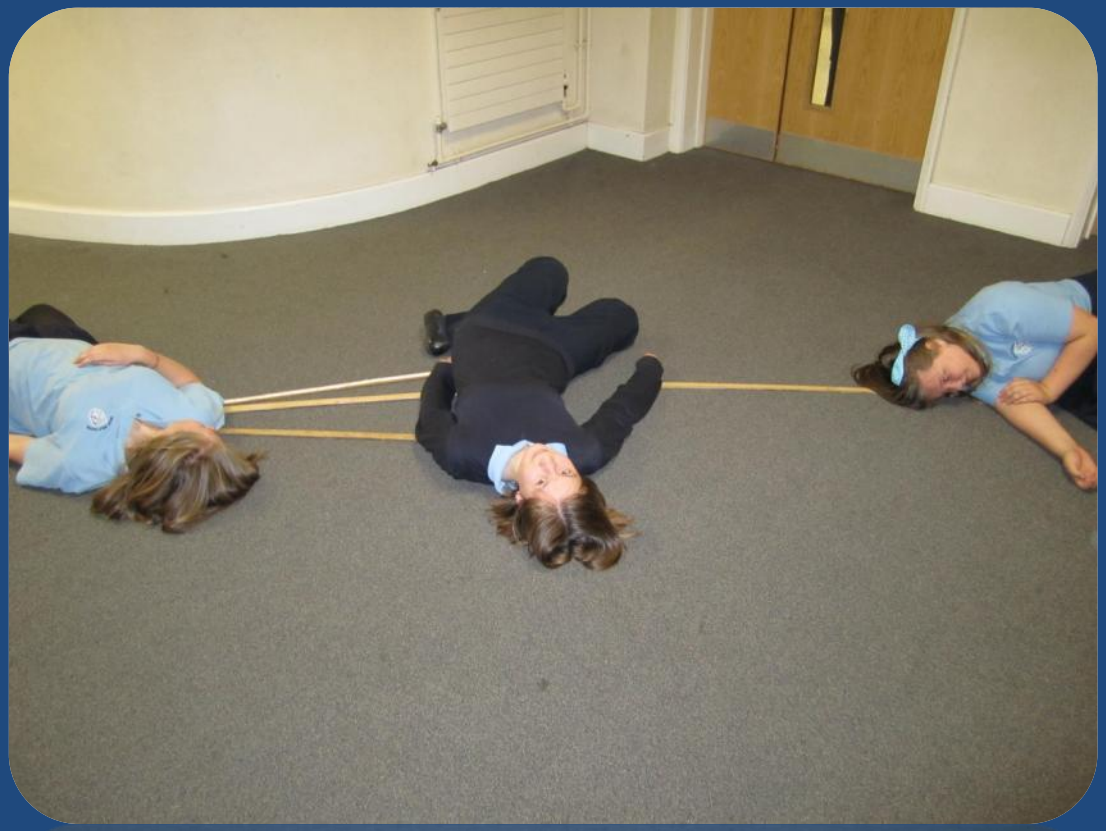


"We chose glucose because it has an interesting and complicated molecular structure and it is a relevant substance as it is commonly used, e.g. in sweets, which is why we made our model out of them."

Lydia
Laura
Katy
Tabitha

- Didcot Girls' School -

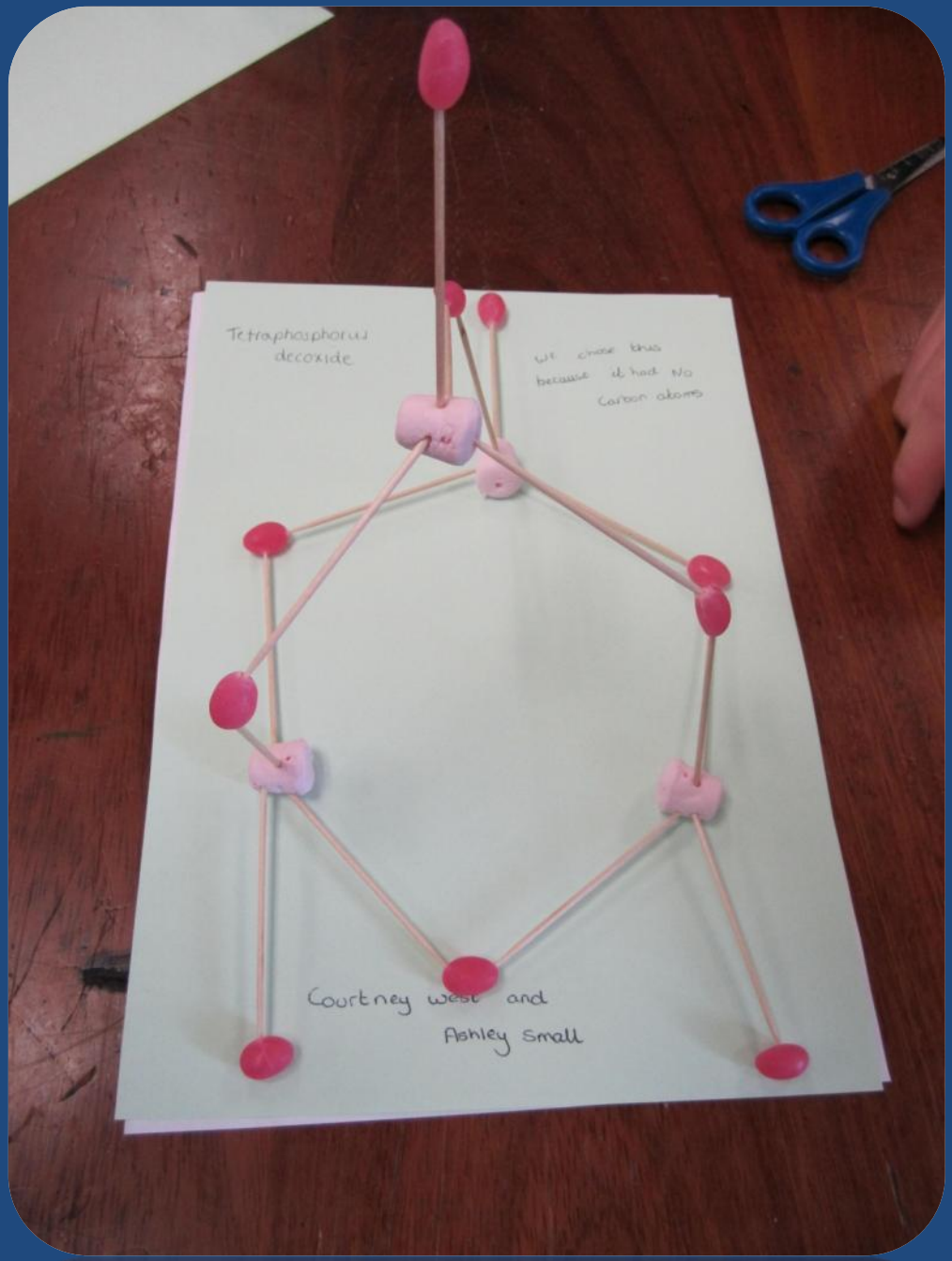
HYDROGEN CYANIDE



"Hydrogen cyanide because chemistry is our favourite way to kill time."

Bryony Jones
Penny Keevil
Imogen Campbell
Katherine Phillips

- Didcot Girls' School -



PHOSPHORUS DECAOXIDE, P_4O_{10}

"We chose this because it had no carbon atoms."

Courtney West
Ashley Small

- Didcot Girls' School -

RIBOSE

3rd

"We chose Ribose because it's part of our DNA, which makes all of us who we are."

Jenna Field
Amy Mock

- Didcot Girls' School -

Many Thanks

from the 'RSC Thames Valley Local Section Committee' to:

- **All the students** who entered this years competition

- **The teachers** for supporting your students to enter:

Lynn Nickerson (Didcot Girls' School)
Esther Garcia-Rodriguez (Fitzharrys School)
S. Field (Kendrick School)

- **Cochranes** – for providing the competition prizes.