

Discover Primary Science Plaque Award Science 2022



Our Garden







We visited Fota Wildlife Park



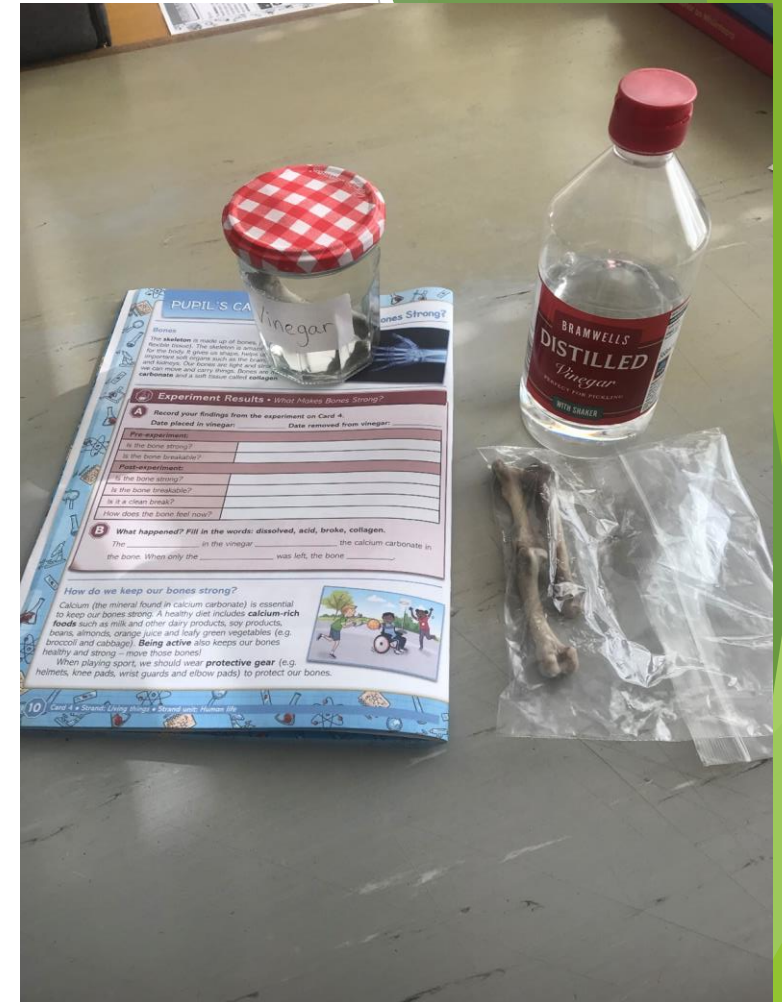




Energy and Forces Friction



What makes bones strong?

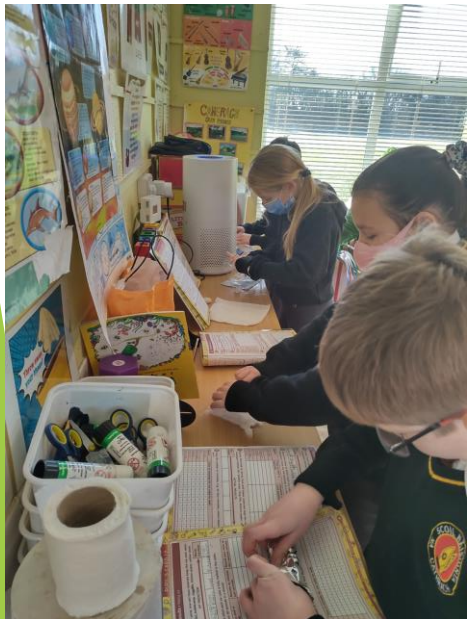


Materials Surface Tension



Materials

Insulator/Conductor



Temperature



Sound



Investigation Sheets

Experiment Results • Design a Boat

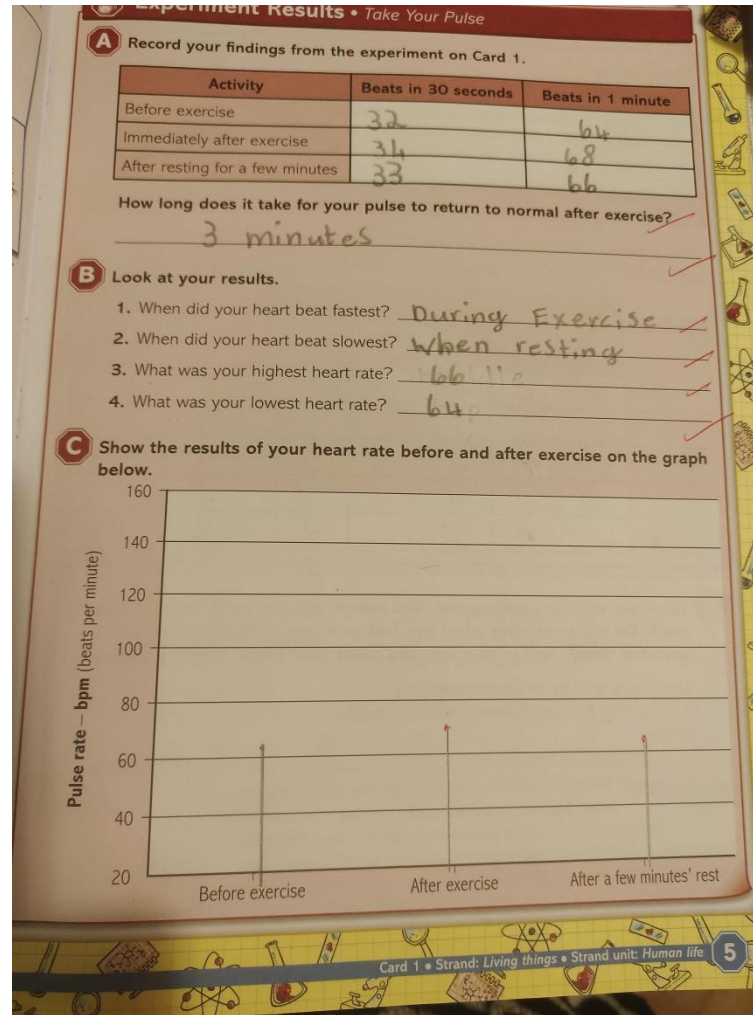
Record your findings from the experiment on Card 16.

Object	Prediction	Result
5c coin	Sink	Sink
€1 coin	float	Sink
Pencil	float	float
Apple	sink	float
Orange	sink	float
Elastic band	float	sink
Paper clip	float	sink
Cork	float	float
Leaf	float	float
Stick	float	float
Lego block	float	sink
Small stone	sink	sink

Card 16 • Strand: Materials • Strand unit: Properties and Uses of Materials

Card 16 • Strand: Materials • Strand unit: Properties and Uses of Materials

Solids	Liquids	Gases
chocolate	ice cream	oxygen
chocolate	milk	nitrogen
book	lemonade	carbon dioxide
ice cube	honey	helium
football	coffee	
play dough	paint	
rubber band	water	
table		
sugar		



leave a gap in the table is a conductor or an insulator. Test each material by inserting it into the gap to complete the circuit and find out if it conducts electricity.

Material	My prediction	Conductor	Insulator
Nail	Insulator	✓	✗
Pencil	Insulator	✓	✗
Key	conductor	✓	✗
Metal spoon	conductor	✓	✗
Plastic spoon	Insulator	✗	✓
Kitchen foil	Insulator	✓	✗
5c coin	Insulator	✗	✓
10c coin	conductor	✓	✗
Plastic ruler	Insulator	✗	✓
Paper clip	conductor	✓	✗

Science!

Have you

PUPIL'S CARD 12

Experiment Results • Melting Ice

A Predict, from best to worst, how well these materials keep the ice cool: wool, newspaper, kitchen foil, bubble wrap, cling film, kitchen paper, cotton wool.

MY PREDICTION

Material	Time to melt in seconds	Renome as minutes and seconds	Round your time to the nearest minute
Cotton wool	35	0:35	0:35
Wool	35	0:35	0:35
Kitchen paper	12	0:12	0:12
Newspaper	12	0:12	0:12
Kitchen foil	12	0:12	0:12
Bubble wrap	12	0:12	0:12
Cling film	11	0:11	0:11

B Record the times at which each ice cube is fully melted in the table. Remember, there are 60 seconds in a minute.

ACTUAL RESULTS

Material	Time in minutes for ice cube to melt
Cotton wool	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Wool	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Kitchen paper	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Newspaper	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Kitchen foil	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Bubble wrap	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
Cling film	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

C Record, from best to worst, how well these materials kept the ice cool: wool, newspaper, kitchen foil, bubble wrap, cling film, kitchen paper, cotton wool.

D Colour the number of minutes, e.g. for four minutes, colour squares 1, 2, 3 and 4.

Card 12 • Strand: Living things • Strand unit: Human life

Third Class

Investigating planning sheet

Question - what do you want to find out?
how power full the acid
in Coca cola

What equipment do you need?
5 coins
cups
Coca cola
tooth brush
kitchen paper

Prediction - what do you think will happen?
the acid from coke will
cling the coins

How will you make it a fair test? What
factor will you keep the same?
Use the same cups
Same coke
Same brush

Third Class

Investigating planning sheet

Question - what do you want to find out?
What is surface tension and how it
works.

What equipment do you need?
A bowl of water, tissue paper and a
pin.

Prediction - what do you think will happen?
The pin will sink.

How will you make it a fair test? What
factor will you keep the same?
Keep the same pin throughout the
experiment.

Third Class

Investigating planning sheet

Question - what do you want to find out?
What factor are you going to change?
Nothing.
size of pin

What are you going to observe (look at)?
The pin floating.

Results table

I put some water in a bowl,
I placed a piece of tissue paper gently
on top of the water and then gently placed
the pin on top of the tissue paper,
I gently pushed the paper away from under
the pin and watched the pin float.

Conclusion

What did you find out?
how surface tension works.

Were your predictions correct?
No because it did work.

By Billie

What factor are you going to change? *None.*

What are you going to observe (look at)? *will look out the center of the bottles*

Results table *a tornado was formed in the middle.*

Conclusion
What did you find out? *I found out about air pressure.*

Were your predictions correct? *yes.*

Jamie Third Class

Investigating planning sheet

Question - what do you want to find out?
what happens with the water?

What equipment do you need?
*2 empty bottles
1 Bornado maker
water.*

Prediction - what do you think will happen?
a tornado will be made.

How will you make it a fair test? What factor will you keep the same?
The same size bottles.

Third Class

Investigating planning sheet

Question - what do you want to find out?
Water gravity

What equipment do you need?
Water, My red kief food dye and other items

Prediction - what do you think will happen?
Some items will float and some will sink

How will you make it a fair test? What factor will you keep the same?
The water level

Third Class

Investigating planning sheet

Question - what do you want to find out?
What is surface tension and how it works.

What equipment do you need?
A bowl of water, tissue paper and a pin.

Prediction - what do you think will happen?
The pin will sink.

How will you make it a fair test? What factor will you keep the same?
Keep the same pin throughout the experiment.

Third Class

Investigating planning sheet

Question - what do you want to find out?
is air pressure outside the bottle greater than inside

What equipment do you need?
- A water bottle
- drawing pin
- water

Prediction - what do you think will happen?
I think that when I open the bottle it will come out

How will you make it a fair test? What factor will you keep the same?
The holes in the bottle

Third Class

Investigating planning sheet

Question - what do you want to find out?
is air pressure outside the bottle greater than inside

What equipment do you need?
- A water bottle
- drawing pin
- water

Prediction - what do you think will happen?
I think that when I open the bottle it will come out

How will you make it a fair test? What factor will you keep the same?
The holes in the bottle

What factor are you going to change? *None*

What are you going to observe (look at)? *look at the center of the bottles*

Results table *a tornado was formed in the middle.*

Conclusion
What did you find out? *I found out about air pressure.*

Were your predictions correct? *yes.*

Jamie Third Class

Investigating planning sheet

Question - what do you want to find out?
what happens with the water?

What equipment do you need?
*2 empty bottles
1 tornado maker
water.*

Prediction - what do you think will happen?
a tornado will be made.

How will you make it a fair test? What factor will you keep the same?
the same size bottles.

Third Class

Investigating planning sheet

Question - what do you want to find out?
What gravity

What equipment do you need?
Water, red food dye and other items

Prediction - what do you think will happen?
Some items will float and some will not

How will you make it a fair test? What factor will you keep the same?
the water level

TOP Third Class

Investigating planning sheet

Question - what do you want to find out?
if the flame blows out or not

What equipment do you need?
*a plastic bottle scissors
a plastic bag rubber band
and a candle and some matches*

Prediction - what do you think will happen?
The flame will move fastly

How will you make it a fair test? What factor will you keep the same?
I'm going to keep everything the same except the type of bag that you're supposed to



Space Week Events

1. Space Art Competition
2. Women in Space Video
3. Magnetic Sun and Space Weather Information Event
4. Create a Straw Rocket
5. *Telescope* Demonstration

Space Week Events - Teachers

1. Space Art Competition - Create a Space Themed Drawing
2. Women in Space - Show video
<https://videos.space.com/m/SKnhn7IZ/women-in-space-here-are-the-first-female-trailblazers?list=9wzCTV4g>
3. Magnetic Sun and Space weather – Find out more
www.esero.ie / <https://esero.ie/wp-content/uploads/2021/09/MagneticSunandSpaceWeather-primary-Space-Week-Resource-min.pdf>
Earth Speedometer experiment.
https://www.sfi.ie/engagement/discover-primary-science-and-maths/discover-centres/resources/energy-forces/05_earthspeedometer.pdf
4. Create a Straw Rocket -
<https://www.jpl.nasa.gov/edu/teach/activity/straw-rocket/>
5. Telescope Demonstration

Space Week







Science Week



Virtual Science Shows
Creating Our Future
Experiments
Science Art
Science History

Science Week

<https://www.sfi.ie/engagement/science-week/>

Virtual Science Shows

See gmail account

- Asian Elephants, Dublin Zoo
- Science All Around
- Giraffes Fota
- Let's Find Out RTE
- Ocean Challenge
- This is Science Múinteoir John
- Pick your Brain Science Quiz

Creating Our Future

[Science Week Resources](#) | [Engagement](#) | [Science Foundation Ireland \(sfi.ie\)](#)

Some resources about science and our future.

Experiments

- Living Things

[The Wonder of Weeds](#) | [National Gallery of Ireland](#)

Test your reaction to changes of colour and give you feedback on your speed:

<https://www.topendsports.com/testing/reaction-timer.htm>

- Materials

[Instant Ice Cream activity - Science Museum Group Learning](#)

[Science of Candy: Monster Mallows activity](#) | [Exploratorium](#)

[Microsoft Word - Dissolving TC \(scoilnet.ie\)](#)

[27059.docx \(live.com\)](#)

[Dancing Raisins - The Bubble Lifter](#) | [Science Experiment \(stevespanglerscience.com\)](#)

- Light

[Disappearing Color Wheel](#) | [Science Experiment \(stevespanglerscience.com\)](#)

Science Week



