

Competition details

There are 18 different molecules to be found in businesses around Kirkwall - how many can you spot? Each molecule is associated with the type of business in which it is on display.

To help you, we've given approximate locations (red dots) of the molecules on the map below.



**Orkney International Science Festival
Family Day
Saturday, 3rd September, 10am - 4pm,
Kirkwall Grammar School.**

Come along to KGS and have a go at making your own molecule. There will be plenty to choose from including some of the molecules that make up the molecule hunt. You can have your picture taken with your chosen molecule.

For more information about science events at the Orkney International Science Festival see:
www.oisf.org

Win your own Molecules Model kit

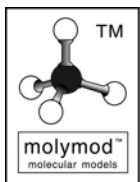
The first correct entry out of the hat on 7th September will win a Molymod molecule kit to allow you to build your own molecular models. This molecule kit was kindly donated by Philip Spring of Molymod.

**Entry forms must be returned to the
Tourist Information Office before noon on
Wednesday 7th September.**

List of businesses taking part:

Aurora	Orkney Tech Ltd
CLAN Cancer Support	Ortak Galleries
Cycle Orkney	Sheila Fleet
Judith Glue	Starlings
Kirkness & Gorie	Sutherlands Pharmacy
Longship Clothing	Orcadian Bookshop
Longship Jewellery	The Orkney Hotel
No 25	Visit Scotland TIC
Orkney Television	W Hourston
Enterprise	

Supported by the following sponsors:



www.molymod.com

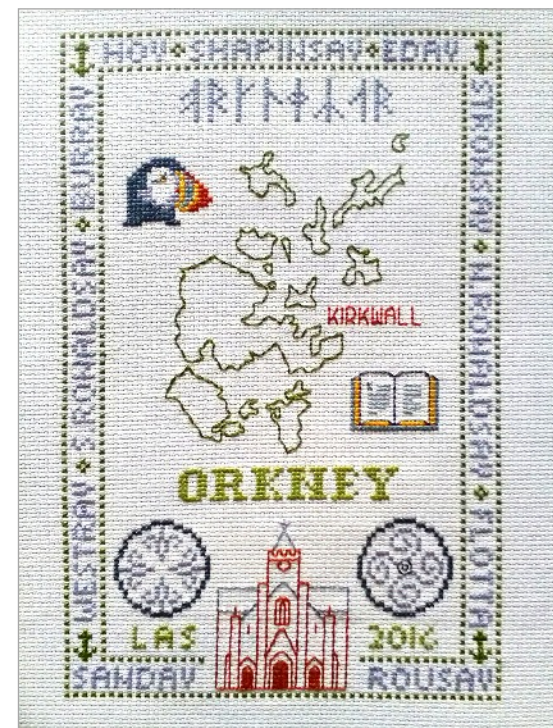


Printed by herald printshop
Kirkwall 875039

Kirkwall Molecule Hunt Competition

1st - 7th September 2022

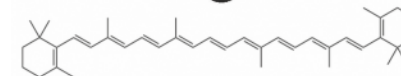
**In association with
Orkney International
Science Festival**



Cross stitch provided by Lorna Smith

Brought to you by:

Science@Cwaben



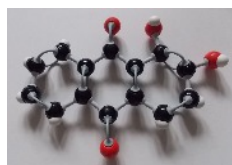
science@cwaben.org.uk
Tel. 07753 383754

Can you find all of these molecules?

The businesses where they are located are listed overleaf.

Answer Sheet

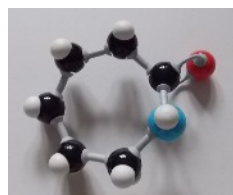
Give the location of each molecule:



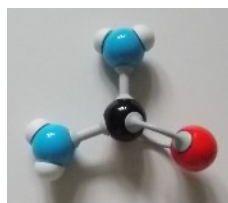
↑1. **Alizarin**
An organic pigment



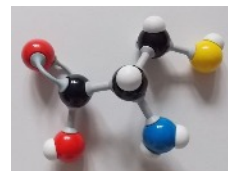
↑2. **Arylide Yellow**
Basis of azo pigments



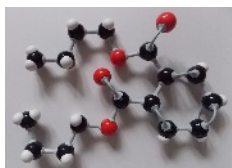
↑3. **Caprolactam**
Monomer used to make nylon 6



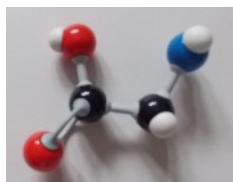
↑4. **Carbamide**
Used in gold refining



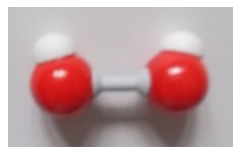
↑5. **Cysteine**
An amino acid found in wool



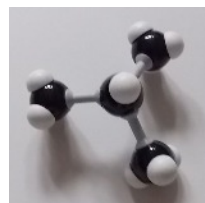
↑6. **Dibutyl Phthalate**
Used in leather manufacture



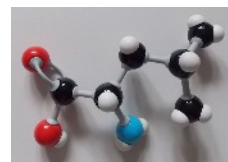
↑7. **Glycine**
Amino acid found in cheese



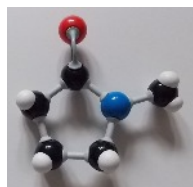
↑8. **Hydrogen Peroxide**
Used in wool bleaching



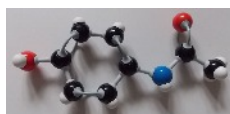
↑9. **Isobutane**
Used in refrigerators



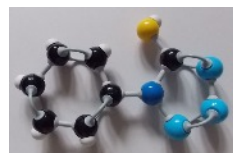
↑10. **Leucine**
An amino acid found in wool



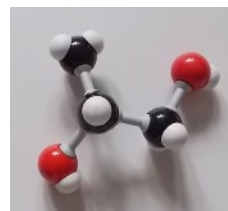
↑11. **N-Methyl Pyrrolidone**
Used in lithium battery manufacture



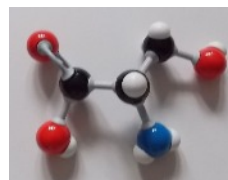
↑12. **Paracetamol**
Analgesic



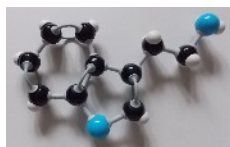
↑13. **Phenyl-mercaptotetrazole**
Reduces tarnish on silver



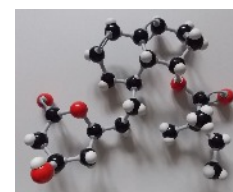
↑14. **Propylene Glycol**
Used in acrylic paint



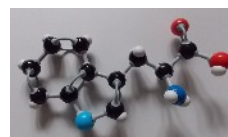
↑15. **Serine**
Amino acid found in wool



↑16. **Serotonin**
Often used in jewellery designs



↑17. **Simvastatin**
Pharmaceutical



↑18. **Tryptophan**
Amino acid found in cheese

KEY TO COLOURS OF ATOMS IN MOLECULES

- | | | | |
|--------------------------|--------------------------|---------------------------|-------------------------|
| ● Black atoms = Carbon | ○ White atoms = Hydrogen | ● Red atoms = Oxygen | ● Blue atoms = Nitrogen |
| ● Yellow atoms = Sulphur | ● Green atoms = Chlorine | ● Orange atoms = Fluorine | |

- | | |
|---------|----------|
| 1. | 10. |
| 2. | 11. |
| 3. | 12. |
| 4. | 13. |
| 5. | 14. |
| 6. | 15. |
| 7. | 16. |
| 8. | 17. |
| 9. | 18. |

Please hand in your completed answer sheet to Visit Scotland before noon on Wednesday, 7th September.

Your Name:

Address:

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Telephone Number:

E-mail Address:

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Any comments about the Molecule Hunt?

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