

Cut and stick your own molecule! Create your own fragment of a Graphene sheet by following the steps below.

You will need:  
This sheet, printed out  
Pencil  
Red paper  
Black paper  
Scissors  
Glue  
Ruler

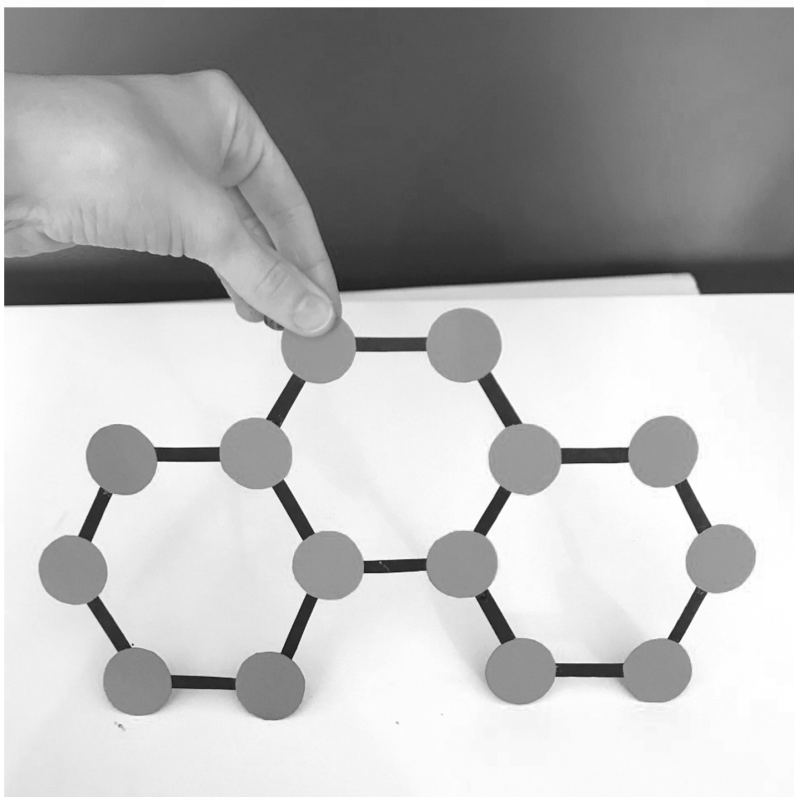
**NOTE** - Use the image above as a guide when cutting and gluing your molecule together, but make sure not to glue it directly onto this paper guide.

1. Cut out 14 circles from red paper, these will be your carbon atoms! The circles should be about the same size (about the size of a 1p coin).
2. Cut out 16 thin strips of black paper, all the same size (4cm works well). These will be your chemical bonds, which will connect your red carbon atoms together to make your molecule!
3. Lay out the circles and strips on top of the drawing above, and glue the strips on top of the circles. Make sure not to glue your molecule directly onto this sheet.
4. Your molecule might look a bit shabby with lots of glue showing and overlapping paper but fear not, just lift your molecule off this sheet and turn it over to reveal your carbon-based MOLECULE!

#### About GRAPHENE

Graphene is a super-flat sheet of hexagons made from carbon atoms. It is so thin that it is see-through, but it's bendier than rubber and stronger than steel. In fact it's the strongest material known to human beings. You can read more about graphene and amazing Nano materials in the book 'NANO The spectacular science of the very (very) small' written by Dr Jess Wade & illustrated by Melissa Castrillon.

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Here is an example of a finished paper Graphene sheet fragment! Once you've finished cutting & sticking your very own, why not try and add more fragments together, then join them up to make a 3D Carbon nano tube!

Download the 'Make your own Carbon nano tube' Worksheet for a step by step guide.

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