

Name: _____

Date: _____

Science 9
DNA Model

What to do?

Develop your own model of DNA. Follow the instructions below. The completed model should look like a ladder. Matched bases form the rungs. Besides being shaped like a ladder, a **real DNA** molecule would be twisted like a **spiral staircase**.

Materials:

Paper bases, scissors, glue sticks, 6 different colours and one legal length blank paper

Safety:

Be careful when handling sharp or pointed objects

Procedure:

1. Colour each nucleotide molecule the same colour (for example: all adenines will be pink). You will use 4 different colours!!!!
2. Colour all sugars the same colour and all phosphates the same colour.
3. Cut out the nucleotide models, cut only on the solid lines
4. Fit **12 nucleotide molecules** together in a puzzle-like fashion to form a row. Make sure that they are randomly assorted. You must use **3 of each base!**
5. The above arrangement represents the left half of the ladder, now complete the right side of the DNA ladder by matching the shapes of the rungs. It may be necessary to turn the molecules upside down in order to join certain base combinations.





