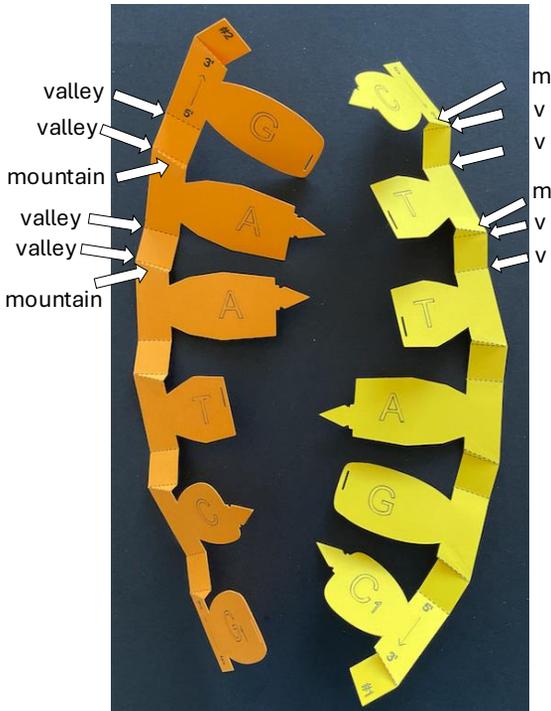


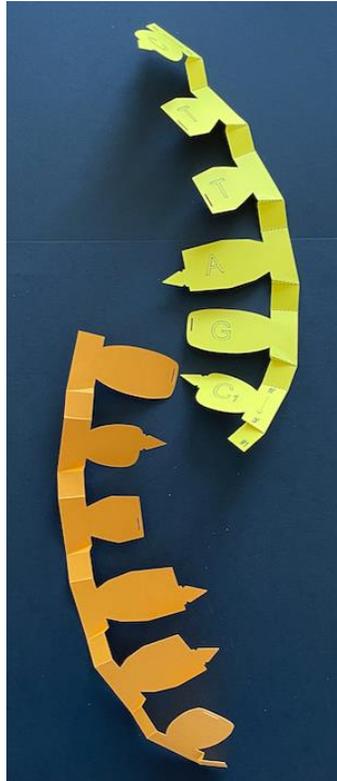
Assembling simple DNA models

1) fold and pair two strands

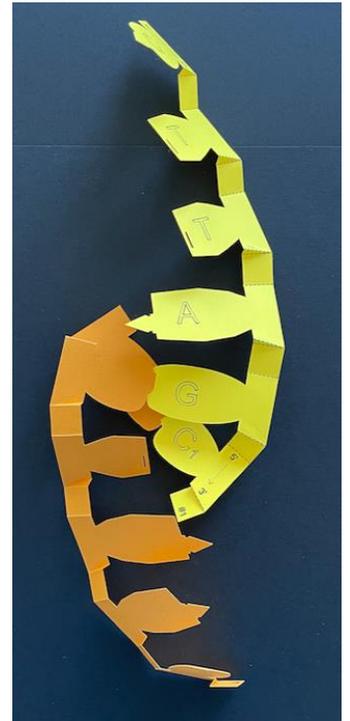
- horizontal dashed / scored lines are valley folds; diagonal ones are mountain folds
- If the demo situation is too chaotic to think, use the numbers on the 3' ends: strands #1 and #2 pair; #3 and #4 pair
- Use the 5' to 3' arrows to align them in antiparallel orientation (or just pair the two bases with subscript 1)



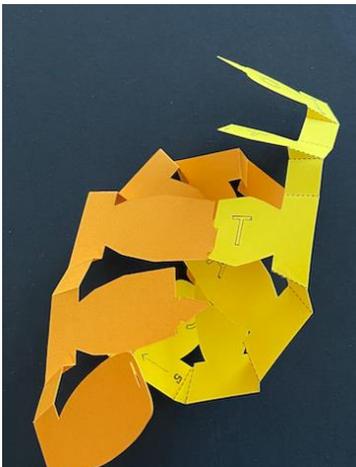
2) flip one strand over



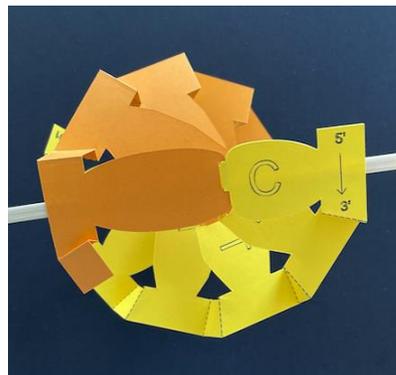
3) start pairing bases



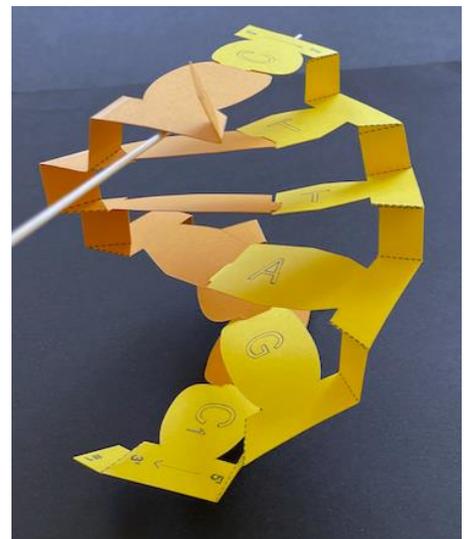
4) zip up your double helix



5) tape a coffee stirrer under the top base pair for extra stability

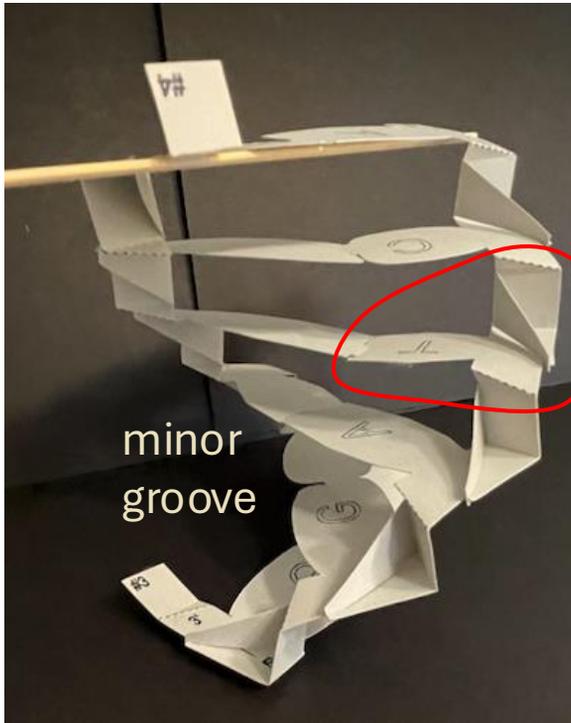


Finished duplex, side view:



Assembled DNA with buttresses

Note the buttresses all face the “minor” groove of the paired DNA



The buttress folds across the phosphodiester backbone and hooks onto it
(gray dashes = valley folds; cyan dashes = mountain)

