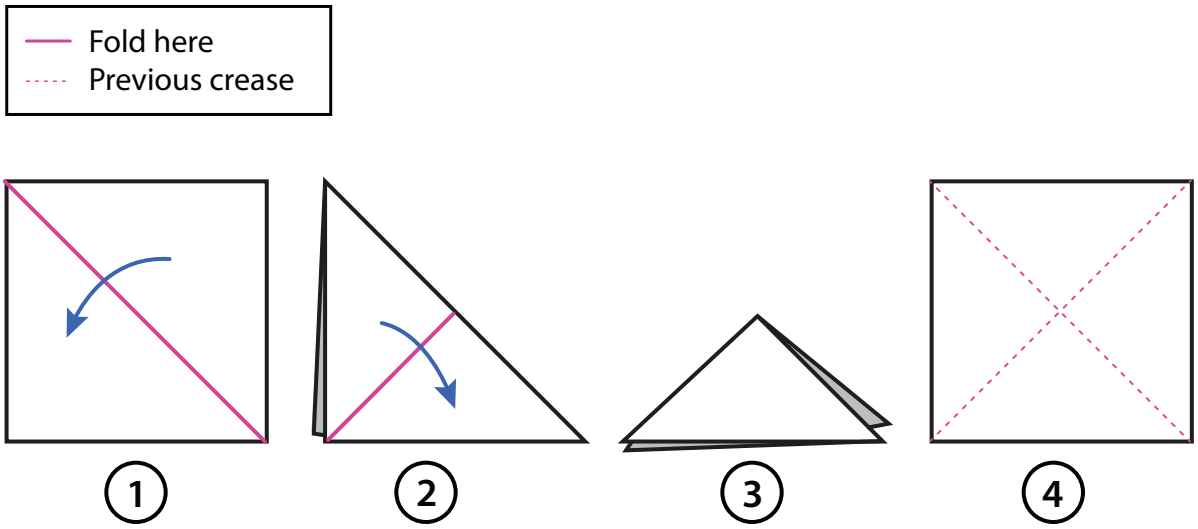
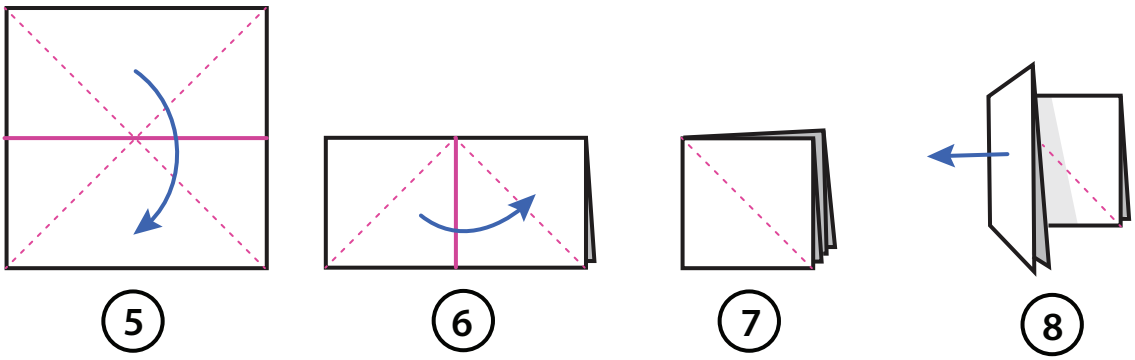
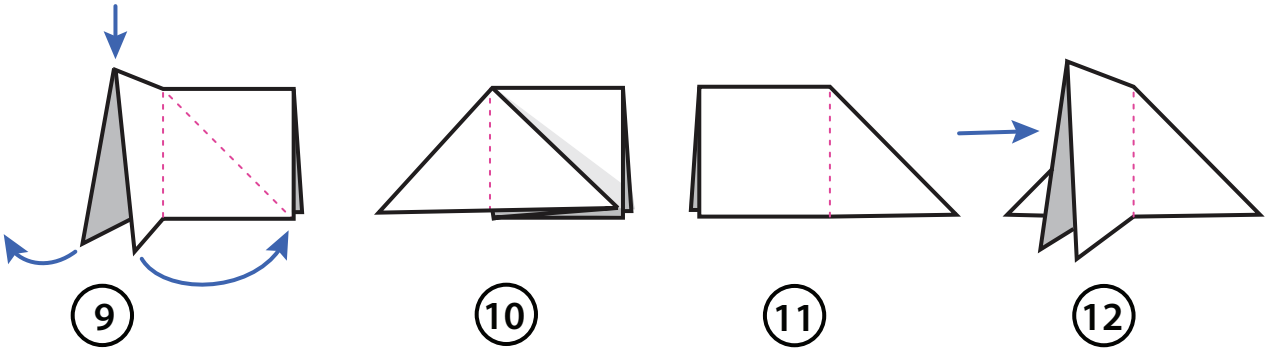
Paper Protein Activity
Part 1: Amino Acids



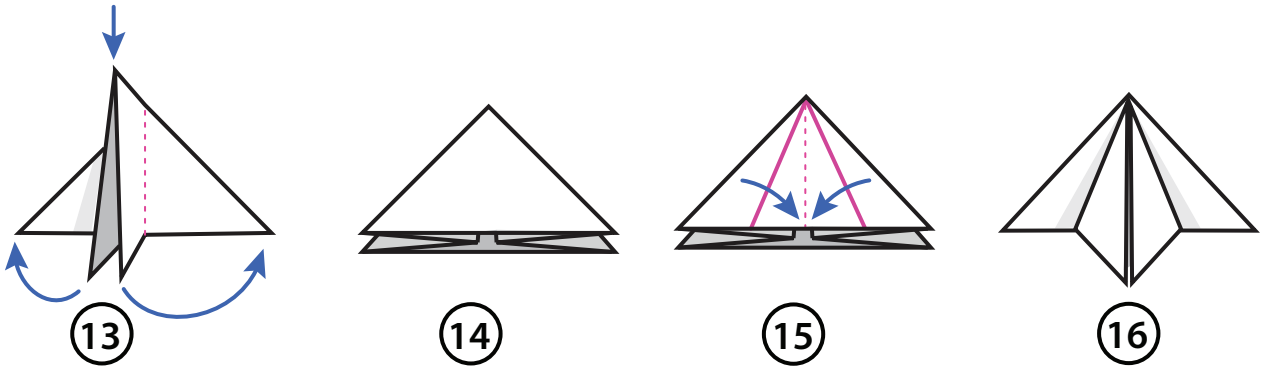
1. Fold a single piece of paper in half diagonally
2. Fold the paper in half diagonally again
3. Your folded paper should look like this
4. Unfold the paper



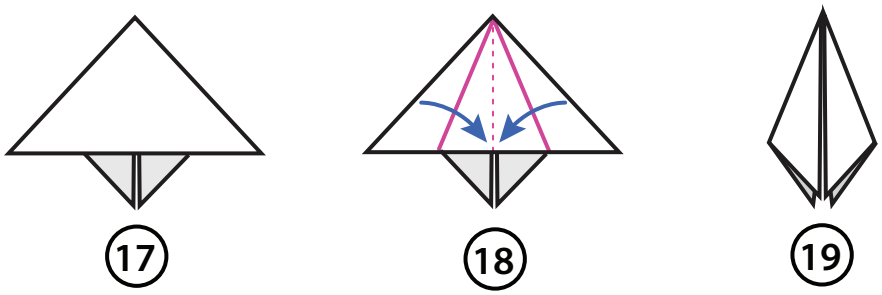
5. Fold the paper in half
6. Fold the paper in half again
7. Your folded paper should look like this
8. Unfold the top layer of the square halfway



9. Open the top layer of the square and flatten it into a triangle, using the existing creases
10. Your folded paper should look like this
11. Flip it over
12. Unfold the top layer halfway



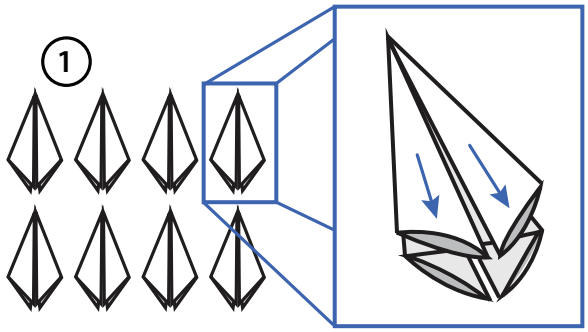
13. Open the top layer and flatten it into a triangle, using the existing creases
14. Your folded paper should look like this
15. Fold the edges of the top layer only into the center line
16. Your folded paper should look like this



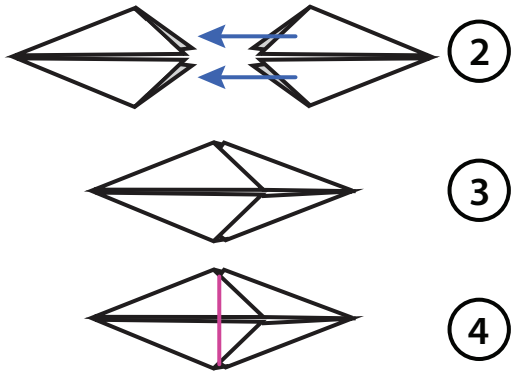
17. Flip it over
18. Fold the edges of the top layer only into the center line
19. You've now completed one amino acid. Repeat these steps with another piece of paper until you've created a total of eight amino acids.

And, that's it!
Once you have amino acids, you are ready to move onto **Part 2** to make the protein channel.

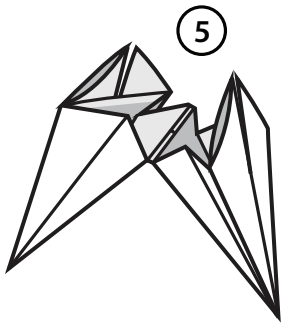
Paper Protein Activity
Part 2: Protein Channel



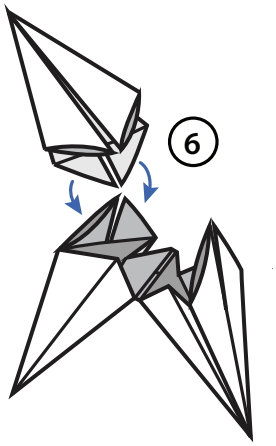
1. Make eight amino acids. Each amino acid has four tabs that open up into a pocket



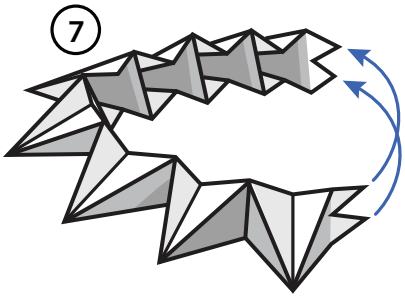
2. Place two amino acids so the open ends face each other. Insert the top tabs of one amino acid into the tabs of the other
3. Your paper should look like this
4. Fold your paper shape in half
5. Your amino acid should look like this



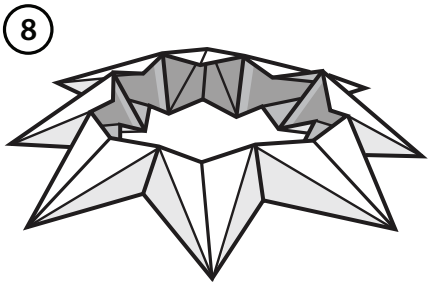
5. Your amino acid should look like this



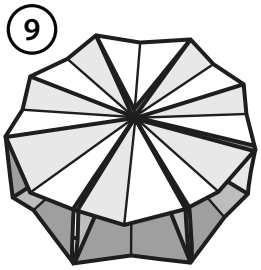
6. Continue adding units using step 2-4



7. When you are finished, you should have a string



8. Your protein channel is complete, and should look like this



9. Your protein model can change shapes by flipping the point to the center, all at once