

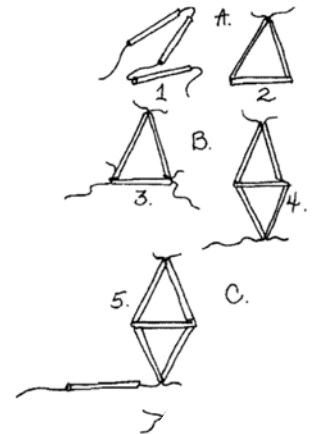
Name: _____ Date _____ Period _____

BERNOULLI WAS A "BIRD-BRAIN"

1. Making the Frame

For each tetrahedron frame, you will need: 6 straws, one piece of string 1 meter in length, and 2 pieces of string 40 cm in length.

- Thread the meter length of string through three straws and tie them into a triangle.
- Tie each of the shorter strings to a corner of the triangle. Slip a straw onto each string and tightly tie the two strings together.



2. Cutting out the gores

The sections which make up the coverings of the kite, called gores, can all be cut from one piece of tissue paper.

- Fold a full sheet of tissue paper in half.
- Lay the pattern on the folded tissue paper with the broken line along the fold and trace the pattern onto the tissue paper.
- Cut the tissue paper with scissors all around the pattern except along the fold. **DO NOT CUT ALONG THE FOLD!**



3. Mounting the Gores onto the Frame

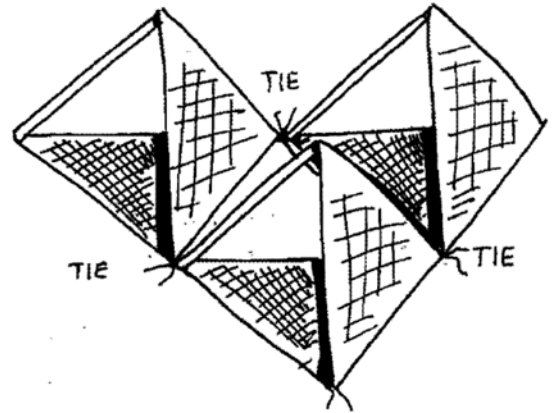
- On the back side of the gore put your name in the middle of the gore using pencil.
- Cover both of the tissue paper flaps lying outside the straw frame with glue. Fold the flaps over the straws to glue them down inside the triangle.

4. Completing the tetrahedron

- Slip a third straw onto one of the loose ends of string.
- Tie the end of the string to the B point of the triangle that has nothing yet tied to it. This should complete your tetrahedron frame.

5. **Putting the kite together**

- a. Arrange three of the tetrahedra in a triangle as shown. Be sure that all the gores are facing the same direction.
- b. Using three pieces of string, tightly tie the three tetrahedra together at the three places where they touch each other.
- c. Place the fourth tetrahedron above the triangle formed by the first three.
- d. Using three more pieces of string, tie the fourth tetrahedron in place.



6. **Getting Ready to Fly**

Cut off all left over strings. Tie a string for flying at the "head" of one of the lower "birds," or tetrahedra.

