



## **Build a Miniature Geodesic Dome – Instructions:**

- 1. Cut 30 straws 8.2 cm long. With permanent marker, mark a long line on these straws. The long line indicates that these are "A" straws.
- 2. Cut 35 straws 9.3 cm long. These are "B" straws.
- 3. Follow the diagram in Figure DX.X to connect your straws. Use small pieces of tape to connect your straws at the corners.
- 4. Begin by taping together a circle of 10 "B" straws to form the base of the geodesic dome.
- 5. Tape one "A" straw and one "B" straw to each corner (where the 10 "B" straws are joined together) of the base.
- 6. Connect the tips of two "A" straws together to form a triangle. Repeat for all the other "A" straws. You should have 5 triangles.
- 7. Repeat step 6, using "B" straws.
- 8. Tape 10 "A" straws together to make another ring of straws. Tape the corners of this ring to the triangle tips you made in steps 6 and 7.
- 9. At the five corners that have only "A" straws, connect 1 more "A" straw. At the 5 corners that are connected to "B" straws, connect 2 more "B" straws.
- 10. Bring the "B" straws on either side of an "A" straw together. Three straws will be touching. Tape them together. Repeat this five more times around the dome.
- 11. Tape 5 "A" straws together to form a star. Tape a "B" straw between each point of the star, forming a pentagon with a star inside.
- 12. Tape the corners of the pentagon to the remaining open corners of the dome.

