Geometry Concepts

Geometric drawing introductory activity

**Read the following instructions to your partner. If you encounter a word that neither of you know ask for help. Your partner must do exactly as you read in order to create a picture that matches everyone else’s.**

Step 1 – Draw a line segment near the middle of the paper that is 4 inches long and parallel to the top edge of the paper.

Step 2 – Draw two small dots at each end of the segment.

Step 3 – Label the left end of the segment, A and the right end of the segment, B.

Step 4 – Find the midpoint of the segment with the ruler.

Step 5 – Mark the midpoint with a small dot and label it, M.

**Now switch papers. You will now draw and your partner will instruct.**

Step 6 – Fold Point A over so it is directly over point B and crease the paper. **What do you notice?**

Step 7 – Draw a segment from point A to the crease that is exactly 2 ½ inches long.

Step 8 – Draw a small dot at the intersection of this segment and the crease and label it C.

Step 9 – Connect points B and C.

**With your partner, name the shape that you created with as much detail as possible. The more information, the better.**

**Switch papers again with your partner.**

Step 10 – Mark a point anywhere on the crease above point M and label it D.

Step 11 – Measure the distance from point D to point A.

Step 12 – Measure the distance from point D to point B.

**What do you notice?**

Extension

If you and your partner need more challenge…

Step 13 – Draw a segment between points D and M. Find the measure of angle DMB with a protractor.

**What would you speculate about angle DMA?**

Step 14 – Find the measures of angles BAC, ACB, and CBA.

Step 15 – Find the sum of the three angles.

**What’s up?**