**Authentic Task #1: Modeling Intersections**

**Points, Lines, and Planes**

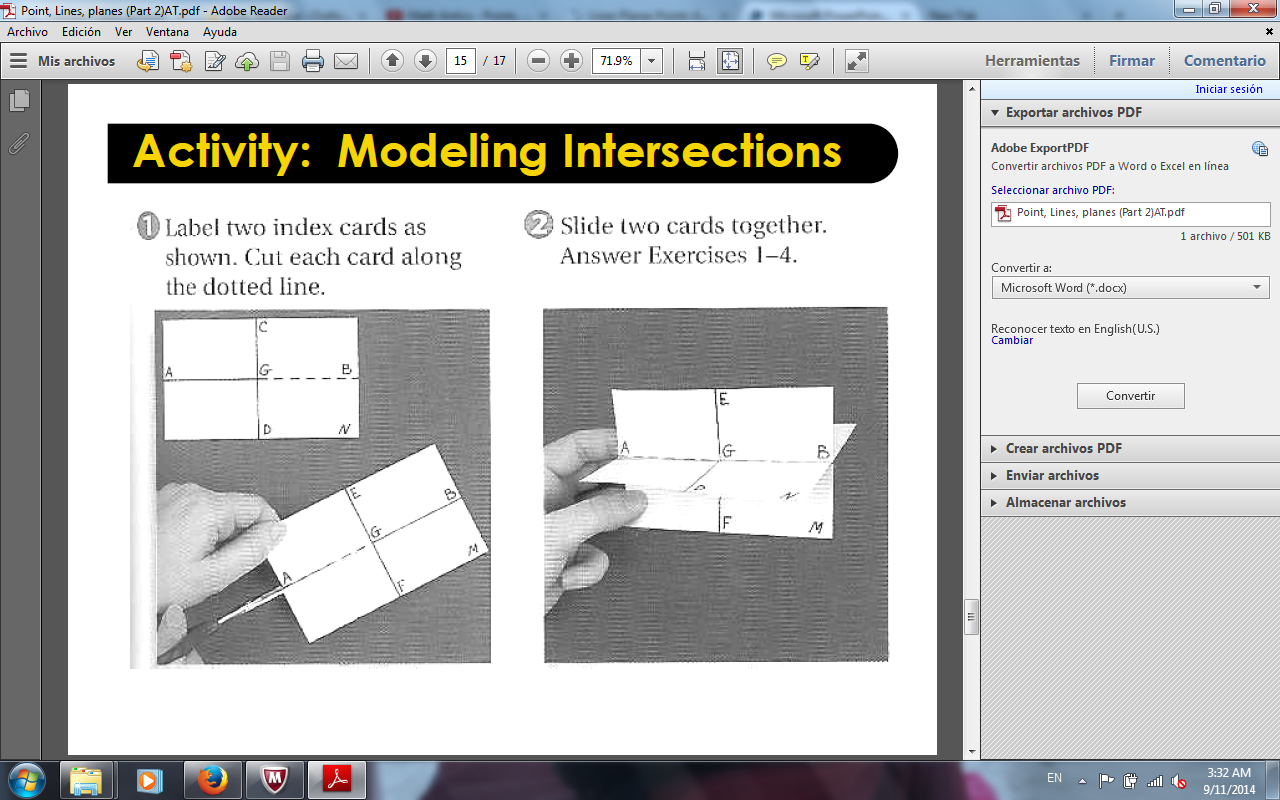
**DIRECTIONS:**  For this ***Authentic Task***, you must work together in your groups. Each group member will be responsible to provide their own work, **even though everyone is working together.** Each answer although similar will be *authentic.*

**Setup**

Your teacher will give you a pair of scissors and two index cards—every member of your group must have 2 index cards.

**The Task**

Work in your groups to answer the following questions about the points, lines, and planes using the model you have created..



**Activity Questions**

1. When the cards are **NOT** together:
2. What is the intersection of and ?
3. What is the intersection of and ?
4. With the cards together, what is the intersection of and ?
5. What is the intersection of planes M and N?
6. Are and coplanar? Please explain your answer.

**SUMMARY QUESTIONS:**

1. How far does a line go in each direction?
2. How far does a plan go in each direction?
3. How many directions does a ray have?
4. What is it called when points are on the same line?
5. What is it called when points are on the same plane?

**Total Number of Point: \_\_\_\_\_\_\_\_\_\_**

**Authentic Task Grade:\_\_\_\_\_\_\_\_\_\_\_\_ (Please see Rubric—each student will get a copy)**

**Teacher Comments:**