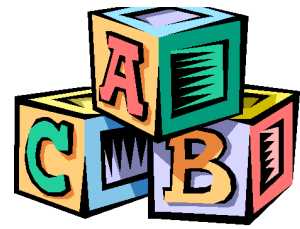


**Decide if each statement is always, sometimes, or never true  
Talk with someone and make sure you agree. Make sure you both figure out what all the vocabulary means. Be prepared to justify each answer with a drawing or a physical representation.**

1	Two lines are coplanar	Always Sometimes Never
2	A line intersects a plane in one point	Always Sometimes Never
3	Two planes intersect in a line	Always Sometimes Never
4	Two planes intersect in a single point	Always Sometimes Never
5	Planes have an edge	Always Sometimes Never
6	Two points are collinear	Always Sometimes Never
7	Three points are collinear	Always Sometimes Never
8	Three points are coplanar	Always Sometimes Never
9	Four points are coplanar	Always Sometimes Never
10	A point is a small, filled circle	Always Sometimes Never

# Math I Quarter 1

## Chapter 7 Project – Spatial Reasoning



As we begin our study of tools of geometry you are quickly introduced to three basic objects: points, lines, and planes. In this project you will deepen your understanding of these objects through visualization, real-world exploration, and sketches. You will also practice spatial reasoning and drawing, which will be extremely important skills throughout the rest of our course.

Earlier you worked with your group to decide whether a series of statements were **always**, **sometimes**, or **never** true. Now that you've got your answers, it's up to your group to convince me they're correct! Here's how it works:

Choose 7 out of the ten statements.

- (1) For each statement that you think is **always** true, you must find a real world example and capture it in a photo. (The photo may be downloaded from the Internet, but make sure to include the link.)
- (2) For each statement that you think is **sometimes** true, you must have **two** photos: one that shows an example of the statement being true and another that shows an example of the statement being false.
- (3) For each statement that you think is **never** true, you must provide a written explanation of your reasoning (in complete sentences). You may use drawings in your explanations.

Once you have your photos it's time to organize them into an album that you can turn in to me. Your album must be organized according to these guidelines: (a Google Slides template is provided for you in Google Classroom)

For each statement, start by writing the statement and whether your group thinks it is **always**, **sometimes**, or **never** true. The next part should look like this:

<b>Left side:</b> Your photo	<b>Right side:</b> A drawing you create to show the important objects in the photo and how they relate. Name the objects using correct notation and write a sentence describing your picture.
------------------------------	---

Any statement that you think is **sometimes** true will have two photos. For a statement that is **never** true you will include your written explanation instead of a photograph.

### **Sample Timeline:**

Monday, October 2 - Complete Always/Sometimes/Never worksheet

Tuesday, October 3 – Find photos

Wednesday, October 4 – Group work day: put albums together

**Thursday, October 5 – Finishing touches: Albums due by end of class**

**Monday, October 23 – Albums viewed by classes**

# Project Score Sheet

You will turn this sheet in to Ms. Walczak

**Record group members' names. Put your name first:**

- Name
1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_

## Introductory Project - Rubric

There are 7 statements, each worth 10 points (which means the project is worth \_\_\_\_ points). Each statement will be graded as follows:

<b>Cover Page:</b> /3	
• contains statement	/1
• correctly identifies always/sometimes/never	/2
<b>Justification:</b> /7	
• contains photograph(s) representing the statement <b>OR</b> if statement is never true contains a clear written explanation	/3
• contains sketch and description	/3
• objects are named using correct notation	/1
<b>TOTAL:</b> /10	

Before turning it in, self-assess your own work in the rubric above for your overall product.

**You will also grade your group members with this scale:**

Please rate your own contribution to your group on this scale (circle one):

Contributed Very Little 1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Contributed a Great Deal

Please rate the contribution of each member of your group on the same scale:

Group Member Name: \_\_\_\_\_

Contributed Very Little 1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Contributed a Great Deal

Group Member Name: \_\_\_\_\_

Contributed Very Little 1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Contributed a Great Deal

Group Member Name: \_\_\_\_\_

Contributed Very Little 1-----2-----3-----4-----5-----6-----7-----8-----9-----10 Contributed a Great Deal

# CHAPTER 7 PROJECT

Record group members' names:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

1

<b>Cover Page: /3</b>	
• contains statement	/1
• correctly identifies always/sometimes/never	/2
<b>Justification: /7</b>	
• contains photograph(s) representing the statement <b>OR</b> if statement is never true contains a clear written explanation	/3
• contains sketch and description	/3
• objects are named using correct notation	/1
<b>TOTAL: /10</b>	

2

<b>Cover Page: /3</b>	
• contains statement	/1
• correctly identifies always/sometimes/never	/2
<b>Justification: /7</b>	
• contains photograph(s) representing the statement <b>OR</b> if statement is never true contains a clear written explanation	/3
• contains sketch and description	/3
• objects are named using correct notation	/1
<b>TOTAL: /10</b>	

3

<b>Cover Page: /3</b>	
• contains statement	/1
• correctly identifies always/sometimes/never	/2
<b>Justification: /7</b>	
• contains photograph(s) representing the statement <b>OR</b> if statement is never true contains a clear written explanation	/3
• contains sketch and description	/3
• objects are named using correct notation	/1
<b>TOTAL: /10</b>	

4

<b>Cover Page:</b> /3	
• contains statement	/1
• correctly identifies always/sometimes/never	/2
<b>Justification:</b> /7	
• contains photograph(s) representing the statement <b>OR</b> if statement is never true contains a clear written explanation	/3
• contains sketch and description	/3
• objects are named using correct notation	/1
<b>TOTAL:</b> /10	

5

<b>Cover Page:</b> /3	
• contains statement	/1
• correctly identifies always/sometimes/never	/2
<b>Justification:</b> /7	
• contains photograph(s) representing the statement <b>OR</b> if statement is never true contains a clear written explanation	/3
• contains sketch and description	/3
• objects are named using correct notation	/1
<b>TOTAL:</b> /10	

6

<b>Cover Page:</b> /3	
• contains statement	/1
• correctly identifies always/sometimes/never	/2
<b>Justification:</b> /7	
• contains photograph(s) representing the statement <b>OR</b> if statement is never true contains a clear written explanation	/3
• contains sketch and description	/3
• objects are named using correct notation	/1
<b>TOTAL:</b> /10	

7

<b>Cover Page:</b> /3	
• contains statement	/1
• correctly identifies always/sometimes/never	/2
<b>Justification:</b> /7	
• contains photograph(s) representing the statement <b>OR</b> if statement is never true contains a clear written explanation	/3
• contains sketch and description	/3
• objects are named using correct notation	/1
<b>TOTAL:</b> /10	

<b>OVERALL TOTAL:</b>	<b>/70</b>
-----------------------	------------

Name \_\_\_\_\_

## Project Viewing - Peer Feedback

Group Members:

What's one thing you thought was interesting from the presentation?

How could the presentation be improved?

Any additional comments?

Group Members:

What's one thing you thought was interesting from the presentation?

How could the presentation be improved?

Any additional comments?