Geometry Cooperative Learning Assignment

Grade 5
Time: 30 - 45 minutes per assignment
Group Members: _____

This is an ongoing Cooperative Learning assignment that you and your group will work on over several Math work periods.

<u>Academic Goals</u>: Each member of your group is to hand in their own copy of the groups' answers to the questions for each of the **3** assignment questions below.

<u>Social Goals:</u> Every time your groups meets to work on these lessons, each member must receive at least **2 √** for each of the social skills listed by the teacher. Social skills may include: Listening, Contributing, On Task, Quiet Voices, Reaching a Consensus, Discussing, Taking Turns

<u>Group and Individual Tasks:</u>

1. Take turns reading the assignment questions.
2. As a group, discuss and reach a consensus on how to complete each assignment activity and question.
3. Each member hands in their own copy of the group's answers to the assignment questions, to the organizer.
4. All Members Checks that everyone understands the groups answers to the activities and questions.
5. After each session of working on the assignment questions, as a group, fill in the group evaluation and initial it to show you agree with the evaluation.

<u>Roles</u>

Organizer: - picks up all the group materials and returns them to the teacher
Presenter: - makes sure everyone contributes
            - presents their groups answers when asked
Writer: - fills in the names on the skills sheet
            - does the writing on the group evaluation
            - fills in the groups answers to the chart in assignment #3
Checker / Time Keeper: - keeps track of the time
            - checks that everyone has their name on their answer sheets and has completed all the assignment activities and questions before handing them to the organizer

<u>Evaluation</u>
<u>Academic Goals</u>
Assignment #1   /20
Assignment #2   /20
Assignment #3   /20
<u>Social Goals</u>   /15

TOTAL   **/75**

Assignment Sheet

Assignment #1

1. Using graph paper, draw an Equilateral Triangle.
2. Colour each of the angles blue.
3. Tear off each angle and fit them together – glue them into your Math notebook.
4. What discovery did you make?
5. Repeat 1 to 4 with each of the following triangles:
    - an isosceles triangle (colour angles red)
    - a scalene triangle (colour angles green)
    - a right triangle (colour angles yellow)
6. Compare your results.
7. What do you notice?
8. What angle does a straight line measure?
9. What is the sum of the angles of a triangle?

Assignment #2

1. Use a square piece of paper.
2. Fold it from one corner to its opposite corner
3. Cut along this fold. This is called a DIAGONAL
4. What shape is each part? Are they the same size?
5. Cut along the diagonal of each of the following:
    - rectangle
    - parallelogram
    - rhombus
    - regular hexagon
6. For each, is one part the same shape and size as the other?

Assignment #3

1. Draw 3, 4, 5, 6 sided plane polygons and name them.
2. Draw all diagonals for each shape.
3. Fill in the chart for each figure to show the following:
    - number of diagonals from each vertex
    - total number of diagonals
4. What is the relationship between the number of sides and the number of diagonals that can be drawn from any vertex of that polygon?
5. How many diagonals can be drawn from any vertex of a 10 sided polygon?

POLYGON	# OF DIAGNOLS FROM EACH VERTEX	TOTAL # OF DIAGNOLS
TRIANGLE		
QUADR1LATERAL		
PENTAGON		
HEXAGON		