**Connecticut Core Curriculum for High Schools - Geometry**

**Professional Development Plan**

|  |  |  |
| --- | --- | --- |
| **Unit 1: Coordinates & Transformations** | | |
| **Date:** | **Location:** | |
| **Presenters:** | | |
| **Schedule for the day: (3 hours suggested)**  **Start time:**  **End time:**  Introduction to Connecticut Core Geometry Curriculum (15 minutes)  Introduction to Unit 1 (15 minutes)  Whole Group Icebreaker Activity (15 minutes) (Activity 1.2.3 – Matching Pre-Images and Images, index cards needed)  Break (5 minutes)  Workshops: (Three workshops, total 110 minutes)  Break (5 minutes)  Closing session (15 minutes) | | |
| **Opening Session**  One presenter introduces the curriculum  One present introduces Unit 1  **Equipment and Materials**  CT\_Core\_Geometry\_Intro\_v3.pptx  Unit1\_PD\_overview\_v3.pptx  Geom\_Unit1\_plan\_v3.docx | | |
| **Workshop 1** | | **Presenter:**  **Room** |
| **Activities**  Investigation 3: Angles and Rotations  Activity 1.3.1 | | **Equipment and Materials:**  Paper and Pencil  Protractors and straightedge |
| **Workshop 2** | | **Presenter:**  **Room** |
| **Activities**  Investigation 5: Composition of Transformations  Activities 1.5.2 & 1.5.3 | | **Equipment and Materials**  Graph paper  Pencils and straightedge  Computers with GeoGebra |
| **Workshop 3** | | **Presenter:**  **Room** |
| **Activities**  Investigation 7: Isometries  Activity 1.7.2 | | **Equipment and Materials**  Computers with GeoGebra  GeoGebra file at:  <http://tube.geogebra.org/material/show/id/755053> |
| **Closing Session**  Discuss End-of-Unit Assessment with Assessment checklist.  Solicit Feedback from participants.  **Equipment and Materials:** | | |
| **Additional Comments:** Assuming this is the first of a series of workshops, some time at the beginning should be spent orienting the participants to the curriculum as a whole (Use the Overview Power Point for this purpose). Teachers should have some familiarity with transformations. We picked three activities that will probably be new. Investigation 3 introduces the way GeoGebra measures angles and that rotations may be greater than 180°. Investigation 5 introduces the operation of composition on transformations. Investigation 7 introduces the properties that are preserved by isometries, setting the stage for the transformational postulates used in Unit 2. | | |