Daily Lesson Plans for Tools of Geometry Unit

Tuesday, August 30, 2016

Objective: I can identify, describe, compare, sketch and name basic geometric terms.

* Make-up issues for quiz, absences
* New Unit Preview – Show Euclid’s Elements
* Demonstration – point, line, plane. Why undefined terms? Read BC Comic.
* Activity – create Geometry glossary, citing undefined terms, writing term, definition, sketch with labels.
* How to name lines, line segments and rays. Practice with students coming to boards.
* HW #3 – worksheet: 2-12, 21-27.
* View quizzes.

Thursday, September 1, 2016

Objective: I can identify, describe, compare, measure, sketch and name basic geometric terms.

* Make-up issues, materials, tardies
* Warm-up: popcorn questions about naming and comparing geometric terms. Intersection of planes, etc.
* Take a grade on HW #3 – 4 pts
* Share HW answers – questions
* ACTIVE – measure segments and angles
* Vocabulary writing – angle, measure of an angle, congruent angles, angle bisector (Get from neighbor)
* Practice – name angles
* Pass out HW #4 – worksheet on angles, do all of it. You may write on it.

Tuesday, September 6, 2016

Objective: I can identify, describe, compare, sketch and name basic geometric terms.

* Warm-up: use protractor to draw a 50 degree angle, a 90 degree angle, and a 7.3 cm segment.
* View student homework; make-up issues
* Activity on whiteboards: sketch this (you need to understand how to name angles)
* Apply: (on whiteboards) – label a composite sketch; interpret one
* Highlighter: what words can we use to write definitions?
* Activity: pp 49-50 – write definitions from sketches (finish for warm-up on Thursday)
* HW Quiz – 4 pts
* HW #5 – handout. Skip 1-8 at the bottom of the page. First 3 sketches need to be in notebook (not enough room on handout).

Quiz next week on Wednesday – 28 pts

Thursday, September 7, 2016

Objective: I can identify, describe, compare, sketch, and name basic geometric terms

* Take a grade on #5. Make-up issues.
* Catch up notebook. Glue in all assignments. Glue in small warm-up sheet and complete it!
* Share HW answers. Questions.
* Share warm-up answers.
* Definition writing activity. At the end of this you will now have in your vocab section behind the yellow header: right angle, acute angle, obtuse angle, complementary angles, supplementary angles, linear pair of angles, vertical angles
* Mind break: algebra -Use new definitions to write and solve equations.
* HW #6 – algebra worksheet.
* Quiz announcement.

Quiz Monday – like warm-ups – 18 pts

Monday, September 12, 2016

Objective: I can demonstrate mastery over naming, sketching and measuring basic terms of geometry.

* Whiteboard activity – sketch this, name these, measure these, draw angles.
* Sketch worksheet 1-10
* Take a grade on HW #6 – 4 pts
* Share HW, naming. Questions on homework.
* Naming angles worksheet: linear pairs, vertical angles, complementary, supplementary.
* Quiz 1.1-2 – 16 pts
* HW #7 – review naming and algebra handout, plus 1-6 on HW #5.

Wednesday, September 14, 2016

Objective: I can model, define, describe, name, sketch, and label polygons, classifying by numbers of sides, concave, convex, regular, equilateral, equiangular. I can identify vertical angles and linear pairs from a sketch.

* Make-up issues from quiz.
* Warm-up: matching worksheet, sketching worksheet
* Take a grade on HW #7 – 4 pts
* Share HW and warm-ups.
* Activity – identify angle pairs in a sketch
* Define in glossary – p 48 – parallel lines, perpendicular lines, skew lines. Sketch, name, label. Practice sketching from symbols.
* Modeling with yarn. Classroom polygon – sides, vertices, angles, number of sides, classify, concave or convex?
* Glossary activity – use handout to cut out terms, sketches, some definitions. Add to from pp 54-55 in textbook. Glue into vocab section.
* HW #8 – polygon vocabulary (instructions written on sheet).

Friday, September 16, 2016

Objective: I can use algebra and definitions to find unknowns. I understand the concept of points, lines, planes, segments, rays and how to name them and sketch them.

* Video – math antics – points, lines, planes
* Take a grade on HW #8 – 4 pts
* Worksheet – add to matching, add to sketching.
* Check worksheet. Check HW (finish Tuesday)
* Sketch types of triangles based on their definitions.
* Gallery walk – algebra for angle bisector, midpoint, complementary, supplementary, and adjacent angles.
* Go over answers.
* HW #9 – review.

Tuesday, September 20, 2016

Objective: I can use algebra and definitions to find unknowns in sketches. I can name planes, lines, rays, segments, and angles.

* Warm-up: (all through picture taking) – 5 algebra problems (geometric interpretation)
* Self-check warm-up and homework #9.
* Practice – naming angle pairs.
* Pre-view: project/ test
* HW #10 – handout – more review
* HW Quiz – 4 pts

Thursday in class – City Map project (preview on website). Tuesday, Sept 27, Unit Test.

Thursday, September 22, 2016

Objective: I can apply geometric terms in real-world context

* City Map Project – 40 pts
* HW #10 – take a grade – 4 pts
* Make-up issues

Tuesday will be a review day; Unit Test next Thursdsay, Sept 29 – 75 pts.

Tuesday, September 27, 2016

Objective: I can practice applying vocabulary, sketching, naming, and algebra skills to solve problems related to Unit Assessment.

* Finish project and turn in
* Work on review assignment – HW #11 – due Thursday
* Class sharing of a few problems

Test Thursday over Vocabulary Unit – 75 pts

Come during advisory for help, or early on Thursday.

Thursday, September 29, 2016

Objective: I can demonstrate mastery over geometric terms

* Board drills – problems from review
* Questions over review. Collect if finished. All others are due at the beginning of class on Monday for an 8 pt grade. No late work accepted.
* Unit Assessment – Vocabulary – 75 pts

Tools B – Constructions

Monday, October 3, 2016

Objective: I can det5ermine my mistakes and why I made them on unit assessment.

I can use a compass and straightedge for constructing equilateral triangles, circles, and regular hexagon inside a circle (daisy).

* What is a construction? Sketch, draw, construct, what are my tools?
* On copy paper: use compass to construct a circle? What determines the distance from the center to a point on the circle?
* Imitate Euclid’s proposition 1 construction: can you construct an equilateral triangle from a segment? Work with partner until yours is correct.
* Use p 11 from textbook: construct a daisy. Connect intersection points to construct a regular hexagon.
* Try both constructions again.
* Return tests (some finishing). Passes for make-ups. How to re-test.
* Two common mistakes. Questions on your test. Collect.
* NO HOMEWORK!
* Collect Unit Reviews – 8 pts
* Students can find what assignments are missing.

Wednesday, October 5, 2016

Objective: I can use a compass and straightedge to construct an equilateral triangle, a regular hexagon, copy a segment and copy an angle. I can discover what is true about points on an angle bisector. I know what it means to construct vs draw or sketch. I can ⊥ bisect with patty paper.

* Note-building with practice built in: construct vs draw vs sketch. When, why, and what I can do with each. How to construct equilateral triangle, daisy, copy a segment, copy an angle.
* Practice copying an angle multiple times. Then watch on mathopenref.com
* P 145:1-3,5. Then check
* Perpendicular bisector how to and practice
* Perpendicular bisector investigation… what it means and why it works. Do by paper folding also.
* Quiz next Tuesday over constructions. Next time: angle bisector, median, altitude. Worksheet for homework.

Friday, October 7, 2016

Objective: I can construct perpendicular bisectors and angle bisectors by paper folding or by compass and straightedge.

* Finish perpendicular bisector activity – glue into notebook. (will take a grade on this – 3 pts)
* Pappty paper constructions of perpendicular bisector and angle bisector.
* Notes and practice – how to construct angle bisectors; do 3
* Construct an equilateral triangle – and then a 30 degree angle (bisected)
* Construct a 90 degree angle (perpendicular bisector) and then bisect it to get 45 degrees.
* On patty paper on perpendicular bisector activity – connect midpoints to vertices to get the three medians. Label as medians and define – a segment that connects a vertex of a triangle to the midpoint of the opposite side.
* What does an altitude look like?
* Quiz topics: constructions: copy or add segments, perpendicular bisect a segment, equilateral triangle, angle bisector; vocabulary: line, segment, ray, angle bisector, perpendicular bisector, circle, arc, midpoint, perpendicular, right angle (be able to use in descriptions).

Quiz Tuesday – Constructions – 20 pts

Tuesday, October 11, 2016

Objective: I can demonstrate mastery over basic constructions and associated vocabulary.

* Vocab and sketches: median, altitude. Glue into vocabulary section.
* Construction Review practice worksheet (will grade Thursday)
* Vocab Game with prizes
* Construction Quiz – 20 pts
* Missing work/ make-up tests/ ??