

TITLE OF LESSON

Geometry Unit 1 Lesson 43 – Review for Test

*Prove it! What's on the outside? What's on the inside? Of Geometry*

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TIME ESTIMATE FOR THIS LESSON

One class period

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ALIGNMENT WITH STANDARDS

California – Geometry

- 1.0 Students demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning.
  - 2.0 Students write geometric proofs, including proofs by contradiction.
  - 3.0 Students construct and judge the validity of a logical argument and give counterexamples to disprove a statement.
  - 4.0 Students prove basic theorems involving congruence and similarity.
  - 5.0 Students prove that triangles are congruent or similar, and they are able to use the concept of corresponding parts of congruent triangles.
  - 7.0 Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles.
  - 8.0 Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures.
  - 10.0 Students compute areas of polygons, including rectangles, scalene triangles, equilateral triangles, rhombi, parallelograms, and trapezoids.
  - 11.0 Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures and solids.
  - 12.0 Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems.
  - 13.0 Students prove relationships between angles in polygons by using properties of complementary, supplementary, vertical, and exterior angles.
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MATERIALS

**Review for Test** – Teacher Pages (one for each student)

**Review for Test Key** – Teacher Page

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LESSON OBJECTIVES

- To hone group work skills
  - To demonstrate individual and group responsibility
  - To demonstrate understanding of the skills and math concepts addressed this quarter
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FOCUS AND MOTIVATE STUDENTS

- 1) Homework Check – Pass back graded work and have students place in the appropriate sections of their binders.
- 2) **Portfolio** – If you have graded their final projects, pass them back and have students look over their grades. Then have them place the project (on disk or a hard copy) in their portfolios.
- 3) **Agenda** – Have students copy the agenda.
- 4) Explain – Explain that this is their review for the final exam, which starts tomorrow. It will be a two-part exam. The first day will be a group practical exam where they will be asked to demonstrate their geometry skills in a real world situation as a group, in order to demonstrate their content knowledge and their group/social skills. Because they have been doing this the whole quarter, it is not necessary to review group work today. The second day of testing (Lesson 45) will be individual problem solving where they will work alone to solve exam problems. Today, they will simulate the last day of testing, Final Exam Part 2. Students will work alone in class to solve the problems on the Review Test. Their final exam questions will be

different, but the concepts will be the same. Tonight, they will work with their study partner to review the problems they missed on the Review Test, figure out what they did wrong, and create new problems with the same concepts to solve for so they can learn from their mistakes and study together again.

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#### ACTIVITIES – INDIVIDUAL AND GROUP

1. **Assign Pairs** – Have students sit in pre-assigned pairs. Pass out **Review for Test**. Tell students they should show their work next to each problem. They should try to solve problems on their own. However, if they are really having problems getting an answer, they may ask their partner for help. Tell them they will have the rest of the period to complete the test. They must finish before the end of the period. So they should pace themselves. Today only, they may use their notes from class to help them on problems they do not know.
  2. **Answer Questions** – Circulate as they work and answer any questions they have. Encourage peer explanations. Try to make sure all questions and areas of confusion are solved today!
  3. **Time** – Tell them when they have half of class time left. Then, again, tell them at 15, 10, and 5 minutes.
  4. **Homework Review** – Pass out the **Review for Test Key**. There will not be time to go over each of the answers with the class, so it will be their responsibility to go over the correct answers at home with their study partner. Make sure all students take their review test home with them today. Tell them to meet with their study partner (yes, their partner from class) to go over each of the problems they answered incorrectly. On their Review Test, they should circle the incorrect answers. Then each student is responsible for creating two problems that mimic the concepts from the incorrect problem. The student should then solve the self created problem. Partners may help each other out. That's why they have their study partners. Right?
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#### HOMEWORK

- 1) Relax and prepare for the final.
  - 2) Organize binder by section and date. Due Lesson 45.
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#### GROUP ROLES

None

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#### DOCUMENTATION FOR PORTFOLIO

Final Photoshop Design