



School of Education

Lesson Planning Framework

Name: Kelsey MacLeod
Date: November 12, 2014 **Time:** 9-10am

Grade Level: 5 **Subject:** Math
Co-operating Teacher: Sean McInerney

I. Provincial Curriculum Outcome (s): (e.g. Professional Standards from Discipline)

Use attributes to describe shapes. (SS5, SS6)
Identify and name perpendicular sides. (SS5)
Discover attributes of quadrilaterals related to side lengths and diagonals. (SS5, SS6)

II. Learning Objective(s) / Goal (s) – written in student friendly language (i.e. “I can” statements):

I can identify, create, and describe quadrilaterals.
I can tell the difference between a square, rectangle, rhombus, kite, trapezoid, and parallelogram
I can name the different attributes of the above quadrilaterals.

III. Lesson Rationale:

Why are you teaching this lesson?

I am teaching this lesson so students can become familiar and comfortable with naming, creating, and differentiating between the different types of quadrilaterals.

What requisite skills do students need in order to access the lesson & participate fully in this lesson?

Students would have had to be present and participated with previous lessons in the geometry unit which focused on parallel lines, perpendicular sides, and an introduction to quadrilaterals (although we review quadrilaterals at the beginning of this lesson).

How does this lesson fit in the prescribed curriculum?

This lesson is in the Geometry unit of mathematics and fulfils the curriculum outcome: “Discover attributes of quadrilaterals related to side lengths and diagonals (SS5, SS6).”

How does the lesson build on previous lessons or previous learning?

This lesson is a continuation of the quadrilateral lesson from yesterday where the students started learning about the different quadrilaterals and their attributes.

IV. Materials & Resources (teacher materials, student materials etc.):

lesson plan
smartboard
laptop
geoboards
geobands
paper
pencils
chart paper
markers
math textbooks
math dictionaries

V. Technology Used:

smartboard
laptop

VI. Learning Cycle: (Engaging Questions, Exploration, Explanation, Expansion, Evaluation)

<p>What is the teacher doing?</p> <p>1) Lead think-pair-share: (5 min) How many quadrilaterals can you name?</p> <p>2) Review each quadrilateral and their attributes (smartboard) (15 min) (square, rectangle, rhombus, parallelogram, trapezoid, kite)</p> <p>Review: -equal sides and hatch marks -parallel lines and arrows -perpendicular sides and right angles</p> <p>(Student will learn about lines of symmetry in tomorrow's lesson)</p> <p>Do you notice a pattern with these quadrilaterals? Quadrilaterals have 4 sides and 4 vertices</p> <p>3) Geobard assessment (5 min) Game: "Make me a....Show me a..." Call out different quadrilaterals for students to create and then hold up for the teacher to see on their geoboard: -square, rectangle, trapezoid, rhombus, kite (convex, concave, parallelogram)</p> <p>4) Quadrilaterals Group Work with Chart Paper presentation (4-5 students per group). (20-25 min) Explain requirements of assignment</p> <p>Show students model of the kite on the smart board Students will write it down first on loose leaf, then copy it onto chart paper It must be readable-right side up</p> <p>Attributes of Quadrilaterals (Group assessment activity) -Assign a different quadrilateral to each table group (trapezoid, rhombus, rectangle, parallelogram, square, kite)</p> <p>Check and correct student's rough copy of their work for spelling and correct math concepts.</p> <p>5) Riddles (last slide on smartboard lesson) (5 min) Assess students learning, comprehension and ability to think and problem solve.</p>	<p>What are students doing?</p> <p>1) Students list as many quadrilateral shapes as possible first individually, in pairs, then as a class.</p> <p>2) Listen to teacher's explanations, answer questions, participate in discussions in pairs and in groups</p> <p>Students identify the shape projected on the smart board by answering the following questions: think-pair-share format.</p> <p>What am I? How many sides? How many vertices? How many pairs of equal lines? How many pairs of parallel lines? How many perpendicular lines? (look for right/square angles)</p> <p>3) Listen to the teacher call out specific quadrilaterals and then create it on their geobard</p> <p>STUDENTS PUT AWAY GEOBOARDS AND BANDS</p> <p>4) In table groups, students will: -Have access to math dictionaries and textbooks -Draw their assigned quadrilateral -write it's name and attributes down on loose leaf.</p> <p>The teacher will check their work for spelling and correct math concepts.</p> <p>Students will then copy it onto chart paper for a good copy (it must be readable so the words need to be written in traditional L-R format) to present to the class and post around the class.</p> <p>If a group gets finished early, they can replicate the kite quadrilateral so all quadrilaterals can be posted in the class.</p> <p>5) Answer Riddle: Think abstractly, review, reflect, remember what they just learned. Identify which quadrilaterals have these attributes</p>
---	---

VII. Accommodation(s) for Diverse Learner(s):

This lesson reaches diverse learners. Through the teachers' explanation auditory learners needs will be met. The smart board will be projecting a visual aid for visual learners. The geobards attract those learners who are kinaesthetic or energetic. It also gives students a chance to create shapes, using a higher level of thinking on Bloom's Taxonomy. Intrapersonal skills are needed as students first think of as many quadrilaterals as they can. Interpersonal skills are used and practiced as students think in pairs and in groups. They will also work in groups at the end of class by putting a quadrilateral and it's attributes on chart paper.

VIII. Evaluation/Assessment of Student Progress:

An informal pre-assessment will be conducted by using think-pair-shaire at the beginning of the lesson to review quadrilaterals. A mid-lesson assessment will be done by having students create specific quadrilaterals on their geoboards. A final assessment will be done by checking the attributes of the quadrilaterals that students will be first making a draft and then a final copy on chart paper.

IX Lesson Plan Reflection:

1. Preparation and Research – Was I well prepared? What could I have done differently?
2. Written Plan – Was I organized? What did I learn that will help me in the future?
3. Presentation – Were the students involved? Was I clear in my presentation? How was the pacing?
4. Assessment – What did the class do? How do I know if they were successful? What should I change for next time?

Attributes of Quadrilaterals

All quadrilaterals have 4 sides, 4 vertices, and 2 diagonals

Trapezoid:

1 set of parallel sides

Square:

2 parallel sides

4 right angles

4 equal sides

Rhombus:

4 equal sides

2 parallel sides

Rectangle:

2 parallel sides

4 right angles

2 sets of equal sides

Parallelogram:

2 sets of opposite parallel sides

2 sets of equal sides