Lesson Plans for Teaching Parallel and Perpendicular Lines

Read the following four lesson plans. Decide where each lesson falls in the four quadrants.

Lesson Number 1:

In this lesson, the teacher introduces parallel and perpendicular lines to the students by demonstrating each group of lines using an interactive white board to do so and even uses the Internet to illustrate some examples. The students use independent practice to do a teacher prepared worksheet. The students switch papers at the end of the lesson and the teacher calls out the correct answers. The children give the papers back to the original owners so they can see how they did on the worksheet. The teacher takes up the papers and records the grades in the roll book.

In this quadrant, students may identify, list, label, report, name, tell, recall, recite, repeat, arrange define, memorize, who, what when where, tabulate, recognize, use, match, quote, report, and measure.

Lesson Number 2:

In this lesson, the teacher introduces parallel and perpendicular lines to the students by demonstrating each group of lines. She uses an interactive white board to do so and even uses the Internet to illustrate some other examples. The classroom activity is designed around students going into the school hallways to find examples of parallel and perpendicular lines within the school and recording them as they walk through the hallways. The children work in pairs with one student recording the examples. When they return to the classroom, they share their findings with the rest of the class and make a chart of similar shapes they found.

The assessment is to share their findings with a small group (through discussion) and report to the class using examples they recorded. Students use a rubric to score each others’ work.

In this quadrant, students may compare, relate, make observations, summarize, show, distinguish, predict, modify, construct, categorize, collect and display, identify patterns, organize, and classify.
Lesson Number 3:

In this lesson, the teacher introduces parallel and perpendicular lines to the students by demonstrating each group of lines. She uses an interactive white board to do so and even uses the Internet to illustrate other examples. The classroom activity is to have students work in groups. In their groups, they discuss the differences between parallel and perpendicular lines, site examples of how they have been used in everyday life, where they are used, and how they help make our lives easier. One person in the group serves as a recorder. They can use the Internet, textbooks, or cell phones for the activity. They are to use as many resource materials as possible to illustrate as many examples of these lines as possible and be able to explain these examples to the class.

The assessment is a rubric the students designed to check student learning. Students use their rubric to assess student understanding of parallel and perpendicular lines as they present their findings to the class.

In this quadrant, students may 
revise, develop a logical argument, access, use concepts to solve routine problems, construct, compare, investigate, differentiate, cite evidence, draw conclusion, hypothesize, critique, explain in terms of concepts, and formulate

Lesson Number 4:

In this lesson, the teacher introduces parallel and perpendicular lines to the students by demonstrating each group of lines. She uses an interactive white board to do examples and even uses the Internet to illustrate other examples. The classroom activity is designed have students find as many examples of these lines as possible. They can use the school hallways, classrooms, facility, or any other resource (Internet, text, phones, etc.) as needed. The purpose is to find and illustrate as many examples of parallel and perpendicular lines as possible for a group discussion. After group discussion, the students create and design a structure of their choice using their knowledge of parallel and perpendicular lines. Their creation is their own independent creation, using color, art work of any type, 3-D computer programs, lego blocks or any other substance the students choose. These projects will be displayed in the classroom or media center upon completion.

In this quadrant, students may design, connect, synthesize, apply concepts to real world problems and situations, critique, analyze, create, and prove