Math Lesson Plan: See the State

Length: 30 minutes/2 days

Age or Grade Intended: 4th Grade

Academic Standards:
4.5.9 Add time intervals involving hours and minutes.
4.3.2 Estimate distances between two places on a map, using a scale of miles, and use cardinal and intermediate directions when referring to relative location.

Performance Objectives:
Given a map of Indiana, the students will plan a road trip across Indiana including at least two major points of interest with 100% accuracy.
Having chosen two destinations in Indiana, the students will estimate the distance between locations with 100% accuracy.

Advance Preparation by Teacher:
Provide maps of Indiana with highway routes and destinations.
Create an itinerary for students to fill out.

Procedure:
Introduction/Motivation:
Have you ever been on a road trip, maybe with your family or friends? Where did you go? What did you see? How long did it take?

Step-by-step Plan:
Divide students into pairs and pass out maps. Allow students time to familiarize themselves with locations, discuss points of interest, and mark a starting point (Home/school location). Handout itinerary logs and explain how students should fill it out. Have students plan a trip, estimating the time and the distance in which they are going to travel.

Closure:
Have students share with classmates their destinations, estimated time of travel, and total mileage traveled.

Adaptations/Enrichment:
Adaptations:
For students that require adaptations, a more detailed map will be provided with a mileage chart to help with estimation.

Enrichments:
For enrichment, students can plan a travel budget to use throughout their road trip.

Bloom’s Questions:
Can you estimate the distance of your road trip?
How close was your estimation to the exact mileage/time?
Gardner’s Multiple Intelligences:
- **Interpersonal:** Students will be working in pairs.
- **Mathematical/Logical:** The activity is mathematically based.
- **Intrapersonal:** Students have to be comfortable within themselves to work in pairs.

**Self-Reflection:**
- What could be improved in instruction or structure of classroom during this activity?
- What supplies were needed that were not anticipated, if needed?
- Was the log sheet easy to understand?