

**Math Lesson Plan:** See the State

**Length:** 30 minutes/2 days

**Age or Grade Intended:** 4<sup>th</sup> 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?