

# Connecticut

## Alliance Created State Giant Traveling Map Lesson

**Title:** Using the Map Scale

**Recommended Grades:** 4-5

**Time Needed:** 1 lesson

**Objectives:**

**Students will:**

- Understand how the scale relates to real distance, and plot out some distances close to their home

**Materials:**

- Giant CT Map
- Chain (included in trunk)

**Preparation:**

- Review multiplication with fours, or remind students of relationship between kilometers and miles if desired
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**Rules:**

- Shoes are not allowed on the map. Please have students remove shoes before walking on the map.
- No writing utensils on the map.
- No running on the map.

**Directions:**

1. Gather students to sit 'in Long Island Sound' facing the corner with the scale. Guide a conversation to remember how even though this map is a kind of 'drawing', and doesn't show the realistic 'live picture' kind of image that makes it easy to imagine in real life, that it was created very deliberately by people called cartographers who are very good at math. Have students turn and talk to discuss why you need to be good at math in order to make a map, share responses.
2. Have students gather close to the scale to show that every length the size of one 'block' in the scale is equal to 4 'real' miles, and so on for 8,12, 16, etc. Depending on student's ability, invite them to think of where a number not written on the scale, like 2 miles, or 7 miles, would fall.
3. Tell students that you will be investigating real distances relative to their own town. Have them help you pick a number of miles, and hold the plastic

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- chain on the scale to equate to that number of miles. Physically bring the chain over to the students' own town, and hold one end of the length right on their town's dot. Swing the designated segment of chain around in a circle radiating from their town, noticing what falls within that radius. Notice what is close, and what is just outside that mileage. If a known place is outside that radius, have students predict about how many miles away it might be.
4. Return to the scale and have students decide on a different mileage to investigate. Invite students to take over the roles you may have dominated in the first round. Repeat the radius investigation with this new mileage.
  5. Ask students what landmarks lie further away from their own town, in a radius we haven't investigated yet (It could be the closest point of Long Island Sound, or the capital city Hartford, or the Rhode Island border, etc.). Invite them to use the chain and a reverse of their current method to figure out how far away that landmark is. Have one student hold the end of the chain exactly on their town's dot, and have others maneuver the chain so that it is stretched taut and reaches the mystery landmark. Have a student hold tightly onto the chain link that most closely touches the landmark. Bring the chain back over to the scale, and carefully 'wrap' the chain again and again next to the scale, counting by 4s or 12s etc. to see how many miles that length of chain covered. (Especially if there is a remainder, students may need help)
  6. Find other landmarks in this way, or invite students to do their own investigation of place they are curious about.

### Tips:

- For the teacher's purposes, each chain link is approximately equal to 2 miles, not exact enough for the activity, but if you're hoping to quickly check students' work for reasonableness, count by 2s!
- **Extension opportunities:**
  - How is math used with social studies?
  - What is a cartographer?
  - What lies within 1 mile of my house? 5 miles?

### Vocabulary:

- Scale
- Mile
- Kilometer