



Lesson 6: Map Making and Movement Clues

Focusing Question: *How can we effectively steer visitors along our quest route?*

Overview: Students decide the route that quest visitors will take, create clues to get visitors from one quest stop to the next, and sketch site icons and border strips.

Materials:

In class:

- Duct tape
- Masking tape
- Index cards
- Markers

In the field:

- Pencil
- Erasers
- Clipboards
- Index cards
- Precut border strips (1.5" x 4.25")

Length of time to complete: In-class prep: 30–45 minutes
Field trip: 2 hours

Procedures:

Establish domains (10–15 minutes)

1. Have the students sit in a large circle. Walk around the circle and say, "Let's map our quest site right here on the floor!"

2. Using the duct tape, establish the main stem of the watershed.
3. Invite students to add roads using masking tape and note street names with marker.
4. Next, place the index cards at your key features: The starting point becomes point A, the first place to stop becomes point B and so on.

Assign domains (5 minutes)

5. Assign different groups the responsibility for the different domains: A to B, B to C, C to D, and so on.

Clarify assignment (10–15 minutes)

6. Clarify that on this field trip, each group, working in its domain, will need to create three products:
 - a. A movement clue leading from their domain to the next domain (A to B, B to C, etc.). The last group leads visitors from the site to the quest’s ending point/treasure box.
 - b. An icon that will represent their domain/place on the quest map.
 - c. A border section that features some “teachable moment” on their site.
7. Preteach movement clues by revisiting one or more movement clues in the sample quest.

Example	Teaching points
Go straight down the steps.	A) Short lines
Count 24 cracks.	B) Different kinds of clues, such as counting, landmarks, body orientation, cardinal direction and so on.
Turn toward the Bay.	C) Aural cues to set direction
With a noisy freeway at your back.	D) Observations
Where wheelchairs can roll.	E) Using caution
You’ll cross at the stripes.	F) In this example, the rhyme scheme is
Look both ways to make sure the time is right!	ABCB: steps, cracks, bay, backs

8. Preteach “icons” by revisiting the quest map. Students can have their icon be a word, a symbol or a realistic drawing. Have students use index cards so all icons are approximately the same size.

9. Preteach “borders” by reviewing the border segments on the sample quest. Some elements are sketches; some feature specific species; one is a rubbing. Students should be sure to stay on the watershed and habitat theme.

10. Head out on the field trip. Each group creates a movement clue, an icon and a border strip.

Assessment

1. Students create a movement clue.
2. Students create an icon to mark a specific site on the quest map.
3. Students create a border strip (if one has not already been created).

Evaluation Rubric:

PRODUCT	Unacceptable	Beginning to progress	Getting closer	Meets standard	Exemplary
Movement clue	Incomplete, illegible and demonstrating a lack of effort	Either incomplete, illegible or demonstrating a lack of effort	Complete and legible, but not successful in moving visitor along the quest	Complete, legible and successful in moving visitor along the quest	Meets standard, plus is well executed and has rich details
Map icon	Not completed	Sloppy, with little attention to detail	Is either sloppy or has little attention to detail	Neat and detailed	Meets standard, plus is well executed and has rich details
Border Strip	Not completed	Sloppy, with little attention to detail	Is either sloppy or has little attention to detail	Neat and detailed	Meets standard, plus is well executed and has rich details