

A PICTURE IS WORTH A THOUSAND WORDS

Using CADD to Illustrate Mapping Concepts

Performance Standards 4A.I

Students will listen to a set of directions read by the teacher and will draw a map which illustrates those directions accordingly:

- *Mapping points of identification:* identify points of the map; locate identified points as indicated in the directions; reach destination.

Procedures

1. ***In order to listen effectively in formal and informal situations (4A)***, students should experience sufficient learning opportunities to develop the following:
 - Demonstrate understanding of material, concepts and ideas in formal/informal presentations.
 - Analyze, synthesize and evaluate information from recorded materials and live presentations.
 - Ask probing (self), idea-generating questions and make appropriate statements to clarify and add to meaning.
 - Analyze and evaluate verbal and nonverbal cues.
 - Modify, control, block out both internal and external distractions.

It is critical that employees using software to assist with various drafting functions be able to execute commands dealing with line, circle, ortho, ellipse, polygon and change properties. Directions for drawings are often received verbally and require excellent listening skills by the employee.
2. Have drafting students review and discuss the assessment task and how the rubric will be used to evaluate their work.
3. The teacher will create a few sets of directions for student practice.
4. The drafting student will be familiar with active listening techniques.
5. The teacher will read aloud (one time only) a set of directions to travel from the starting point of a journey to the destination.
6. As the directions are read, students will listen to the directions and will draw, on their computer screens, a map that illustrates the route to be followed, complete with the indicated markers for changes in direction, landmarks, etc., as provided in the directions.
7. The teacher will evaluate the map for accuracy against the master copy in the teacher's directions.
8. The teacher will evaluate each map against the master copy, deducting for each missing component of the map.
9. Evaluate each student's performance using the rubric. Add each student's scores to determine the performance level.

Examples of Student Work

- [Meets](#)
- [Exceeds](#)

Time Requirements

- 20-30 minutes

Resources

- Auto CADD software
- A Picture Is Worth a Thousand Words Directions and Answer Key
- Examples of legend items
- A Picture Is Worth a Thousand Words Rubric

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Directions

Read these directions aloud to the class, pausing after each sentence for students to complete the section of the map described therein.

1. Create a new file following the established protocol. Then follow this set of directions, which will be read only once:

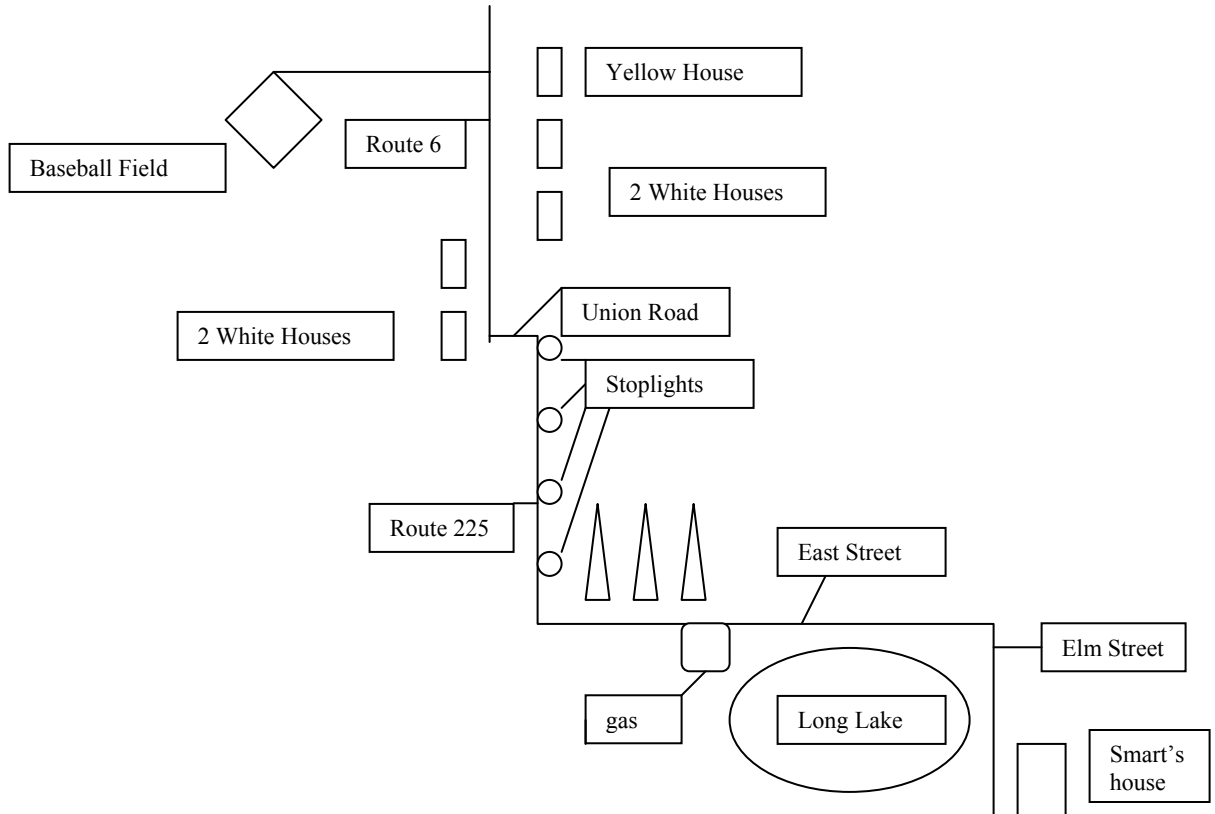
Mrs. Smart left her husband the following directions so that he could meet her at their son's League Championship baseball game. Mr. Smart can follow directions better if he has a map. Make a map for him, showing everything mentioned in the directions. If you make any mistakes, he might not get to the championship game! Start by drawing the Smart's house in the lower right-hand corner of your computer screen. (North is toward the top of the page; south is toward the bottom.)

2. Starting at the Smart's house, go north on Elm Street until you come to Long Lake, on your left.
3. After you pass the lake, take a left turn on East Street, heading west.
4. You will pass a gas station on your left and then three large pine trees on your right.
5. After passing the pine trees, turn right, heading north on Route 225.
6. Go through three stoplights about two miles apart. At the fourth stoplight, turn left on Union Road.
7. Stay on Union Road for a few yards; then turn right on Route 6.
8. On Route 6, you will pass two white houses on your left and then two white houses on your right.
9. The next house on the right is yellow.
10. Turn left into the driveway across the road from the yellow house. The baseball field is at the end of this driveway. See you there!

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Answer Key Map with Points of Identification

Points to be identified in each map include:



Map 1 – 16 items

1. Smart's house in lower right hand corner
2. Elm Street north
3. Long Lake on left side of Elm
4. East Street is a left turn (west) after Long Lake
5. Gas station on left side of East Street (below the street on the page)
6. Three large pine trees on right side of East Street (above the street on the page)
7. Right turn north toward top of page on Route 225
8. Stoplight one, two, three on Rt. 225
9. Stoplight four on Rt. 225
10. Left turn onto Union Road at stoplight four.
11. Right turn onto Route 6 (north toward top of page)
12. Two white houses on the left
13. Two white houses on the right
14. Yellow house on the right
15. Driveway to left across road from yellow house
16. Baseball field

NOTE: Labeling streets/landmarks is optional.

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


NAME _____ DATE _____

- Exceeds standard (must have 15 - 16 items correctly placed)
- Meets standard (must have 12 - 14 items correctly placed)
- Approaches standard (must have 6 - 11 items correctly placed)
- Begins standard or absent (must have 0 - 5 items correctly placed)

Map Points of Identification	
4	<ul style="list-style-type: none"> • Fifteen to sixteen of the items from the legend are drawn on the map. • All identified points are properly located as indicated in the directions. • Driver reaches his destination.
3	<ul style="list-style-type: none"> • Twelve to fourteen items from the legend are properly drawn on the map. • Most of the identified points are located as indicated in the directions. • Driver reaches his destination.
2	<ul style="list-style-type: none"> • Six to eleven items from the legend are properly drawn on the map. • Some of the points are located as indicated in the directions. • Driver may not reach his destination.
1	<ul style="list-style-type: none"> • Five or fewer items from the legend are properly drawn on the map. • Few or none of the points are located as indicated in the directions. • Driver does not reach his destination.
Score	

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
Total: _____
Check each correct item on the map and total results.

A PICTURE IS WORTH A THOUSAND WORDS MAP

LEGEND	
House	
Lake	
Tree	
Gas	
Stop-light	
Field	

Draw your map on your computer screen, beginning in the lower right-hand corner of the screen. Use the shapes in the legend to show houses, trees, etc. and label all entries on the map.