

Directions for creating the 3-D Map

Tell students that the class is going to build a model of the map using construction materials to represent the ground, fields, water, trees, plants, and animals, and buildings. Give each student or pair of students one of the pieces of ground (colored construction paper cut to size) or a 3-D feature. They will place the ground features first. (Note the orientation of the core map: north is to the right side of the map.) If your students know or are learning the cardinal directions, use them for placing the pieces; you may need to use “next to,” “to the right/left of,” “behind,” etc. if your students do not yet know cardinal directions. This could also be used to help teach/practice the directions.

Display the core map. Use the following set of directions for creating the 3-D map.

Point to the house on the projection; discuss that there are other farm buildings near the house, some trees (most likely fruit trees), and a garden. Ask the student with the brown (residence) ground to place it on the floor (or large table).

Next point to the corn acres on the map. Tell students that this is a corn field. Ask if there is anything else on the map that looks the same and would also be a corn field (additional 22 acres to the northwest). Have the student with the smaller yellow corn field place the paper to the west of the residential property.

Point out the pasture land (on both sides of the railroad). Ask students to point to and, if possible, to identify additional features in the pasture (tree - crab apple grove, woodland, beef cattle, pond, stock well, brick school house). Have the student place the tan pasture to the north of the residential and corn field.

Next point to the meadow on the map. Ask students what they see on the map (rows of plowing, hay stacks, horse-drawn hay wagons). Ask the student with the green meadow to place it west of the corn field. Next, have the student with the larger yellow cornfield place it to the north of the meadow.

Have the student with the black road pieces lay them along the east and north edge of the property.

Have the students with water features place their creeks as you point to them on the projected map: one in the meadow, one in the corn field, one in the pasture.

Explain that the class will now add features to the map. Have a student add the railroad tracks so they cut across the paper map in the same way as on the projected map.

Next, have students with buildings place them on the paper map as you identify the features on the map: house, three farm outbuildings, railroad station and small railroad building, and school. Help students to orient them correctly on the paper map and to each other. Ask students to speculate about what the buildings were used for. Ask students whether the school or railroad station are part of the farm. (No, these are for all the residents in the City of Athens to use. The city is just to the south of the farm on the same road.)

Point to the garden, and ask students where the garden is in relationship to the house. Have a student place the garden ground in the correct position. Next have students with vegetables and fruit trees

place them on the residential property. Discuss why these buildings and the garden would be close to the house.

Point to the pond and have a student place the pond correctly. Add the lane over the tracks connecting the two portions of the pasture. Next have a student put a stock well alongside the stream in the northeast corner of the pasture.

Have students add their trees to form the crab apple grove and woodland as you point out the two areas. Discuss the difference between a grove and a woodland. Ask students to speculate why the farmer would have left each. (The grove, a small natural stand of one tree species, may have been left as shade/shelter for the cattle, as well as for the crab apples for jelly. The woodland would also provide shade/shelter for the cattle, but more likely was used as a wood lot for firewood. The land may also have been too difficult to clear or plow.)

Discuss what would be found in the corn fields (corn) and have students place some corn pieces in each field. (Note that the corn is planted in rows.)

Ask what is found in the meadow (hay) and have students place hay stacks and horse drawn wagons in field.

Ask what animal is found in the pasture (cattle) and have students place the cows in the pasture. This may be good time to discuss the difference between dairy and beef cattle. The Miller Farm had beef cattle.