

Task: If I Had an Acre...

Task Description

Students predict, measure, and visualize an actual acre of land.

Background

Area equals length x width. One acre equals 43,560 square feet or 208.5 feet squared. If using yards, one acre equals 4,840 square yards or 69.5 yards squared. Historically, an acre was the amount of land a farmer could plow in one day's time, using a team of oxen.

Additional Information and Resources

Mapping Small Places: Examining Your Environment
Series, 1976

Materials

Two sets of four markers (each set a different color or kind)
100-foot tape measure or trundle wheel

Discussion Questions

What professions work with acres of land?

How much does an acre of land cost?

How many acres are on your school grounds?

Organization of Tasks (how to implement this lesson)

1. Take group to large open site.
2. Using one set of stakes, have students estimate one square acre by marking each corner with a stake. Talk with students about how accurate they might be. Option: Students might pace out an acre.
3. Students determine actual acre by using measuring tools and second set of markers.
4. Students should now be able to compare their estimate with the measured acre. Have students spread out along perimeter of measured acre to get a good visual of the amount of space it occupies.
5. Have students discuss what they would do if they had their own acre of land.



Knowledge-Work Planner: If I Had an Acre

Core Content:

- Number/Computation
- Geometry/Measurement
- Probability/ Statistics

Blackacre:

- If I Had an Acre

School:

- Determine how many acres are at your school site.
Graph or chart how much of the area is building, pavement, grass, etc.

Classroom:

- Determine the area of a variety of objects in the classroom.
- Have students check one another's work.

Community:

- Research the value of an acre in a variety of areas in Jefferson County.
- Compare and discuss reasons for different values.

Student Learning

Assessment and Student Products

Core Content:

Science

Social Studies

Reading

Writing

Mathematics

Arts and Humanities

Practical Living

What's Next?

Thinking Beyond...

If I Had an Acre

A deer eats 3,650 pounds of forage each year. If one acre produces 500 pounds of forage each year, how many acres of forest does it take to feed one deer each year?

Literature

The Empty Lot, Dale Fife

Pumpkins: A Story for a Field, Mary Lyn Ray

Our Common Ground: The Water, Earth, and Air We Share, Molly Bang

If I Had an Acre

An acre of land is a lot for some uses but not enough for other uses. For example, a golf course requires more than one acre because there must be room for eighteen holes, and each hole has a lengthy fairway. Golf courses require many acres of land. On the other hand, an acre is more than enough space to plant a vegetable garden. Even one-fourth of an acre will supply a family with plenty of fresh vegetables in the summer.

Give some examples of ways to use an acre of land. Choose uses that would be appropriate for that amount of land. Describe how the land would look.

Think of land uses that require more than an acre of land. Describe and explain why more than an acre is necessary.

What would happen if you tried to use an acre of land for a use that required three acres? Give an example.