

Name _____ Group Members _____ Date _____

Fence for the Cattle

Kay and her father needed to create a new area in their pasture for their 4-H cattle. They have decided to use 3 acres of land. Kay and her siblings have the opportunity to decide on the shape the fenced area would create for their cattle (you get to decide on the shape). The fence is shown below. Each section of fence measures 2 m from post to post. How many posts and how many rails would be needed to fence in the 3 acres of land?

Square meter is a metric area unit and **acre** is widely used in imperial, us customary systems for **land planning and management, agriculture, forestry**.

1 Acre = 4046.85642 Square Meters (You may round this number)

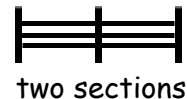
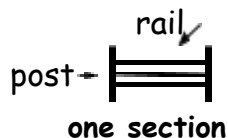
Meter is a metric length unit. Foot is an imperial length unit. There are 3.2808399 feet in a meter.

1 Meter = 3.2808399 Feet

Task: Complete each section below then create a sketch of the 3 acre pasture you have designed and the number of posts and rails that need to be ordered to create the pasture for the 4-H cattle.

Please use the toothpicks to create sections of the fence to assist with your planning.

1. Use toothpicks to build the first **five** sections of the fence pattern shown.



2. Predict the number of posts and the number of rails in ten sections and record:
Predictions for posts and rails in 10 sections _____
3. Record posts and rails in the following chart:

