



Student: _____

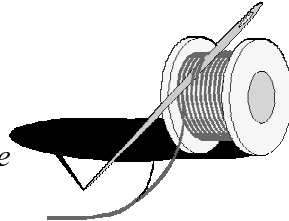
Activity

Due Date: _____

Mark

12

Length is a quantity cropping up frequently in day to day activities such as sport, travel, in buying a range of goods such as cotton, cling wrap, wrapping paper, building materials etc. Perimeter and length are closely related with both quantities measured in the same units.



Research

Use school resources to find the size of the following units and where they are used.

(a) angstrom.

(b) nautical mile.

(c) light-year.

Brain Teasers

1. Find the thickness, in millimetres, of a single sheet of photocopy paper.

_____ mm

2. Find the length of the line of paper, in metres, that would result if each sheet in a 500 sheet pack of photocopy paper were placed end to end in a straight line?

_____ m

Activity

The School Council wants to improve boundary security of the school.

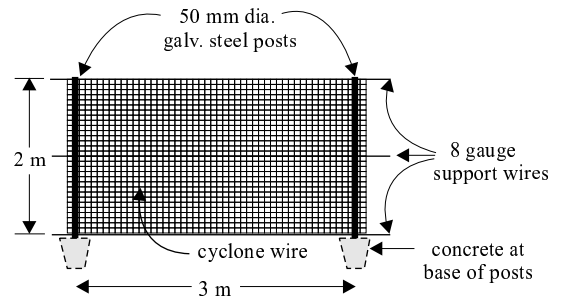
Suppose your group is a fencing firm that has been asked by the Council to quote on providing a two metre high cyclone wire fence on vulnerable parts of the school boundaries.

Within your group decide on the parts of the school boundary requiring the security fence. Measure distances for the security fence. Prepare a detailed quote showing all material and labour calculations.

Include a sketch with your quote showing the dimensions of the parts of the school boundary to be fenced.

Specifications for a cyclone wire fence:

- * A 50 mm diam. galvanised steel post every 3 metres (concreted into ground).
- * Three strands of 8 gauge fencing wire.
- * Cyclone wire mesh (2 metres high).



Base your quote on the following figures:

Labour is calculated at one hour for every one metre of fencing.

Labour costs are \$30 per hour.

Concrete for post holes is \$3 per hole.

Cyclone wire (2 metres wide) is \$450 per 50 metre roll.

A 2.6 metre length of 50 mm diameter galvanised pipe (for posts) is \$8.

8 gauge fence wire is \$100 for a 250 metre roll.

Narrow gates for pedestrian traffic are \$300.

Wide gates for vehicular traffic are \$900.