This resource has been created by The Parks Trust Outdoor Learning Team and Nigel Cross, Leading Practitioner for Maths at Shenley Brook End School.

Estimating and Measuring

ne Parks

These activities can be completed in any open space, including in your local Parks Trust park. To find out which park is closest to your school visit www.theparkstrust.com

To find out more about delivering your own learning activity in the parks contact outdoorlearning@theparkstrust.com



- 1. Give students the sheet with a list of objects. They have to estimate the measurements but they cannot give their estimate using metric units.
- 2.The group must come up with their own units of measurement. Introduce them to some historical units.
- 3.Move to metric units and discuss how to estimate without rulers or measuring tape i.e. use a finger for 1cm or a stride for 1m. Students estimate lengths of items on the list using metric units and then check their estimate using metric measuring equipment.
- 4. Students work out conversion formula for their original unit to metric unit.

Extension - Students describe the dimensions of an object in the park and someone else has to find it.





ltem	Estimate in our units	Metric estimate	Actual measurement
Width of The Parks Trust sign			
Width of park bench			
Length of felled log			
Circumference of tree trunk			
Height of a bush			

1 chain = 22 yards

Our unit of measurement:

## Some historical units of measurement: 1 yard = 3 feet [1 yard is approximately 0.914 metres]

1 chain = 100 links
1 link = 7.92 inches
25 links = 1 perch = 5.5 yards
1 rod = 1 perch = 1 pole = 25 links or 5.5 yards = 16 1/2 feet = 1/4 chain
1 furlong = 10 chains = 40 rods = 220 yards
1 mile = 8 furlongs = 80 chains
3 miles = 1 league
3 barleycorns = 1 inch



## Britain's railways are still measured in miles and chains!



The barleycorn is the basis for our shoe sizes!

NOTES:

How to convert from our unit of measurement to metric units:

Remember: To convert from a larger unit to a smaller one, multiply. To convert from a smaller unit to a larger one, divide.