# The longest side Worksheet 

Equipment: trundle wheel, pencil and paper

## Things to do outside

Your group is to start at one corner of a sports field. Where you are standing can be called point $A$. Point $B$ is the other end of the touch line, while point $C$ is opposite $B$, but 'on the diagonal' from $A$.


A
B

1) Predict - which is furthest away from where you are standing - point $B$ or point C? (If you think they are an equal distance away, you can say this). Explain your reasoning for your answer.
2) Is the distance from $A$ to $C$ bigger, equal to or shorter than the distances from $A$ to $B$ and $B$ to $C$ added together? Explain your reasoning for your answer.
3) Use a trundle wheel to measure the distance from $A$ to $B$, from $B$ to $C$ and from $C$ to $A$.

## In the classroom

4) Write up your work for questions 1 to 3 neatly. For question 3 , start by drawing a triangle in your maths book and label it $A B C$. Write the lengths you measured on the correct sides of the triangle.
5) Using your measurements see if your predictions were right.
6) If $A B$ means the side from $A$ to $B$, check to see which of the following statements are true
Is $A B+B C$ bigger than $A C$ ?
Is $A C+A B$ bigger than $B C$ ?
Is $A C+B C$ bigger than $A B$ ?
What have you learned from doing this?
