

# Summer of Fun

Games sheet

## Fun times in the sunshine! \* Measure a mile

Your school is taking part in a summer fundraiser! And our friend Johnny Ball has shared a couple of fun ideas on how you could measure a mile.

These days, all our maths at school and our distances used in athletics and other sports involve using metric measurements. So what is a mile?

### The Romans and measuring a mile

The Romans invented and used the mile 2,000 years ago and brought it to us when they conquered Britain. The Roman word "mille" was a metric term meaning 1,000. The Romans measured a mile by counting 1,000 double paces as walked by their regimental pacers.

As a group marched, the man at the front would count each double pace. One, two, three, four and so on. After nine, the next man would shout ten, then say nothing else until the first man got to 19 after which he would say 20.

When the time came, the third man would shout 100, and so on.

The Romans had accurately practised so that every 1,000 of their double paces was a mile, or very, very close to it. Whenever they pitched camp, the Romans would put up a sign which stated how many miles it was back to Rome.

When the Roman legions marched across what was then the greatest empire that the world had known, they did everything in tens, hundreds, and thousands.

**Challenge:** Could you become a centurion and get 100 people to join you in re-enacting a Roman mile for the NSPCC?

\*Sunshine not guaranteed, unfortunately.



### How to measure your mile

- 1 Place a tape measure on the floor and ask a teacher to walk a double pace along the line.
- 2 Try to find the distance that their double pace covers (from left toe to left toe again).
- 3 Once you have measured this, multiply it by 1,000 and see if the Romans were right in their mile measuring!

When Johnny Ball did this for a TV programme many years ago, at the first try Johnny's double pace was 63 inches, which is 1.75 yards. In metric terms, this is equal to 1.6 metres.

If you multiply that by 1,000, you get 1,750 yards. A mile is 1,760 yards so Johnny's first measurement would have been out by only 10 yards. Not bad.

If you want to measure your double pace in metres, multiplying it by 1,000 should achieve the same result. If we multiply Johnny's 1.6 metre result by 1,000, we are left with 1.6 kilometres, which is also roughly equal to a mile.

Now you have all the information you need to measure your mile. However you choose to measure your mile, make sure you have lots of fun!

A big thank you to Johnny Ball for helping us measure our mile!

# NSPCC