LESSON PLAN
UKS2 MATHS

Length of lesson: 50 minutes

Lesson objectives:	Lesson outcomes:	National curriculum link:
To understand the difference between metric and imperial measurements. To convert between m/km and miles.	***All*** students will understand how far a mile is in relation to their school. ***Most*** students will understand how many kilometres are in a mile. ***Some*** students will be able to calculate how many kilometres are in multiple miles.	**Upper KS2—Measure (Year 5)** To understand and use approximate equivalences between metric units and common imperial units. **(Year 6)** To convert between miles and kilometres.

Preparation:
- Use Google maps to plot routes and distances around the school and local community
  In particular choose known landmarks or places that are approximately one mile from the school
- One worksheet per child

Starter/warm up:
Ask students to estimate how far they think a mile is? e.g. The length of the classroom, from their classroom to the playground or from home to school. Put options on the board, and take a tally from the class of how far they think a mile is. Who was closest?

Whole class teaching:
Explain the difference in the metric and imperial system. Explain that one mile = 1.6093 kilometres. How would we round this figure? (Answer: 1.6km) How many metres in 1.6km? Use metre stick to support visualisation of 1000 metres. Split children into groups to take distance measurements using a metre stick or metre wheel. Ask them to fill in their answers on the worksheet. Different groups of different abilities could take on each distance. Bring the groups back to the classroom and feed back the lengths they discovered.

Independent work:
Ask students to complete the questions on their worksheet. Encourage them to show their working. Lower ability children could work in pairs or supported groups. Higher ability or extension work could be to think about how many miles/km they could walk as part of the Great African Welly Walk and where that route could take them.

Plenary:
As a class go through each of the problems on the sheet. How did students estimate or calculate distances and why? Did some children use different strategies to others? Address any misconceptions the children may have had.

Name: ..... **Date:** .....

Learning objectives: .....

1. a) How many metres long is the classroom?

b) How would we write this in kilometres?

2. a) How many metres long is the hallway?

b) How would we write this in kilometres?

3. a) How many metres is it around the perimeter of the playground?

b) How would we write this in kilometres?

4. How many times would you need to walk around the playground to walk one mile?

5. If you went on a three km welly walk, how many miles would you walk?
How did you work this out?

6. How many kilometres are there in half a mile?

7. If you went on five mile welly walk, how many kilometres have you walked?