# LKS2 MATHS



**Length of lesson:** 50 minutes

#### Lesson objectives:

To estimate and measure to the nearest half cm.

#### **Lesson outcomes:**

**All** students will be able to measure an object to the nearest cm.

**Most** students will be able to estimate and measure an object to the nearest half cm.

**Some** students will be able to work out the difference between different measurements and/or convert between mm and cm.

#### National curriculum link:

### Lower KS2—Measure (Year 3)

To measure, compare, add and subtract lengths (m/cm/mm).

#### (Year 4)

To estimate, compare and calculate different measures.

To convert between different units of measure [for example, kilometre to metre].

#### **Preparation:**

- 1 ruler per child
- Pictures of ruler, metre stick, metre wheel, tape measure and/or signs showing different units of measurement
- 1 worksheet per child/pair (according to appropriate ability)

#### Starter/warm up:

Explain focus of measuring length. What units do we measure length in? How many mm in a cm? How many cm in a m? How many m in a km? Show different objects for pupils to decide what unit and/or equipment they would use to measure it. e.g. Using a ruler to measure the length of a pencil in cm. (This could be carried out as a whole class activity in the classroom/hallway with pictures of different measuring equipment/units around the room. When given an object, ask pupils to stand by the relevant unit or equipment).

#### Whole class teaching:

Explain process of rounding to the nearest cm by using the half cm mark as a reference point. Model the process of using the ruler correctly to measure and round up or down. Is the object nearest to a whole cm or a half cm? Model how we write this in cm e.g. 4.5cm or 5cm. Model the main activity of estimating and then measuring each welly boot. Extension work could be to work out the difference.

#### Independent work:

Pupils to estimate and measure the size of each welly boot to the nearest half cm. Lower ability pupils could work in pairs/supported groups and measure to the nearest cm. Higher ability/extension work could work out the difference between their estimate and actual measurement. Pupils could convert their cm measurements into mm. Some children could measure more accurately to the nearest mm rather than rounding to the nearest half cm.

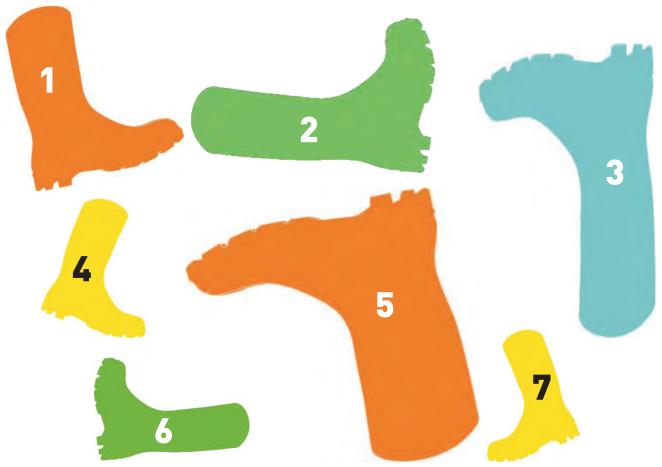
#### Plenary:

Share findings. How accurate were your estimates? Did you improve? Look at converting cm measurements into mm by using knowledge of how many mm are in cm.



Name:	Date:	

## Learning objectives:



Welly	Estimate (to nearest cm)	Measurement (to nearest cm)	Was my estimate higher or lower?
1			
2			
3			
4			
5			
6			
7			