

## Distance

### Learning Objective:

- Convert measures given in
  - kilometres to metres and vice versa
  - meters to centimetres and vice versa
  - Centimetres to millimetres and vice versa.
- Solve real-life situations involving conversion, addition and subtraction of measures of distance.

### Let's Talk Math:

- Explain to the pupils that
  - Kilo means 1000, centi means 100, and milli means 1/1000.
- When a bigger unit is converted to a smaller unit: we multiply with the conversion factor.
- When a smaller unit is to be converted to a bigger unit; we divide with the conversion factor.

$$1 \text{ km} = 1000 \text{ m ;}$$

$$1 \text{ m} = 100 \text{ cm ;}$$

$$1 \text{ cm} = 10 \text{ mm}$$

### Duration: 1 Lesson

### Whole Class Activity

#### Let's Try It:

- After giving pupils a breakdown of all the conversions, give them some real-life examples of distance and ask them to help you do some conversions on the board.
- Here are some examples of questions you can use: Jawad was going to distribute Eid sweets in his neighbourhood.
- He walked 20 metres to the first house. How many centimetres did he walk?
- He walked 100 meters to the next house. How many centimetres did he walk?
- He walked 100 meters. How many millimetres did he walk?
- He walked 4500 centimetres to the next house. How many metres did he walk?
- He couldn't make it to the next house because it was 2000 metres away. How many kilometres was it?

### Assessment:

Ask pupils to solve some realistic problems that involve distance. Here are some examples of questions below:

- Javeria and Tina drove to their aunt's house. Javeria drove  $9\frac{3}{4}$  kilometres. Tina drove 3500 metres before they arrived. How many kilometres did they drive in total?
- Mira flew 1234 kilometres to Lahore to visit her uncle. After picking up Mira, her uncle drove 20 kilometres to his house from the airport. How many kilometres had Mira travelled in all?
- Nobody wanted to ride the 22 kilometres back to town after the family reunion. So, relatives rode 10 kilometres to the nearest hotel. How many kilometres did the family ride in all?

## Time

### Learning Objective:

- Add and subtract intervals of time in hours and minutes with carrying and borrowing.
- Solve real-life situations involving conversion, addition and subtraction of intervals of time.

### Let's Talk Math:

- Explain to pupils that:
  - When hours are converted to minutes, multiply by 60.
  - When minutes are converted to hours, divide by 60.
  - When minutes are converted to seconds, multiply by 60.
  - When seconds are converted to minutes divide, by 60.
  - One hour = 60 minutes  
Half an hour = 30 minutes  
Quarter of an hour = 15 minutes  
Three-quarters of an hour = 45 minutes

### Make Sure You Have: Worksheets

**Duration: 1 Lesson**

**Group Activity**

### Let's Try It:

- Draw this activity sheet on the board for pupils to create a worksheet of it. Ask pupils to fill them out in groups of three.

1. Yousuf decides to start practising for his Maths exam on Friday at 3:15 p.m. which is due after the weekend. Day: Friday Time: 3:15 p.m.	2. 5 hours later he gets bored and decides to take a break for dinner. Day: Time:	3. 15 hours later he picks up his science book and starts reading the new topic his teacher gave him for homework. Day: Time:
After 2 hours he decides to take a break for lunch. Day: Time:	Half an hour later he takes a nap for 45 minutes. Day: Time:	Then he goes for a bicycle ride with his friends for an hour. What time is it now? Day: Time:

**Assessment:** Ask pupils to solve the worksheet given above in class.