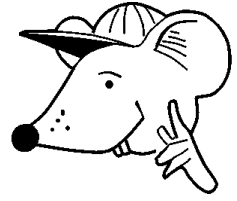


# MATHEMATICS



**N.S. Yr. 6 P.101**

**Read the time from clocks, calendars  
and timetables.**

## Equipment

Paper, pencil  
Atlas with time zones around the world

# MathSphere

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### **Concepts**

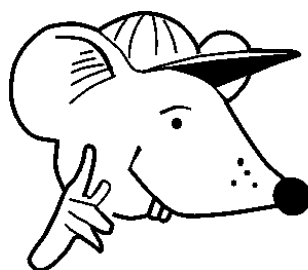
Children should be able to read the world's time zones from an atlas and work out the time in a given place if the time in another is known.

They should understand distance time graphs and be able to draw and read them, drawing conclusions where appropriate.

As an extension, children should be able to read distance/time graphs, understand speed and average speed, and be able to solve problems involving time and speed.

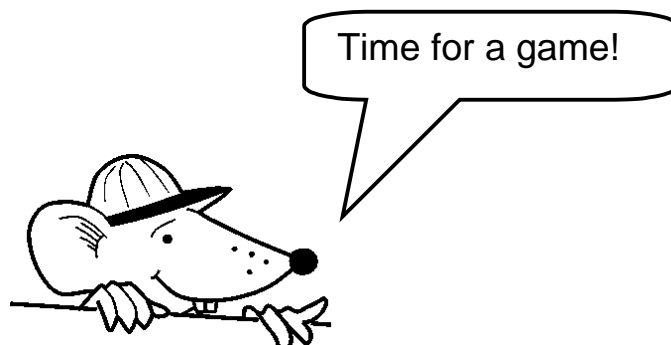
For this little exercise you will need an atlas that shows time zones.

Look up the cities in your atlas. See which time zone they are in and then work out what the time will be at the moment in each one.

**The time now where I live is:**

City	Time Now
Sydney	
New York	
Cairo	
Calcutta	
Brasilia	
Capetown	
Beijing	
Paris	
Athens	
Mexico City	

You could try searching the internet for schools around the world and sending some an email to find out what the time is there. Don't wake them up in the middle of the night!



Cut out the cards at the end of this module with the names of cities and times.

Share out the city cards with your partner (without looking) and share out the time cards.

Copy what you have into this table, pairing a card with a time. One example is shown.

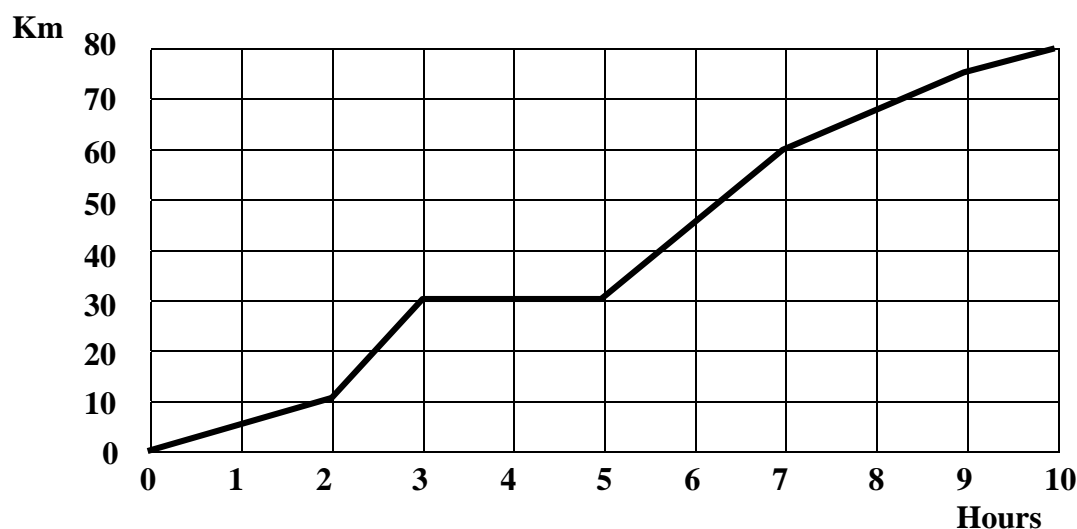
<b><i>City</i></b>	<b><i>Time</i></b>	<b><i>Time in London</i></b>
<b>Los Angeles</b>	<b>10:40 a.m.</b>	

Now have a race to see who can work out the time in London for each of the cities and times in the table.

The first to finish is the winner. Ask your teacher or parent to check your work.

**Extension Work**

The graph shows the distance a cyclist rode in a time of **10** hours.

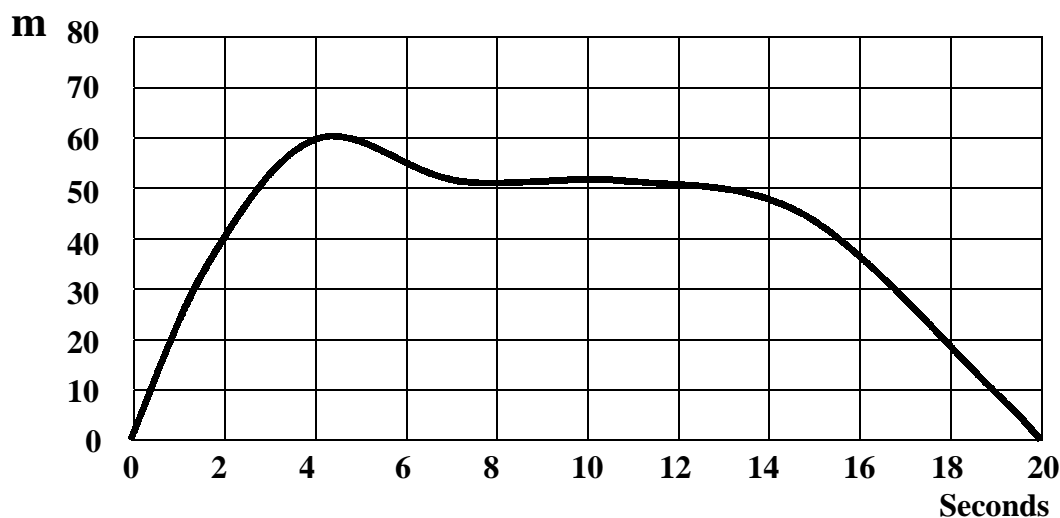


Answer these questions:

- a) How far was the cyclist from the starting point after **two hours**?
- b) How far was she from the starting point after **seven hours**?
- c) What was the cyclist doing between the **third** and the **fifth hours**?
- d) How far did she cycle in the **ten hours**?
- e) What was her average speed over the journey?
- f) Between which hours was she cycling fastest?
- g) What was her average speed when she was cycling fastest?
- h) Estimate how far she had gone after **9 hours 30 minutes**.
- i) If she rode back at a steady speed of **16 Km/hr**, how long would it take her to return?

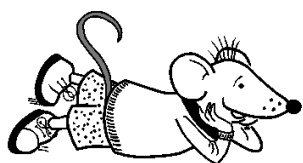
### Extension Work

A boy launches a model glider. The graph shows the height of the glider above the ground over **20** seconds.



Answer these questions:

- a) What was the **greatest height** reached by the glider?
- b) For how long did it stay in **level flight** approximately?
- c) How far did it rise in the first **two seconds**?
- d) What was its average speed vertically in the first **two seconds**?
- e) How long did it take to go from its highest position to landing on the ground?
- f) How far did it come down in the last **two seconds**?
- g) How high was the glider after **14 seconds**?



I can't take gliders lying down.

**Answers****Page 5**

- a)** 10 Km
- b)** 60 Km
- c)** Resting
- d)** 80 Km
- e)** 8Km/hr
- f)** 2 and 3 hours
- g)** 20 Km/hr
- h)** 77/78Km
- i)** 5 hours

**Page 6**

- a)** 60/61 metres
- b)** Approx 6 seconds
- c)** 40 metres
- d)** 20 m/s
- e)** 15/16 seconds
- f)** 19/20 metres
- g)** Approx 48 metres

<b>Los Angeles</b>	<b>10.40 a.m.</b>
<b>New York</b>	<b>2.30 p.m.</b>
<b>Sidney</b>	<b>6.20 a.m.</b>
<b>Brasilia</b>	<b>9.15 p.m.</b>
<b>Cape Town</b>	<b>Noon</b>
<b>Calcutta</b>	<b>Midday</b>
<b>Moscow</b>	<b>11.02 a.m.</b>
<b>New York</b>	<b>3.55 p.m.</b>