

# Tiebreak Teasers!

## Tennis Maths Problems

### Lesson Objectives

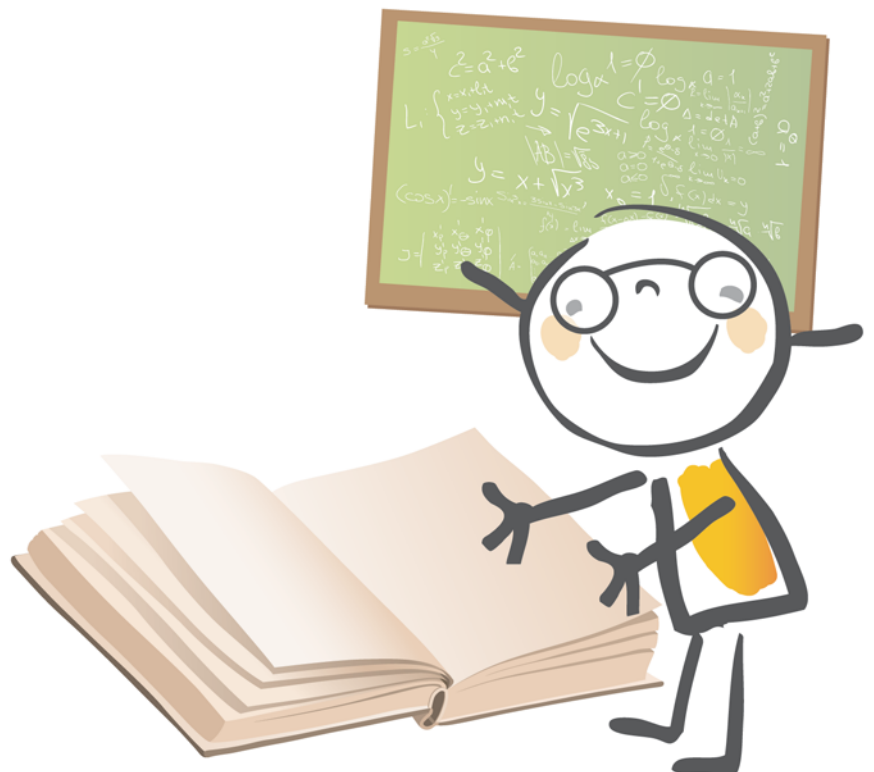
- To be able to solve one and two part word problems.

‘Tiebreak Teasers’ is a series of word problems where children have to use a variety of strategies to solve them. Calculators may be used.

They are written in progressive order of difficulty ranging from National Curriculum Levels 3 - 5.

### Helpful Hints

- For some children it may be useful to work with a partner or in small groups, to solve these problems.
- Underlining or highlighting key words or information in the question can also help.
- Encourage the children to show ALL their working and to underline their final answers.



# Tiebreak Teasers!

## Tennis Maths Problems

1

My coach says I can have five pence for every ball that I collect.

After the training session, I picked up 14 balls on court one, 26 balls from court two and 9 balls which had been hit over the fence!

**How much money did I collect?**

.....

2

A match started at 2pm and finished at 4.30pm.

During the match there were two rain relays, one of 20 minutes and one of half an hour.

**How long did the match last?**

.....

3

Ten courts are being used on the second Monday of the Wimbledon Championships for singles matches.

**A. If each player on court requires two towels, how many towels will need to be taken out?**

.....

**B. Eight bottles of water are needed in each on-court fridge. How many bottles are required altogether?**

.....

4

Each year 250 Ball Boys and Girls are recruited for the Wimbledon Championships from local Secondary Schools. They are grouped into teams of six.

**A. How many teams can they create and how many children are in reserve?**

.....

**B. Each team operates for 60 minutes on court. If a match between Nadal and Federer lasts 4 hours 30 minutes, how many Ball Boys/Girls will be used?**

.....

**C. Each boy/girl is issued with four pairs of Wimbledon socks costing £1.99 a pair. How many pairs of socks must be ordered for all the boys and girls?**

.....

**D. How much will the sock bill be?**

.....

5

During a rain break, a family of four have lunch. They buy:

- 4 packs of sandwiches costing £3.99 each
- 4 soft drinks of £2.50 each
- 4 dishes of strawberries and cream costing £4.50 each

**A. What would the cost of the lunch be?**

.....

**B. How much change from a £50 note?**

.....



6

	Gentlemen's & Ladies' Singles	Gentlemen's & Ladies' Doubles	Mixed Doubles
Winner	£750,000	£115,000	£46,000
Runner-Up	£375,000	£57,500	£23,000
Semi-Finalist	£187,500	£28,750	£11,500
Quarter-Finalist	£93,750	£15,000	£5,250

Look at the chart showing the prize money at the **Wimbledon Championships**

**A. Player A was runner up in the Gentleman's Singles, a semi-finalist in the Gentleman's Doubles and winner of the Mixed Doubles. What would his total winnings be?**

.....

**B. Player B was the semi-finalist in the Mixed Doubles, quarter-finalist in the Ladies' Doubles and the winner of the Ladies' Singles. Did she win more or less than Player A?**

.....

**C. What was the difference?**

.....

7

During the Championships, 6 balls are on court at any one time. The balls are changed after the first seven games, then after each nine games.

**A. The Ladies' score was 6-4, 3-6, 6-1. How many balls were used for this match?**

.....

**B. In a Men's match the score was 6-4, 2-6, 7-5, 4-6, 10-8. How many MORE balls were needed for this match?**

.....



8

At the first Wimbledon Tennis Final in 1877, the two hundred spectators paid one shilling (five pence) for their ticket.

**A. How much were the takings at the gate in 1877?**

.....

**B. There are now 15,000 seats in Centre Court. If a ticket cost the same as in 1877, what would the takings be at the gate?**

.....

**C. A ticket for the Wimbledon final now can cost £60. If all the seats were sold, how much would be taken at the gate now?**

.....

9

The Centre Court at Wimbledon holds 15,000 spectators.  
The seats are divided into 12 sections.

**A. A company purchases two whole sections of seats.  
How many people can they bring?**

.....

**B. If 15% of the seats are unoccupied how many people are watching in the section?**

.....

**C. How many seats are there in each section?**

.....

**D. Round that number to the nearest hundred.**

.....

**E. Round it to the nearest thousand.**

.....

10

There is a long queue of people waiting at Gate 13.

**A. If 225 people stand two abreast and each pair occupies 75cm on the pavement, how long, in metres, will the queue be?**

.....

**B. If it takes 1 and a half minutes for one pair to get through the turnstiles, how long will it take for the queue to get through into the ground?**

.....

# Tiebreak Teasers!

## - ANSWERS -

1

£2.45

2

1 hour 40 minutes

3

- A. 40 towels
- B. 80 bottles

4

- A. 81 teams with 4 children in reserve
- B. 30 balls boys/girls
- C. 1000 pairs
- D. £1990

5

- A. £43.96
- B. £6.04

6

- A. £499,750
- B. She won more (£776,500) - Difference £326,750

7

- A. 24 balls (4 changes of balls)
- B. 18 balls (3 more sets of balls needed - 7 changes overall)

8

- A. £10
- B. £3,750
- C. £900,000

9

- A. 1250
- B. 1300
- C. 1000
- D. 2500
- E. 2125

10

- A. 84.75m (112 pairs and 1 extra person)
- B. 2 hours 48 minutes and 45 seconds