

TIEBREAK TEASERS!

Tennis Maths Problems

ACTIVITY 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.

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.

WORKSHEET

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?

WORKSHEET

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?

WORKSHEET

6

	Gentlemen's & Ladies' Singles	Gentlemen's & Ladies' Doubles	Mixed Doubles
Winner	£2,350,000	£540,000	£116,000
Runner-Up	£1,175,000	£270,000	£58,000
Semi-Finalist	£588,000	£135,000	£29,000
Quarter-Finalist	£294,000	£67,000	£14,500

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?

WORKSHEET

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 it 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?
- A 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