Premier League   International   Champions League   Carabao Cup

AUG

6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

SEPT

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

90
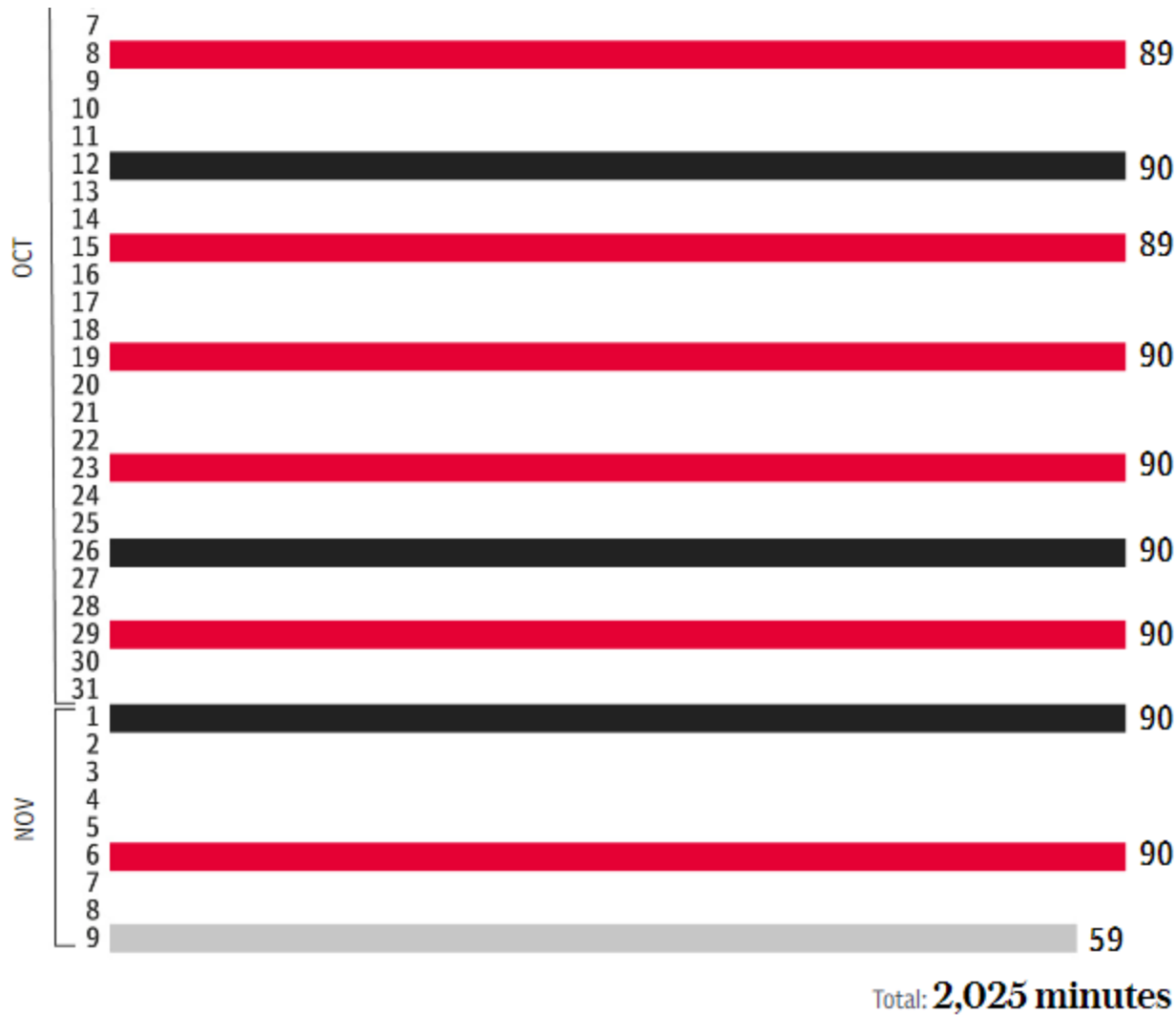Minutes played

90

90

90

90

78

90

90

Here is the start of a graph.

What is going on?

Premier League   International   Champions League   Carabao Cup

Here is the whole graph (reduced in size), along with the title and the key.

Any comments?

This is the end of the graph.

How many matches has he played?

What error can you spot?

What The Graph 27: teacher notes

Notes/comments

- From an article about the amount of football Harry Kane (captain of England's men's team) has played prior to the Qatar World Cup.
- They appear to be trying to say that he has played lots of games.
- Slide 1 has part of the graph. It seems that the colour gives the type of match (most of which are played for Tottenham Hotspur, with the internationals being played for England). The width of the line appears to tell us how many minutes (out of 90) he played for in each match.
- Slide 2 shows the full graph. It's very difficult to read the dates and the lengths of time, but it's great to allow us to see how frequently he has played. On the website it wasn't possible to see the whole thing without scrolling, so it was less useful there.
- Do we care about the colours? Is it relevant whether a match was in the Carabao Cup, or the Champions' League?
- In almost all matches he played the full 90 mins. The x-axis is not very interesting …
- Slide 3: I ask the question "how many matches?" – and we could go back to count them. We could also get a lower bound by dividing the total number of minutes by 90. This is 22.5, so he has played in at least 23 matches.
- The penultimate bar says '90' mins and the final one says '59'. Hold on: that's under 2/3 of the match, but the bar isn't 2/3 of the length! It's not in proportion! Look back at the 78 mins one on slide 1 – is that in proportion (hint: no!)
- How could this data be displayed better? (One possibility is on slide 5 – there are undoubtedly better ways than this!

Source:

HARRY KANE'S MATCHES THIS SEASON

Premier League ▬ | **International** ▬ | **Champions League** ▬ | **Carabao Cup** ▬

August '22

M	T	W	T	F	S	S
1	2	3	4	5	**6**	7
8	9	10	11	12	13	**14**
15	16	17	18	19	**20**	21
22	23	24	25	26	27	**28**
29	30	**31**				

September '22

M	T	W	T	F	S	S
			1	2	**3**	4
5	6	**7**	8	9	10	11
12	**13**	14	15	16	**17**	18
19	20	21	22	**23**	24	25
26	27	28	29	30		

October '22

M	T	W	T	F	S	S
					1	2
3	**4**	5	6	7	**8**	9
10	11	**12**	13	14	**15**	16
17	18	**19**	20	21	**22**	23
24	25	**26**	27	28	**29**	30
31						

November '22

M	T	W	T	F	S	S
	1	2	3	4	5	**6**
7	8	**9**	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				