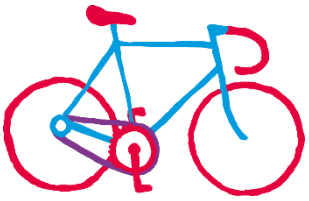


Graphique de Temps de Distance

Name: _____

Topic

1. Translate the French title back to English to discover the topic of this task:

Introduction

Graphs are used to display data and interpreting them is an important skill in many occupations. A huge amount of data is taken in the Tour de France and teams employ scientists to interpret this data and present it to the riders and team managers.

1. **Other than distance ridden, what other data would be obtained from cyclists participating in the Tour de France?**

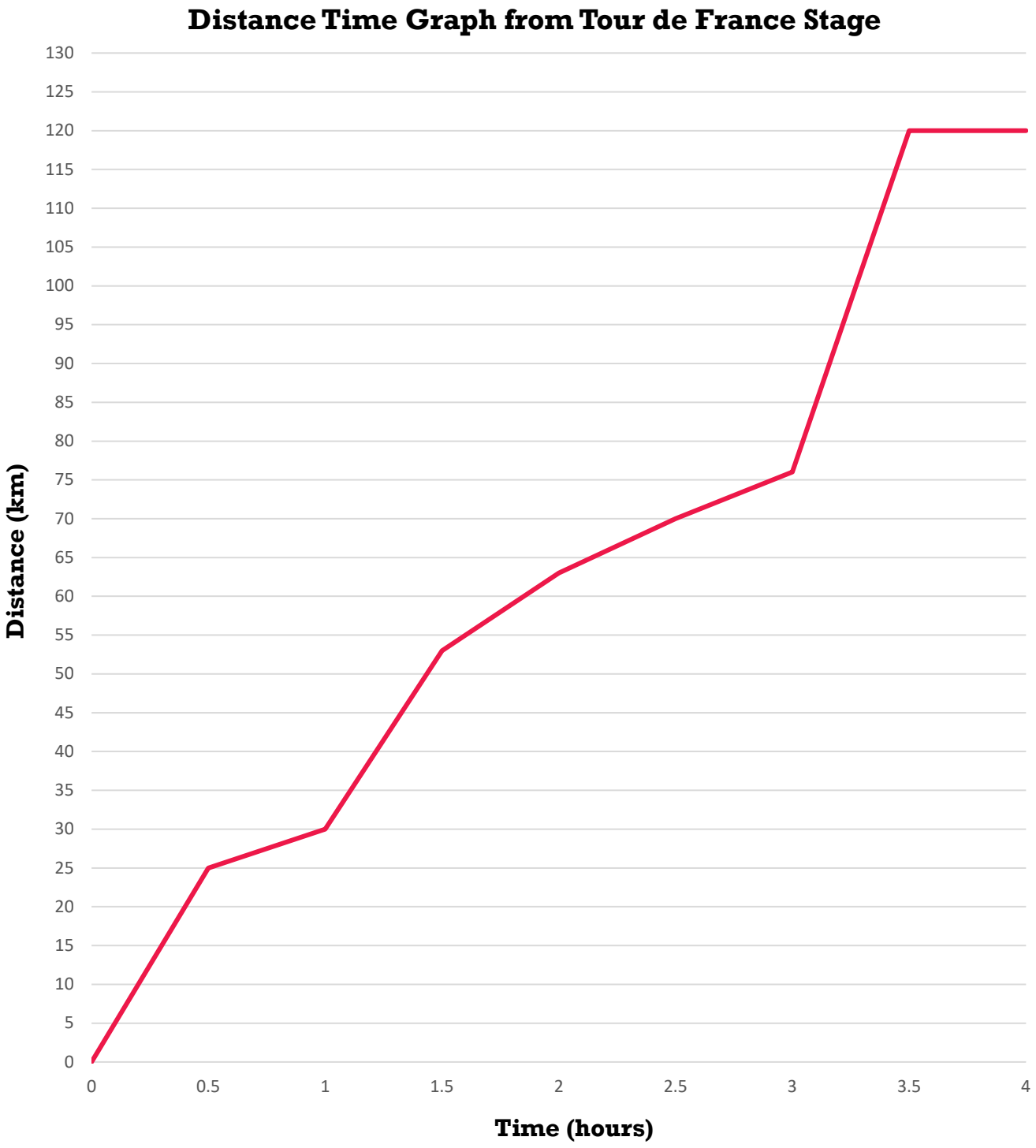
2. **Suggest why the data is displayed on a graph rather than numbers in a table?**

3. **Name 3 examples of when you have seen data displayed on a graph over the past week.**

Example	Data displayed
One	
Two	
Three	

Distance time graph

The following graph shows data from a rider in a stage of the Tour de France:



4. Complete the missing values in the table below:

Time (hr)	0	0.5	1	1.5	2	2.5	3	3.5	4
Distance (km)		25	30		63	70	76		

Interpretation

5. **What technology do you think was used to collect this data?**

6. **How long was this stage of the Tour de France?**

7. **How many hours did it take for the rider to finish the stage?**

8. **The gradient on a distance time is an indication of the speed an object is going. Match the gradient to the speed in the table below by using the following options:**
   - **Stopped**
   - **Slow**
   - **Fast**

Gradient	Speed
Gradual	
Steep	
Horizontal	

9. **Indicate when the rider was:**
   a. **Traveling at their fastest:** _____
   b. **Traveling at their slowest:** _____
   c. **Was stopped:** _____

The average speed can be calculated using the following formula:

$$Average\ speed\ \left(\frac{km}{h}\right) = \frac{Change\ in\ distance\ traveled\ (km)}{Change\ in\ time\ (hr)}$$

10. **Calculate the average speed of the rider between the following points (perform your working out on a separate page and take a photo of it when submitting your work):**
    a. **0 hr and 1 hr:** _____
    b. **1.5 hr and 3 hr:** _____

c. **3 hr and 3.5 hr:** _____

d. **3.5 hr and 4 hr:** _____

11. **The Tour de France is known for its mountains. Using the distance time graph, when do you believe the rider was riding uphill and downhill? Justify your answer.**

Slope	Time	Justify your answer
Uphill		
Downhill		

12. **The data at the end of the graph (between 3.5 – 4 hrs) appears to be an error. Describe what you think has occurred at this point.**

13. **State another occupation where the role includes graph interpretation.**
