Act the Graph

Surprise in Facial Expression: Opening a Present

100%

excitement

50%

0%

5   10

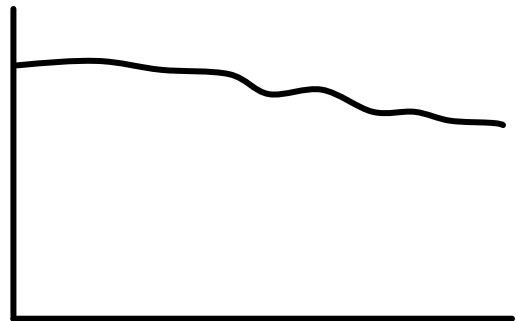Time (seconds)
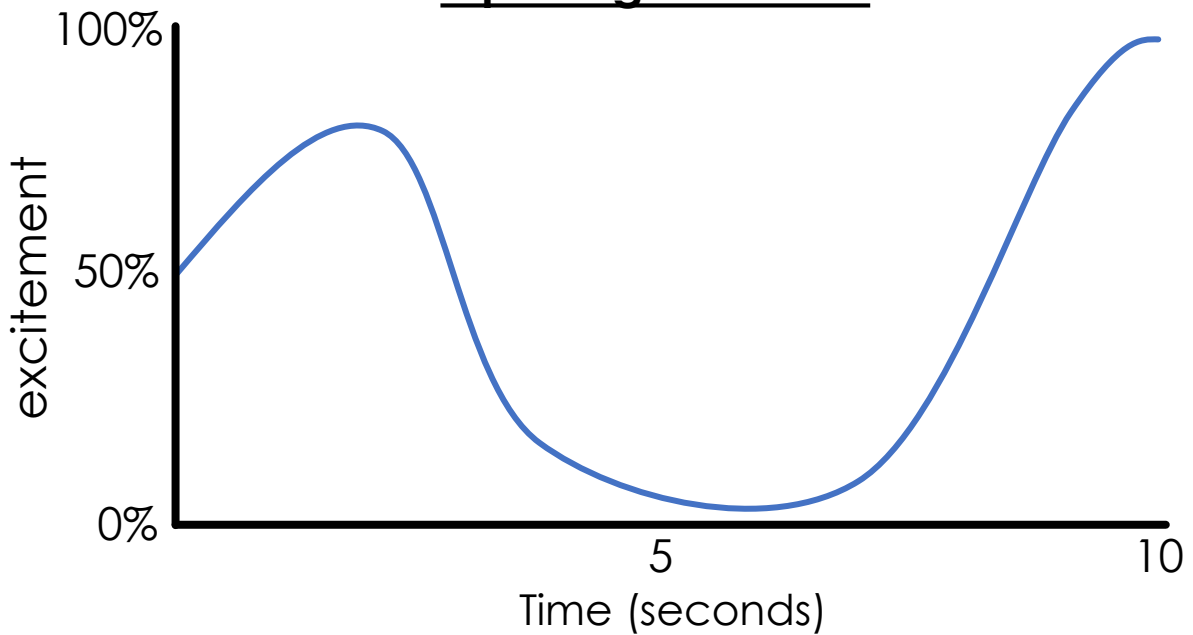
Reading Graphs

Sara has been trying to improve her fitness. Each week, she has recorded the number of press-ups she can do in one go and the time it takes her to run 5km. Here are her results:

Press-ups
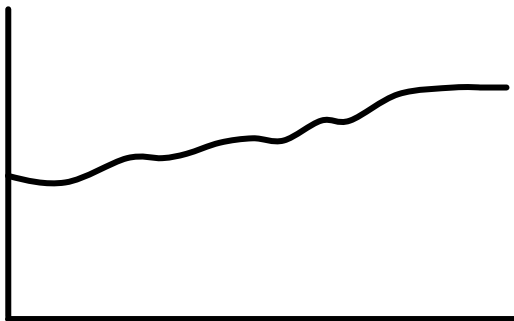
5km Time


Agree or disagree:

Sara is better at press-ups but is slower at running

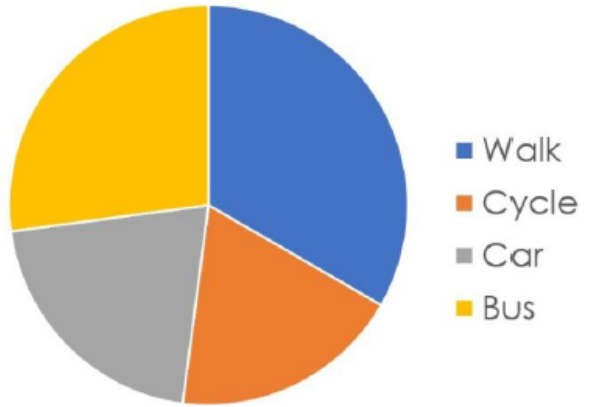*Sara is improving at press-ups and running*

Changing Graphs

Marton Vale Primary ran an 'Active Start' project, encouraging children to walk or cycle to school. They wanted to **improve children's fitness** and **reduce traffic congestion** around school.

Mode of Travel to School, February

- Walk
- Cycle
- Car
- Bus
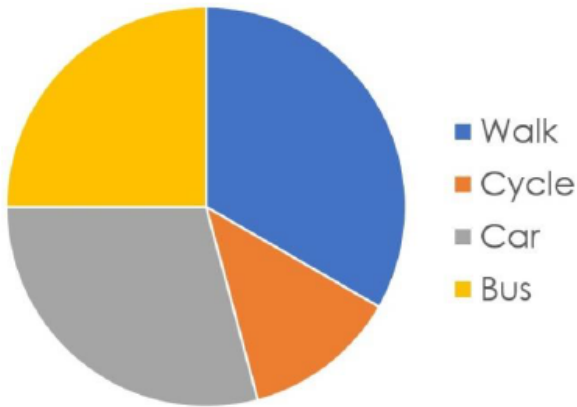
Mode of Travel to School, May

- Walk
- Cycle
- Car
- Bus

How successful was the 'Active Start' project?

Planning a Journey

Here is a train timetable for the morning trains from Sheffield to Newcastle:

Sheffield	6:20	7:04	7:58	8:45
Doncaster	6:47	7:33	8:25	9:14
York	7:14	8:00	8:52	9:41
Darlington	7:43	8:29	9:21	10:11
Durham	8:01	8:48	9:39	10:30
Newcastle	8:14	9:01	9:52	10:43

Jen lives in York. She has a job interview a 10-minute walk from Newcastle train station. Her interview starts at 9:15am.

At what time should Jen arrive at York train station?

Explain your choice.

Answers

Act the Graph: At first excitement rises. Then there is apparent disappointment or confusion. After a few seconds, you realise what the present is and show great excitement.

Reading Graphs: The red statement is true. An improvement in press-ups means you can do more press-ups and an improvement in running means your running times get quicker.

Changing Graphs: The proportion walking and getting the bus remain similar. The main change is a reduction in those travelling by car (congestion) and in increase in children using their bike (fitness).

Planning a Journey: The 8:00 train from York is expected to arrive in time for the interview. However, Jen is likely to want to arrive earlier than this considering that she is going to a job interview. The 7:14 train from York may be more suitable. It is also advisable to arrive at a train station a few minutes before your expected departure time.