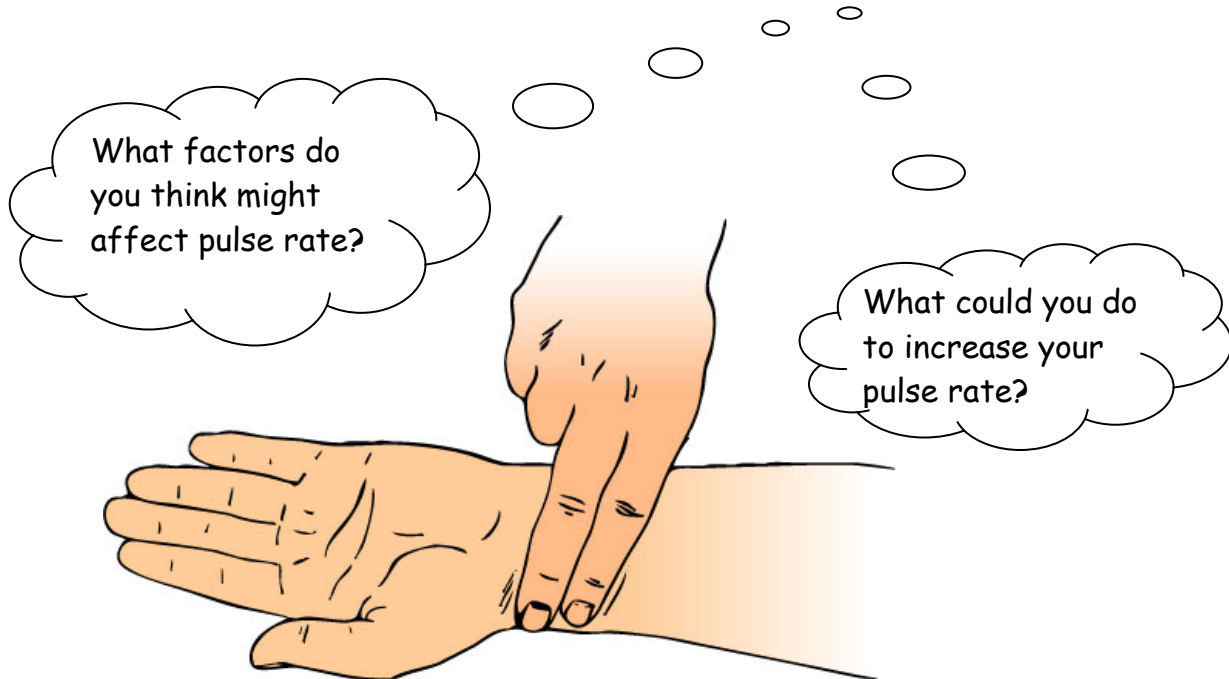


Just what is a Pulse rate?

Pulse rate shows how fast your heart is beating. It is usually given as the number of beats in one minute. It varies for different people -

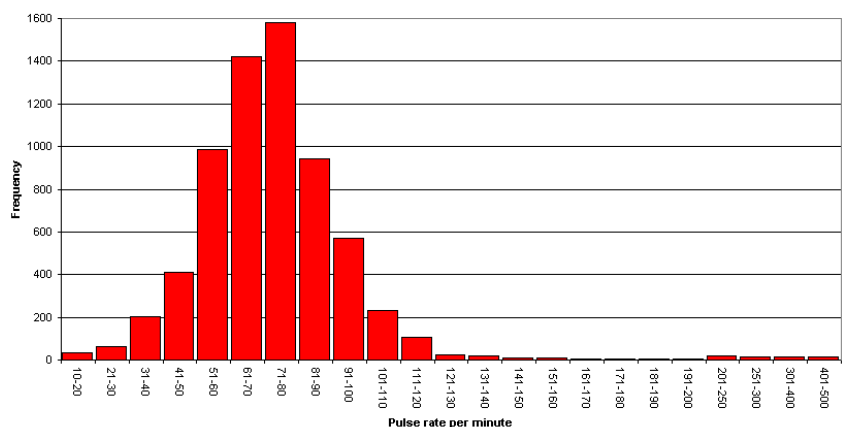


For 7-16 year olds a normal resting pulse rate is between 75 and 100. It varies according to your age, level of fitness and how active you are being.

- Here are some pulse rates taken from the CensusAtSchool database. Have a careful look at the graph. Write a few sentences describing the graph. Is this what you would expect? Try and explain what you have noticed.

Pulse Rates of 6700 Children aged 7 to 16.

Data from Phase 3 CensusAtSchool



(**Extension** - The mean of this data is 75.32, the mode 72 and the median 72. Can you explain why the mean is higher than the other two measures of average?)

2. Look at the following pulse rates. What do you notice? Can you think why there are differences between the species?

Type of Animal	Normal Pulse Rate
Horse	32 - 44
Dog	60 - 120
Sheep	70 - 80
7-16 year old	75 - 100
Mouse	450 - 550
Elephant	20 - 30
New born baby	130 - 140

3. Which three activities below would make your pulse rate go up?

Sleeping	Watching TV	Cycling
Running	Reading	Swimming

Explain why your pulse would go up.

4.

- Find your pulse. Count the number of heartbeats in 30 seconds. Enter the number in the table below.
- Multiply by 2 to get your pulse rate - the number of beats per minute. Enter this in the table.
- Multiply by 60 to get the number of heartbeats in one hour.
- Complete the rest of the table.
- The average lifespan for a mouse is 3 years. Using the data in Q2 work out how many times a mouse's heart beats in its lifetime.
- Repeat for a different animal. What do you notice?

Time period	Number of heartbeats
30 seconds	
1 minute	
1 hour	
1 day	
1 year	
Average lifetime (80 years)	

For more interesting facts about pulse rate and blood generally go to:
http://www.questacon.edu.au/html/assets/pdf/The_Circulatory_System.pdf
http://www.medindia.net/patients/calculators/pulse_chart.asp