

Activity –Let me Check my Pulse

Subject	Biology
Class	XI
Chapter	Circulation of body fluids
Topic	Arterial pulse
Duration	40 minutes
Nature of the Activity	In pairs

What will I learn? (Learning Outcome)- to feel the pulse; to associate that the blood flowing through the artery with pressure helps it to pulsate; the effect of exercise/games- on the pulse rate; the relation between pulse rate and heart rate

Skills- Observing, Calculating, Infering

What I have to do?- Check the radial pulse before and after exercise

What do I require?- Stop watch, pen, paper

What do I need to know?-Cardiac cycle, heart beat, heart rate; that the radial artery passes down the thumb side of forearm

- **Teacher's activity-**
- Give instructions for the activity
- Give directions as to how to feel the pulse, by keeping the index and middle fingers on the thumb side of the wrist, while supporting the wrist with the thumb
- For measuring heart rate (heart beats per minute)- pulse rate can be measured, as heart rate and pulse rate reflect the same

- **How will I proceed?**
- **Student's activity-**
 1. To be ready with note pad, pen, stop-watch
 2. To place the index and middle fingers on the thumb side of the wrist, while supporting the wrist with the thumb and feel the pulse
 3. To start counting the pulsations when the partner starts the stop watch
 4. To continue for a minute and note the number of pulsations
 5. To do on the spot jogging for 5 minutes and note the pulse rate. For better results, one should note for the first 10 seconds and multiply by 6
 6. To take turns and repeat the same with the partner
 7. To compare the two readings

8. Compile all the readings, compare and discuss

What do I observe?

	Pulse rate (at rest)	Pulse rate (after exercise)
Student 1		
Student 2		
Student 3		
Student 4		

What have we learnt?

Pulse rate increases, upon doing exercise

What would I like to know ?

Arteries are deep-seated, whereas veins are superficial, then how can one feel the arterial pulse?

Which other parameters can help find about a healthy heart?

How to use a stethoscope?

Let me Evaluate myself-

1. What is pulse rate?
2. What is the average pulse rate for a healthy person?
3. Find out the time required for completing different phases of a cardiac cycle.
4. How can a trainer help a sportsperson in maintaining a healthy exercise regime?
5. What all can a doctor conclude regarding the health condition of a patient, by checking the pulse rate?