

## Pulse

**Approach:** Team

**Level:** Year 8 & year 4

**Resources:** Stop watch; timer's instructions; results sheet.

### Questions/instructions

*Presented orally.*

In this activity you are going to work as a team. In the activity you will be finding out the effect exercise has on your pulse rate.

First of all, I want each of you to try to find your own pulse. Good places to try are your wrist or your neck. Try to find your pulse now. Ask me for help if you can't find it.

Now we will do a practice count of pulses. I will time you for 30 seconds. Get ready to count your pulse from when I say "start".

**After 30 seconds:**

Stop now. Tell the others in your group how many pulses you counted in 30 seconds.

**Select one person in the group to be the timer.**

[Name] is going to be the timer in the next part of the activity. [Name] will give you your instructions from the card. You will count your pulse, then write it on the chart each time. Let's see what the instructions are that [name] will give then you can start.

#### The Timer's Instructions for the Team

1. Get ready to count your pulse for 30 seconds when I say "start".  
Stop counting when I say "stop".
2. Write your number of "pulses" on the chart.
3. Now get ready to do some hard exercise, jumping up and down on the spot for 1 minute. Wait until I say "start".
4. Now count your pulse for 30 seconds when I say "start".
5. Write your number of "pulses" on the chart.
6. Now get ready to do some more hard exercise, jumping up and down on the spot for 1 minute.  
Wait until I say "start".
7. Now count your pulse again for 30 seconds when I say "start".
8. Write your number of "pulses" on the chart.

### RESULTS

	Number of pulses		
	Student 1	Student 2	Student 3
Before exercise, pulse for 30 seconds.			
After 1 minute of exercise, pulse for 30 seconds.			
After 1 minute more of exercise, pulse for 30 seconds.			

% responses

y8 y4

### TEAM RESPONSES

#### Experiment

Rated on a 3 point scale:

Timing of exercise: good 98 79

Adequacy of exercise: good 81 81

Apparent accuracy of pulse reading: good 91 53

Rated on 4 point scale

Overall rating for experiment: very good 75 40

#### Reporting results to teacher

Students reported pulse rate increased 100 99

#### Explaining reasons for increase in pulse

Heart beating faster 92 73

Breathing faster 31 18

Body needs more blood flow 62 30

Body needs more oxygen 31 1