

Name: \_\_\_\_\_

### Activity 3.2 UP – How to increase fitness

To increase aerobic fitness, the cardio-respiratory (heart-lung) system must be strengthened. The heart, like any other muscle, must be exercised enough to strengthen it but not enough to cause damage. The heart needs to be exercised for 10 minutes or more at a time. The exercise does not need to be difficult – you should be a little puffed but still able to talk. Slow jogging is better for increasing fitness than a fast sprint. After exercise it is very important to cool down properly. This means that you should walk around slowly after a fast run and do some gentle stretching exercises.



1. To find your own level of fitness, record your results in the fitness test below.

Week	A. Resting heart beats per minute	B. After 3 minutes of step-ups, 3 minutes of jogging and 4 minutes of walking	C. After 3 minutes of rest	Fitness Score ie B minus C	Time in minutes for heart to recover to resting heart rate
Date Time 1					
Date Time 2					
Date Time 3					
Date Time 4					
Date Time 5					
Date Time 6					
Date Time 7					



2. What will happen to your resting pulse rate and your recovery rate if you follow a regular exercise program? How will this be beneficial to your health?

\_\_\_\_\_

\_\_\_\_\_

## Activity 3.2 UP – How to increase fitness (continued)

### Fitness tests

The aim of fitness tests is to find out if the heart is pumping sufficient blood to the muscles. To do this the pulse rate is measured. Pulse is the beat of the heart as it pumps blood into the arteries. Your pulse rate is the number of pulses in one minute (which is also your heart rate or HR). As with any other muscle, your heart has to be exercised to make it stronger. The result is that a fit person can recover from exercise quicker than an unfit person, for example:



#### Fit person

running HR = 140  
minutes later HR = 90



#### Unfit person

walking HR = 140  
minutes later = 120

These examples show that a fit person's heart rate gets back to the heart's resting rate much quicker. Exercise (together with diet) makes the heart stronger so people are less likely to have heart attacks or heart disease as they become older.

	Unfit adult	Fit adult
Resting heart rate	85 bpm*	70 bpm
5 minutes skipping	160 bpm	120 bpm
5 minutes walking	140 bpm	120 bpm
5 minutes running	140 bpm	120 bpm

\*beats per minute

These figures show that a fit person's heart does not beat as fast as an unfit person's heart.



1. Why do we give fitness tests?

\_\_\_\_\_

2. What is a pulse?

\_\_\_\_\_

3. What do we need to do to make our hearts stronger?

\_\_\_\_\_

4. A fit person will recover more quickly after exercise. True or false? Explain.

\_\_\_\_\_