

# Investigate the effect of heart rate on exercise

Split into 3 groups

## Step 1

Use the stethoscopes and timers to record how many heartbeats you can hear in 30 seconds.

## Step 2

Complete the circuit three times.

## Step 3

Use the timers and stethoscopes again to record how many heartbeats you can hear in 30 seconds.

### Let's think scientifically

A scientific investigation should be a fair test. Think about what conditions you need to keep the **same** and what condition you will change.

#### Things to keep the same:

Heartbeats must be counted before and after exercising for the **same amount of time**.

The person whose heart rate is compared must be the same.

#### Things to change:

Heart rate should be measured before and after exercise.

#### Make a prediction

What effect do you think exercise will have on heart rate?

Why do you think this?

*Clue – when you exercise your muscles need more food and oxygen from your blood, so your heart has to beat faster to transport them.*

#### What is recovery time?

Recovery time is the time taken for heart rate to return to normal. If you have time can you work out how long this is for you?

What could you do to help your body recover?