

# INVESTIGATE THE RATE

## An investigation into heart rate

### ACTIVITY OBJECTIVES

- To begin to understand what happens to heart rate during exercise.
- To begin to understand the relationship between heart rate and pulse rate.
- To identify factors that could affect pulse rate.

- Ask the children what they think happens in their bodies when they exercise. Discuss pulse rate and what it tells us about our bodies. Check that they understand how exercise increases the heartbeat and that in turn, increases the supply of blood to the muscles. Point out that blood carries oxygen, which muscles need in order to work.
- Ask for volunteers to come out to the front to have their pulse rates taken. Demonstrate taking a pulse in the wrist and the neck. Allow pupils to take their own and a friend's pulse rate. Explain that the pulse rate they are taking is called a 'resting pulse'. Ask children which factors they think could change the pulse rate. Discuss why exercise is good for us; what exercise they take and whether they think they should take more or less.
- Ask the children to make a prediction about what will happen to their pulse rate if they exercise.
- Tell them that they are going to investigate the relationship between exercise and pulse rate.
- Discuss with them what sort of exercise they think raises the pulse rate most.
- Ask the children to record their resting pulse on the worksheet. Discuss the ways that they could easily raise their pulse rate and make a list on the board.
- Allow the children to complete some exercises in two minute bursts. They could run across the playground or step up and down on a bench in the hall, etc. Ask them to record their pulse rate after each exercise on the worksheet and then again five minutes after they have stopped exercising.



### PLENARY

Discuss results. Hopefully they will have discovered that pulse rate increases with exercise. Ask if they noticed anything else that changed in their bodies e.g. breathing, sweating etc.

Set them the challenge of finding out more about the heart and how it works at home perhaps on the internet or in books.

## WORKSHEET

# INVESTIGATE THE RATE

Your body and exercise

**TAKE YOUR PULSE FOR 30 SECONDS AND THEN DOUBLE IT!**

### PULSE RATE PER MINUTE:

AT rest	Immediately after exercise	Five minutes after exercise

### OTHER CHANGES NOTICED:

---

---

---

---

---

---

---