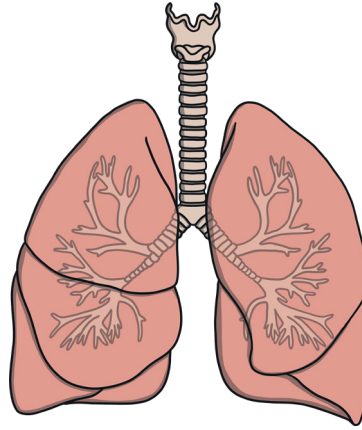


Breathing Rate Mini Investigation

Your **respiratory rate** is the number of breaths you take per minute. The average respiratory rate for an adult at rest is usually between 12-16 breaths per minute. At rest, children usually take about 20 breaths per minute.



What happens to your breathing rate when you exercise?

Prediction

Circle your predicted outcome.

I predict that my breathing rate will increase/decrease/stay the same after exercise.

Equipment

List the equipment you may need for this investigation.

Plan

You are going to investigate your breathing rate:

- at rest
- after 15 seconds of exercise
- after 1 minute of exercise

Step 1

Measure your breathing rate at rest for 10 seconds.

Step 2

Exercise for 15 seconds.

Measure your breathing rate again for 10 seconds.

Step 3

Exercise for 60 seconds.

Measure your breathing rate again for 10 seconds.

Results

Record your results in the table below.

Multiply your number of breaths in 10 seconds by 6 to calculate the number of breaths per minute.

	Breaths in 10 seconds	x6	Breaths per minute
At rest			
After 15 seconds of exercise			
After 60 seconds of exercise			

Conclusion

Is breathing rate affected by exercise?

How is your breathing rate affected by exercise?

Why might this be?

Breathing Rate Mini Investigation

Safety Information

Ensure the exercise is carried out in a clear space.

Students should know not to exercise more than they feel comfortable with and to notify the teacher if they have any injury, sickness or dizziness.

Disclaimer

We hope you find the information on our website and in our resources useful. As far as possible, the contents of this resource are reflective of current professional research. However, please be aware that information can quickly become out of date. The information given here is intended for general guidance purposes only and may have to be adapted to meet the needs of your students.

The activities set out in this resource are potentially hazardous. You are responsible for carrying out proper risk assessments on the activities and for ensuring that activities can be carried out safely. We are not responsible for the health and safety of your group or environment so, insofar as it is possible under the law, we cannot accept liability for any loss suffered by anyone undertaking the activity or activities referred to or described in this resource. It is also your responsibility to ensure that those participating in the activity are fit enough to do so and that you or the organisation you are organising for has the relevant insurance to carry out the physical activity. If you are unsure in any way, we recommend that you take guidance from a suitably qualified professional.