

Lesson Plan

NEUROHEADWAY

Neuroscience Into Education

Breathing – 15 mins

T = Teacher

Ss = Student

Time	Interaction	Activity	Information	Notes
00.00.00	T-S S-T	Question to Ss	Who knows what the air we breathe contains? What is the most important part of those gases? Why is oxygen needed in the body? We can survive a few weeks without food, a few days without water but only a few minutes without air.	-78% Nitrogen 21% Oxygen 1% argon, carbon dioxide and other trace gases. -Oxygen provides the fuel for our cells to produce energy from what we eat.
00.02.30	T-S	Teacher gives information	So breathing is the most important thing we do in our lives. It stays with us from birth to death. How we breath has been shown to have an impact on our mental health and even our lifespan.	
00.03.00	T-S	Activity 1	Place your hand on your upper chest and the other on your abdomen. Now try breathing only from your upper chest. Try to keep your abdomen still.	Ensure no student has a breathing problem or asthma related condition. Ensure students are sat up straight in their chairs or sat cross legged on the floor.
00.05.00	T-S S-T	Post exercise debrief	How did that feel? Breathing from your upper chest is something we do when we feel stressed or anxious. This is shallow breathing; we are not getting the maximum amount of oxygen we can into the body.	
00.06.00	T-S S-T	Activity 2	Now place your hands in the same position. Now breathe from your diaphragm, make your belly expand to its maximum capacity. How much better does this feel?	
00.08.00	T-S S-T	Post exercise debrief	The first style of breathing activates what is known as the sympathetic nervous system. This part of the nervous system is responsible for the fight or flight response it is related to stress and anxiety. The second type activates the para-sympathetic nervous system which is responsible for feelings of calm and relaxation.	
00.09.00	T-S S-T		Which is the best way to breathe? If you are feeling stressed or anxious which type of breathing will you probably be doing?	-Belly breathing or diaphragmatic breathing. -Shallow chest breathing

			Which type of breathing would be better for you? Why?	-Belly breathing -It will activate the para-sympathetic nervous system which induces relaxation.
00.11.00	T-S	Activity 3	The 4-7-8 breathing exercise. This exercise again is about slow correct breathing. In this we breathe in with the belly for 4 seconds, hold the breath for 7 seconds and then exhale forcefully through the mouth making a 'whoosh' sound as you do, for 8 seconds. Again, this activates the para-sympathetic nervous system. It can also be used if you are having trouble sleeping and reducing feelings of anger.	-Teacher demonstrates first then students' practice.
00.13.00	T-S S-T	Post exercise discussion	How do you feel after that breathing technique? If you are ever feeling stressed or anxious, stop and check how you are breathing. By changing the way we breathe we can actually change the way we feel, reducing our anxiety substantially. Remember to breathe.....correctly!!!!	