

## **Highly Commended**

# Science Writing Year R-2

Emma Zuo

## St Andrew's School

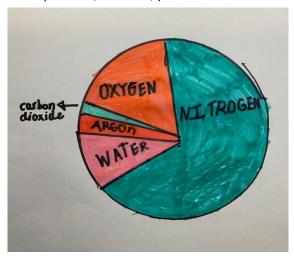




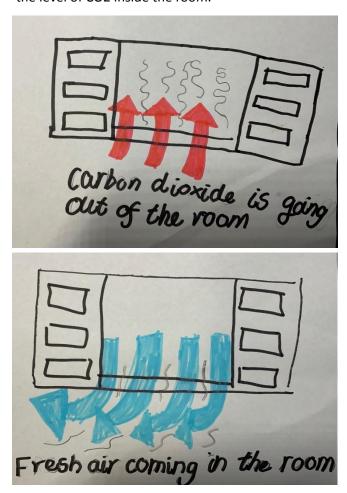


### **Air Quality**

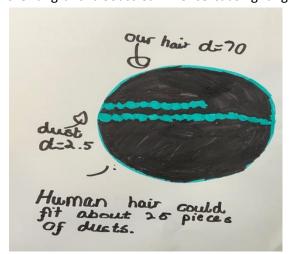
Air is important for living things. Animals, plants and humans need air to survive. In the air, there are gases, such as nitrogen, oxygen, carbon dioxide CO2 and water vapour, and also there are lots of small particles, like dust, pollen and smoke. Air quality affects our health and environment.



Indoor air quality is measured by the concentration of CO2, humanity, temperature and dust. CO2 comes from our breathing, cooking and gas heater. A high concentration of CO2 can lead to dizziness, sleep and even asthma. Scientists suggest that opening windows regularly would effectively reduce the level of CO2 inside the room.



Dust are tiny particles with sizes range 1-400 micrometers. PM2.5 particles are fine enough to enter the lung and bloodstream hence causing lung irritation, runny nose and short breath. The outdoor



sources of dust are exhaust gas from vehicles and bushfires. The indoor dust comes from tobacco smoke, cooking and burning candles. To reduce the effect of dust, it is suggested that apply an air purifier to control air quality. Also wear a facial mask during the outdoor activities if the air quality is poor.

In conclusion, clean air is important for the health of families. We need to monitor and maintain the high level of air quality.

#### Reference

Air Quality, <a href="https://www.health.ny.gov/environmental/indoors/air/pmq\_a.htm">https://www.health.ny.gov/environmental/indoors/air/pmq\_a.htm</a>, viewed at 15<sup>th</sup> June 2022;

Bushfire smoke and your health,

https://www.sahealth.sa.gov.au/wps/wcm/connect/Public+Content/SA+Health+Internet/Public+Health/Bushfires/Bushfire+Smoke+and+Your+Health, viewed at 14<sup>th</sup> June 2022;

Factsheet: How is air quality measured?,

https://www.lawa.org.nz/learn/factsheets/air-quality-topic/how-is-air-quality-measured, viewed at 20<sup>th</sup> June 2022;

Indoor air quality, <a href="https://www.yourhome.gov.au/live-adapt/indoor-air-quality">https://www.yourhome.gov.au/live-adapt/indoor-air-quality</a>, viewed at 20<sup>th</sup> June 2022;

Indoor air quality and ventilation,

https://niwa.co.nz/education-and-training/schools/teaching-resources/air-aware/lesson-five-indoor-air-quality-and-ventilation, viewed at 16<sup>th</sup> June 2022

Particulate Matter (PM) Basics, <a href="https://www.epa.gov/pm-pollution/particulate-matter-pm-basics">https://www.epa.gov/pm-pollution/particulate-matter-pm-basics</a>, viewed at 16<sup>th</sup> June 2022;

Smoke from domestic heating,

https://www.epa.sa.gov.au/environmental info/air quality/assistance and advice/smoke from do mestic\_heating, viewed at 16<sup>th</sup> June 2022;