ITINERARY

Year 9: Carbon Sequestration

Earth and Space Sciences

Earth and space sciences (AC9S9U03)

Represent the carbon cycle and examine how key processes including combustion, photosynthesis and respiration rely on interactions between Earth's spheres (the geosphere, biosphere, hydrosphere and atmosphere).

Time	Activity		
9.00 - 9.20 (20 mins)	Introduction to staff, facilities and program. Focus: Investigate how carbon is sequestered in Toohey Forest.		
9.20 - 10.00 (40 ins)	**Carbon Cycle Game:** classroom-based	9.20 - 10.20 (1 hour)	**Carbon activities:** students rotate around a series of 'stations' - microscope, tree rings, transpiration, CO_2 and O_2 monitors, leaf age, fire sticks
10.00 - 10.30 (30 mins)	**FIRST BREAK**	10.20 - 10.50 (30 mins)	**FIRST BREAK**
10.30 - 11.30 (1 hour)	**Carbon activities:** students rotate around a series of 'stations' - microscope, tree rings, transpiration, CO_2 and O_2 monitors, leaf age, fire sticks	10.50 - 11.30 (40 mins)	**Carbon Cycle Game:** classroom-based
11.30 - 11.40 (10 mins)	**Transition:** students are given time to change into appropriate clothing, put on hat, sunscreen etc		
11.40 - 1.10 (1 hour 30 mins)	**Field work:** conducting a field investigation to evaluate carbon sequestration in an ecosystem, such as measuring tree biomass, deadwood, leaf litter and soil depth, and using formulas to calculate approximate carbon storage		
1.10 - 1.40 (30 mins)	**SECOND BREAK** Visiting teacher to supervise completion of field booklets, data sharing and specimen ID using classroom resources		
1.40 - 2.25 (45 mins)	**Conclusion:** summarise results and use spreadsheet calculations to estimate the carbon storage within Toohey Forest		
2.25 - 2.30 (5 mins)	**Farewell and depart**		

Students will need:

- field booklet, clipboard, pencil
- covered footwear
- sun safe clothing and hat
- long pants recommended
- sunscreen and insect repellent **already applied**
- water bottle
- morning tea and lunch

Litter free lunch

We encourage students and staff to pack a litter free lunch that contains no throwaway packaging. Everything in it can be reused, composted or recycled. Food should be in reusable containers rather than disposable plastic wrap and drinks in refillable bottles. Pre-packaged food is discouraged.