

Predator-Prey Balance (Musical Chairs)

Resources:

- A large open space (indoors or outdoors)
- Chairs (same number as students)
- Signifiers for dingo and kangaroo roles (masks, tags, etc.)
- Music

Roles:

- **Dingoes** – four students
- **Kangaroos** – rest of class

This game was developed by Turkish education researchers (Yilmaz et al., 2019) to represent relationships between wolves and rabbits in their natural habitats. This game has been adapted to the Australian context with dingoes and kangaroos.

Activities:

- Place the chairs in a circle, facing out.
- The kangaroos form a circle one meter away from the chairs.
- The dingoes form a circle one meter away from the kangaroos.
- Both groups move/dance clockwise around the circle when the music starts. The dingoes may move faster than the kangaroos.
- When the music stops, each kangaroo must find a chair to sit down on (in Round 1, there should be four more chairs than there are kangaroos). The dingoes can tag any kangaroo who is unable to find a chair. Kangaroos who are tagged leave the game.
- Rounds 2-4: For each round, remove four chairs. For example, if you began with 16 chairs, Round 2 would have 12 chairs, Round 3 would have 8, and Round 4 would have 4 chairs.
- Round 5: Remove all but one chair. Any remaining kangaroos must compete for this chair.

Reflective questions:

- What is being represented by the chairs?
- What would you expect to happen if the last chair were excluded?
- What do you suggest to keep the kangaroos at a certain balance without leading to their extinction? Try out students' suggestions.

CURRICULUM CONNECTIONS		
	Science	Geography
F-2	Plants and animals have basic needs, including air, water, food and shelter; the places where they live meet those needs (VC2S2U02)	The natural and constructed features of places, how they change and how they can be cared for (VC2HG2K05)
3-4	Consumers, producers and decomposers have different roles and interactions within a habitat; food chains can be used to represent feeding relationships (VC2S4U03)	The importance of environments, including natural vegetation and water sources, to people and animals in Australia and on another continent (VC2HG4K03)
5-6	Habitats can be described by their physical conditions; changing the physical conditions of a habitat, including by human activity, may affect the growth and survival of organisms (VC2S6U01)	The specific geographical and other characteristics that shape their place, how their place is changing and how change is managed (VC2HG6K03)
7-8	Matter and energy flow through ecosystems and can be represented using models, including food webs and food pyramids; populations will be affected by changing biotic and abiotic factors in an ecosystem including habitat loss, climate change, seasonal migration and introduction or removal of species (VC2S8U04)	How interconnection and change can be used to understand environmental phenomena (VC2HG8K17)
9-10	The theory of evolution by natural selection includes the processes of variation, isolation and adaptation and is supported by evidence including the fossil record, biogeography and comparative embryology; the theory explains past and present biodiversity and demonstrates how all organisms have some degree of relatedness to each other (VC2S10U05)	Human-induced environmental changes and their impacts on the sustainability of places and environmental functions (VC2HG10K10)