

Radical Curiosity: In the Orbit of Buckminster Fuller Exhibition Curriculum Links (Tertiary)

ArtScience at School segment	Section introduction	Curriculum links
<u>Design Revolution</u>	Buckminster Fuller sought to change the world through a “design revolution” that would result in the radical and systemic transformation of our understanding of the planet and how it worked.	General Paper Syllabus aims: 2.1 Understand better the world in which they live by fostering a critical awareness of continuity and change in the human experience 2.2 Appreciate the interrelationship of ideas across disciplines Geography Learning outcomes Knowledge:
<u>Geodesic</u>	Geodesic dome was a product of Bucky’s obsessive study of the rules of geometry. A geodesic structure is also the greatest area that can be covered with the least amount of material and can support itself without the need for foundations. It represents the culmination of the idea that more can be achieved with less.	<ul style="list-style-type: none"> • The evolution of landscapes and development of issues over time • Different approaches to solve real-world problems and achieve sustainable development Skills: <ul style="list-style-type: none"> • Use and evaluate maps, other data visualisation to integrate information and communicate to a specific audience
<u>Tensegrity</u>	Synergy is the behaviour of complete systems, which cannot be predicted from the behaviour of any of their separate parts on their own. “Tensegrity”, a portmanteau of “tension” and “integrity”, consists of the suspension of rigid elements in space solely through continuous tension and discontinuous compression.	Values: <ul style="list-style-type: none"> • have the integrity to uphold ethical principles and be resilient in their pursuit for a better world

Radical Curiosity: In the Orbit of Buckminster Fuller Exhibition Curriculum Links (Tertiary)

<p><u>Shelter</u></p>	<p>Buckminster Fuller envisioned that the house of the future would be self-sufficient in terms of energy to be free of supply networks and to free occupants from the slavery of domestic drudgery thanks to new automation technologies.</p>	<p>Mathematics</p> <ul style="list-style-type: none"> • Experience and appreciate the value of mathematics in life and other disciplines. <p>Science Handling, applying and evaluating information</p> <ul style="list-style-type: none"> • Manipulate numerical and other data and translate information from one form to another. • Use information to identify patterns, report trends, draw inferences and report conclusions. • Bring together knowledge, principles and concepts from different areas of physics, and apply them in a particular context. <p>Art</p> <ul style="list-style-type: none"> • Develop visual literacy through the critical analysis and appraisal of artists and artworks. <p>Computing</p> <ul style="list-style-type: none"> • Develop and apply problem-solving and computational thinking skills to solve real-world problems using suitable algorithms and data structures in a web-based environment using a personal computer.
<p><u>Information</u></p>	<p>Fuller felt that the source of many of our world’s problems lies in our inability to detect patterns of activity in society. He proposed that if we knew enough to understand how the world’s resources are distributed, it would be much easier to determine a reasonable solution for everybody.</p> <p>Various decades before technology made it possible, Fuller foresaw the contemporary discourse offered by Big Data and the visualisation of information, and by the logic of gamification, which uses the mechanics of games to tackle complex problems.</p>	
<p><u>Make your life and experiment</u></p>	<p>There are many exaggerated stories associated with the Bucky myth and yet this myth was an instrument through which he constructed an image of a visionary entrepreneur in order to transmit a powerful idea: without the need to be anything special, we can all do exceptional things.</p>	