

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.	<p>IB PYP</p> <p>Where we are in place and time Inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationship between and the interconnectedness of individuals and civilizations, from local and global perspectives</p>
<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.	<p>How we express ourselves Inquiry into the ways in which we discover and express ideas, feelings, nature, culture, beliefs and values; the ways in which we reflect on, extend and enjoy our creativity; our appreciation of the aesthetic</p> <p>How the world works Inquiry into the natural world and its laws, the interaction between the natural world (physical and biological) and human societies; how humans use their understanding of scientific principles; the impact of scientific and technological advances on society and on the environment.</p>
<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.	<p>How we organize ourselves Inquiry into the interconnectedness of human-made systems and communities; the structure and function of organizations; societal decision-making; economic activities and their impact on humankind and the environment</p>

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

<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>Sharing the planet Inquiry into rights and responsibilities in the struggle to share finite resources with other people and other living things; communities and the relationship within and between them; access to equal opportunities; peace and conflict resolution.</p> <p><u>IB MYP</u></p> <p>Art</p> <ul style="list-style-type: none"> • Make purposeful connections between investigation and practice. • Understand the relationship between art and its contexts. • Respond to and reflect on art. • Deepen their understanding of the world. <p>Design</p> <ul style="list-style-type: none"> • Develop knowledge, understanding and skills from different disciplines to design and create solutions to problems using the design cycle. • Enjoy the design process and develop an appreciation of its elegance and power. <p>Individuals and Societies</p> <ul style="list-style-type: none"> • Develop conceptual understanding of the interactions and interdependence of individuals, societies and the environment in which they live.
<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>	

		<p>Interdisciplinary learning</p> <ul style="list-style-type: none">• Integrate conceptual learning, ways of knowing and methods of inquiring from multiple disciplines. <p>Mathematics</p> <ul style="list-style-type: none">• Enjoy mathematics, develop curiosity, and appreciate its elegance and power.• appreciate how developments in technology and mathematics have influenced each other; the moral, social and ethical implications arising from the work of mathematicians and the applications of mathematics; the international dimension in mathematics; and the contribution of mathematics to other areas of knowledge <p>Science</p> <ul style="list-style-type: none">• Develop skills to design and perform investigations, evaluate evidence and reach conclusions.
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		<p>Mathematics: Analysis and approaches</p> <ul style="list-style-type: none">• Connect ideas within mathematics and apply mathematics in the context of business and social sciences
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