

Muses edu portfolio course outline

Little Architect: The Elements (4-6)

Summary

Lesson	Topic	Description	Curriculum Aims	Deliverable
1-3	Metal- the reflective glorious form maker 金屬折射學	Maze design, origami technique, 3D model 迷宮設計、摺紙技巧、立體模型教學	Structural study Abstract painting 結構學習及抽象繪圖	3D model 2D painting
4-5	The Wood maker: Tree house fun! 小小樂樹屋	3D tree house model, making urban furniture design 立體樹屋模型建造、現代傢俬設計	Furniture design Creative thinking Observational skill 傢俬設計、創意思維、觀察力技巧	3D model
6	Structural day 力學結構日	Egg drop challenge, force diagram 倒蛋挑戰、力學圖解	Structural experiment 結構學實驗	3D model
7-9	Natural element - Water 大自然元素 - 水	Recycle of water, brainstorming map, device making 水之循環、思維導圖繪製、水裝置製作	Problem solving, Giving back to community 解決問題、回饋社會	Sketches Drawings 3D model

10-12	Natural element - Fire 大自然元素 - 火	Fire extinguisher making, fire proof design 滅火器製作、防火設計	Smart design 智能設計	3D model
13-16	Natural element - Earth, green, landscape 大自然元素 - 地球與綠化自然	Gravity design, soil making, greenhouse making, green mobile city 重力設計、土壤製作、溫室製作、綠色都市	Sustainable design Environmental issues Alternative thinking 可持續性發展設計、環境保護、探討思維	3D model Drawings
17	Moving parts 移動大法	Pulley system 滑輪系統學	Creative thinking Mobility design 創意思維、流動性設計	Schematic drawings 3D model
18-19	Architect 建築學	Reference and history of the career of architecture 建築故事及歷史	Research 建築學研究	Write-up
20	Space 空間感	Study of dwelling design, explore alternative space for living 住宅設計學、人類居住環境討論	Critical thinking Creative thinking Research 批判思維、創意思維	Painting

21	Natural element - Electricity 大自然元素 - 電	Solar powered paper house design, 太陽能紙屋設計	Scientific principles Alternative design 科學原理、探討思維	3D model
22-23	Robotic age 機械人世紀	Robotic and architecture, smart house design 機械人與建築、智能屋設計	Critical thinking 批判思維	3D model
24	Presentation 分享日	Summary of learning and lesson learnt 課堂總結	Presentation training, Summarizing skill 演講培訓、總結能力	2D presentation