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| **Goonhavern Primary School- Design Technology** | | |
| **TOPIC: DT** | **YEAR: 3** | **STRAND: Structures** |

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| **What should I know already?** | **What will I know by the end of the unit?** |
| * That some building materials are stronger and sturdier than others and can withstand the elements better * Some materials can be joined together using nails, glue, string or cement | * Different structures and shapes are better at absorbing heavy loads * I can create a design that has a good engineered result * I know which techniques e.g. bunching straws together will work to give the bridge strength * That bridges support weight horizontally and vertically * The relationship between the tension and applied forces is important as too much of either and your bridge will collapse or sag and buckle * The most important shape in engineering is the triangle * You can strengthen a rectangle by adding supports to its corners * There are different types of bridges: a suspension bridge, a arch bridge, a truss bridge and a cable stayed bridge |
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| **School Values** | |
| **Five Ways to Wellbeing** | |

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| **Vocabulary** | |
| **Structure** | A building or object made from separate parts |
| **Strong** | Able to withstand pressure, force or wear |
| **Strength** | How strong something is |
| **Weak** | liable to break or give way under pressure; easily damaged. |
| **Material** | he matter from which a thing is or can be made |
| **Elements** | Wind, rain, snow, hail, sun, heat |
| **Sturdy** | Strongly and solidly built. |
| **Join** | Link/connect |

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| **Image/diagram that helps me to articulate my knowledge/understanding** | **Investigate!** |
|  | Link to ‘Wonders of the World’ topic-  Bridges/link to Wonders of the World. Make models out of art straws first. Then use jelutong and dowling. Evaluate by testing strength with weights. Limit number of resources available. |