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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. |