Year 1/2: Freestanding Structures-How did the Billy Goats Gruff cross the river?

Subjec	t Specific Vocabulary	Prior Learning EY	Sticky Knowledge
freestanding structure	a structure that stands on its own foundation or base without attachment to anything else.	Experience of using construction kits to build walls, towers and frameworks. Experience of using of basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card. Experience of different methods of joining card and paper.	Technical knowledge and understanding Build walls with these different patterns. Tap away the centre brick in the bottom row of each wall in turn. What happens? Which wall is the strongest?
stability	in relation to a freestanding structure, the extent to which it is likely to fall over if a force is applied.	Future Learning Y3/4	Tap here Tap here
buttress	a structure added to a wall, tower or framework to make it more stable and/or reinforce it.	Create a design for an end user. Use a shell structure to create a product. Use finishing techniques that make their product visually appealing and safe to handle. Build on knowledge of how to strengthen sheet materials to build strong shell structures. Make a bridge for the Three Billy Goats Gruff	 Investigate different kinds of bridge structures and the types of materials used to make them. Explore construction using different kits. Measure mark out and cut a range of chosen materials, these could be new or reclaimed. Think of ways to make a structure stronger try out folding materials or adding support to keep them stable. Pupils create a success criteria for their model and accurately base their evaluations upon its
brick bonding	arranging bricks in a wall to improve the performance of the structure or improve its appearance.		
mock up	3-D representation of a product.		
Techniques for assembling freestanding structures Swing Pipe cleaner joint Straws Plasticine Half of a card tube		BILLY GOAT GRUFF	success.