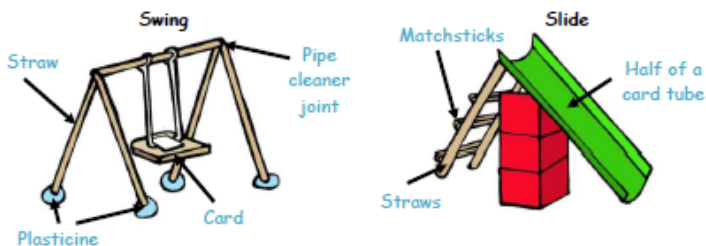
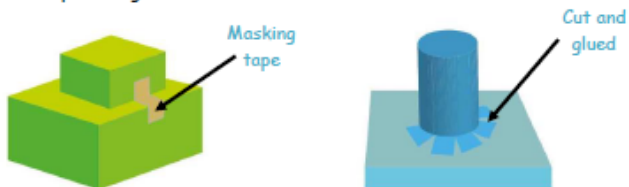


Techniques

Techniques for assembling freestanding structures

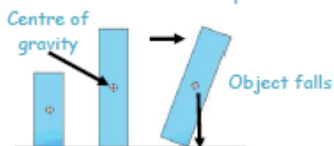
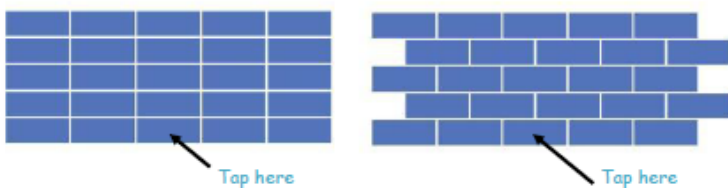


Show children how to join sheet materials and reclaimed boxes together using different tapes and glues.



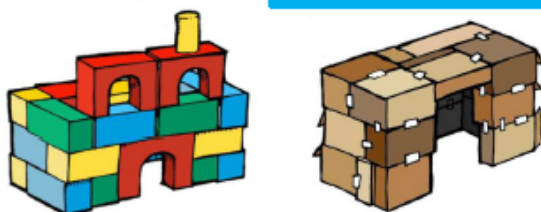
Technical knowledge and understanding

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?



As a freestanding structure becomes taller its centre of gravity rises. Stability in a structure can generally be increased by making the base wider, making the base heavier or adding buttresses.

Ask the children to build and explore a variety of freestanding structures through focused tasks. Use a range of construction kits.



Vocabulary

freestanding structure	a structure that stands on its own foundation or base without attachment to anything else
wall	a vertical brick structure used to enclose
tower	a tall, narrow building
framework	an essential supporting structure of a building or object
weak	lacking power
strong	having lots of power
base	the lowest part or edge of something, especially the part on which it rests or is supported
edge	the outside limit of an object, area, or surface
surface	the outside layer or part of something
thin	small in the measure from one side of a surface to the other
thick	large in the measure from one side of a surface to the other
design	to generate, develop and communicate ideas for a product
evaluate	to judge how a product meets chosen criteria
purpose	a reason or plan that guides an action, design or goal
user	the intended person in mind when designing a product
product	the object being designed and made
function	what the product does

Health and Safety

Pay close attention when using sharp tools

Stop what you're doing as soon as the teacher or your partner says "stop".