

What? (Key Knowledge)

Prior Learning

- 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.

Designing

- Generate ideas based on simple design criteria and their own experiences, explaining what they could make.
- Develop, model and communicate their ideas through talking, mock-ups and drawings.

Making

- Plan by suggesting what to do next.
- Select and use tools, skills and techniques suitable for the task, explaining their choices.
- Select new and reclaimed materials and construction kits to build their structures.
- Use simple finishing techniques suitable for the structure they are creating.

Evaluating

- Explore a range of existing freestanding structures in the school and local environment e.g. everyday products and buildings.
- Evaluate their product by discussing how well it works in relation to the purpose, the user and whether it meets the original design criteria.

Technical knowledge and understanding

- Know how to make freestanding structures stronger, stiffer and more stable.
- Know and use technical vocabulary relevant to the project.

Possible Experiences

Design, make and evaluate a rocket



Focus on design, material, appeal and colour

What? (Key Vocabulary)

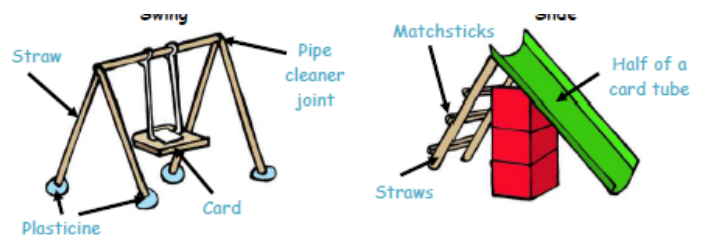
Spelling

Definition/ Sentence

Free standing Structure	A structure that stands on its own
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.
Stability	In relation to a freestanding structure, the extent to which it is likely to fall over if a force is applied.
System	A set of related parts or components that together achieve a desired outcome.

Diagrams and Symbols

Techniques for assembling freestanding structures



Joining sheet materials and reclaimed boxes together using different tapes and glues.

