Enriching lives every day; enabling our school community to learn, achieve and flourish through living 'life in all its fullness'

Sustainability

Subject: DT

Year group: 1

Term: Spring

Unit name: Freestanding Structures

Prior Knowledge - • 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.

Key Vocabulary

cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder, design, make, evaluate, user, purpose, ideas, design criteria, product, function

Assessment for learning

Recapping prior knowledge- beginning of unit- what do children already know?
Beginning of each lesson- focus on recall of previous learning (quick quizzes)

Respect	Integrity
Do for other people the same things you want them to do for you. Matthew 7:12	An honest witness tells the truth. But a dishonest witness tells lies. Proverbs 12:17

National curriculum:

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
- explore and evaluate a range of existing products
- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics
- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
- evaluate their ideas and products against design criteria

Design Process

Investigative and Evaluative Activities (IEAs)

Focused Tasks (FTs)

Design, Make and Evaluate Assignment (DMEA)

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Key Learning (what pupils MUST know and remember)	Possible Outcomes
- To name free-standing structures: Eiffel tower (European. More familiar example) and The Burj Khalifa in Dubai (tallest example) - To discuss the different types of animal enclosures – penguins have to have water to swim in and land, lions need high fences so they don't jump out, giraffes need trees to eat from. - To design and draw an annotated sketch of a structure, explain the user and purpose and label it with materials. For example: an animal enclosure for people to visit. - To select from PVA glue, glue sticks, scissors and a range of stronger materials to cut and join materials (card and cardboard). - Children can state if their structure is suitable for the intended user and purpose. They can offer a way to improve their structure with some guidance.	• enclosures for farm or zoo animals • playground/park/garden furniture • bridge for Billy Goats Gruff playground equipment • furniture for the Three Bears other – specify