

"I'm a Hamster; Get me out of here!"

4 Weeks



Rationale

Help! The hamsters need some exercise. Year 1 teachers have received a letter explaining that hamsters kept in schools must have access to safe and exciting play areas. They know what they want but can't think of a way for the hamsters to get from their cage to the play area, safely. They would like Year 6 to design something to help. We will need to work together to come up with an innovative product to 'sell' to the Year 1 teachers. After research they will create designs and prototypes to test shapes and sizes of bridges before finalising their design. When they are satisfied that their bridge fulfils the design brief it will be time to produce their final product. They will present their product along with a handbook explaining how it works, design features, suitability and cost of production. Which will impress the Year 1 teacher enough to be used with their hamsters?

Hook

Bridge Building Workshop
Letter from an animal welfare organisation asking school to design an exercise areas for 1 hamsters.

Outcomes

Design convention and celebrate hamster activities.

Collaboration

- Have a secure understanding of their own strengths and weaknesses and use this positively to assist other learners and build on their own confidence and skill.
- Critically evaluate own part in the team and make constructive and helpful comments to other team members so that everyone makes a significant and positive contribution.
- Seek the opinions and views of others to broaden their knowledge and give an alternative perspective in coming to their own considered view.

Thinking

- Use imagination to find multiple solutions to create innovative outcomes.
- Generate rigorous criteria to critically evaluate performance and achievement in learning.

Focus Subject 1

DT

- Generate and present a range of innovative ideas to solve the problem.
- Create criteria for product that would solve the problem effectively.
- Research artists and textile designers to evaluate design and functionality.
- Create annotated sketch to fulfil design criteria.
- Explore materials to develop techniques for strengthening, stiffening, reinforcing, shaping.
- Build prototype to demonstrate the mechanisms and fixings that will be used.
- Evaluate prototype with reference to design criteria refine design.

Focus Subject 2

ENGLISH

- Read information about design to create a design board including information they have researched.
- Write notes to annotate their designs.
- Create a handbook to support their final product and design.
- Write a persuasive letter to Year 1 teachers to convince them that they should choose their product.

Focus Subject 3

MATHS

- Explore and experiment with shapes used in bridge design to develop understanding of the properties and application of geometric shapes.
- Measure and convert units to create stable and accurate models.
- Patterns

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| <ul style="list-style-type: none">• Create an exploding diagram to show their final design.• Make and finish final product to present to Year 1.• Evaluate theirs and others' products against the success criteria. | | |
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Application Subject: - ICT-

email Year 1 teachers

Application Subject: Art

Explore and use patterns and textures