



Shade and Shelter

Autumn 2B

Innovate Challenge

Designing and building a play den



Taxi

Spring 4B

Innovate Challenge

Designing and building a London taxi

Skills:

- Construct simple structures, models or other products using a range of materials.
- describe the similarities and differences between two products.
- follow the rules to keep safe during a practical task.
- Name and explore a range of everyday products and describe how they are used. Select and use a range of materials, beginning to explain their choices.
- Talk about their own and each other's work, identifying strengths or weaknesses and offering support.

Core Knowledge:

- A product or project is usually guided by a set of design criteria.
- The project or product must meet the design criteria to be successful.
- Rules are made to keep people safe from danger.
- Safety rules include always listening carefully, following instructions and using equipment only when told to.
- A shelter is a structure designed to give protection from weather or danger.
- A strength is something that is good about a piece of work.
- A weakness is an area that could be improved.
- Science: A material is what an object is made from.
- Science: Everyday materials include wood, plastic, glass, metal, water, rock, brick, paper and fabric.

Depth : Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

Skills:

- Create a design to meet simple design criteria.
- Describe the similarities and differences between two products.
- Name and explore a range of everyday products and describe how they are used.
- Talk about their own and each other's work, identifying strengths or weaknesses and offering support.
- Use wheels and axles to make a simple moving model.

Core Knowledge:

- A product or project is usually guided by a set of design criteria.
- The project or product must meet the design criteria to be successful.
- Two products can be compared by looking at a set of criteria and scoring both products against each one.
- An axle is a rod that is connected to the centre of a wheel, which allows it to turn.
- A chassis is the frame of a vehicle.
- A strength is something that is good about a piece of work.
- A weakness is an area that could be improved.
- Most vehicles that move on land have axles and wheels that are fixed to a chassis.
- An axle fixed to a chassis has freely moving wheels.
- A freely moving axle has fixed wheels.

Depth: Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.

Knowledge and Skill Organizer

Year 1 DT



Innovate Challenge

Designing and making a supermarket sandwich

Chop, Slice and Mash

Summer 6 B

Skills:

- Follow the rules to keep safe during a practical task.
- Create a design to meet simple design criteria.
- Measure and weigh food items using non-standard measures, such as spoons and cups.
- Select healthy ingredients for a fruit or vegetable salad.
- Select the appropriate tool for a simple practical task.
- Sort foods into groups by whether they are from an animal or plant source.
- Talk about their own and each other's work, identifying strengths or weaknesses and offering support.
- Explain why hand washing and cleanliness are important.
- Select healthy ingredients for a fruit or vegetable salad.

Core Knowledge:

- A product or project is usually guided by a set of design criteria.
- The project or product must meet the design criteria to be successful.
- Rules are made to keep people safe from danger.
- Safety rules include always listening carefully, following instructions and using equipment only when told to.
- Fruits and vegetables can be mixed to make a healthy salad.
- Salad dressings can improve the flavour of salads.
- Fruit and vegetables are an important part of a healthy diet.
- It is recommended that people eat at least five portions of fruit and vegetables every day.
- Some foods need to be prepared before eating.
- Peeling, slicing, chopping, grating, tearing or mashing are different methods of preparing foods.
- Some foods come from animals, such as meat, fish and dairy products.
- Some come from plants, such as fruit and vegetables.
- Hand washing and good hygiene prevent the spread of germs.
- Fruit and vegetables are an important part of a healthy diet.
- It is recommended that people eat at least five portions of fruit and vegetables every day.

Depth: Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. Being equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.