

Eccleston Lane Ends Planning



Subject	DT
Year Group	Year 1
Topic	Wheels and axels
Term	A1
NC	Design - 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
	Make - 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
	Evaluate - evaluate their ideas and products against design criteria Technical knowledge explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

Sequence of lessons – objectives to be met

- Can they make simple plans before making objects, e.g. drawings, arranging pieces of construction before building?
- Can they make a product which moves?
- Can they cut materials using scissors?
- Can they describe the materials using different words?
- Can they say why they have chosen moving parts?
- Can they make a structure/model using different materials?
- Is their work tidy?
- Can they talk with others about how they want to construct their product?

Lesson 1	LO: I can explore how vehicles move. LO: I can name parts of a moving vehicle.
	Starter: Have a selection of toy vehicles and images dotted about the carpet. Let the children explore these with each other. Bring children back. What do they all have in common? They are types of vehicles. Can they name anymore.
	Show pp. Task – Ingroups call children over to assemble a car and label it with the key vocabulary they have learnt. Chassis, wheels and vocabulary Photograph groups for books. – Add information to construction area window. Gather children back and see if they can explain in their own words what each art is.

LO: I can design a vehicle to carry a teddy. Lesson 2 LO: I can label my design using correct vocabulary. Ask the children if they have been to a teddy bears picnic? Link to reception. Tell the children that this year some of them can't make it because they can't get there. We need to make Some vehicles for the teddys to get to the picnic! Have a look at a variety of vehicles. Which one will you make for your teddy? Draw your vehicle design. Think about what materials you may need. Card? Plastic? Tape? Glue? What colour will it be? How many wheels? Label it with key parts of a vehicle. Use PowerPoint in planning file. Must roll when pushed or pulled. MAKE - all afternoon Lesson 3 LO: I can create my final product. Children look at their designs from the previous week. Children paint their vehicle how they have designed using the same colours. The have the opportunity to change things before begging their painting process. Make – decorate Lesson 4 Children work in small groups of 2/3. They will measure and mark their axels for the length they need. Help children attach doweling wood in a clamp securely. Show children the safety goggles and explain we need these to protect our eyes. Explain how to hold the saw, using the handle. Children will use their other hand to grip the left-over axel on the other side of the clamp. Show the children a slow back and forward motion using the saw. Continue in small groups throughout the week.

LO: I can test out my final product with its user in mind.

Test

Lesson 5

	Children will take their final products into the hall to test it out. The hall will be set up with racetracks and benches to test their vehicles ability to move up and down different surfaces. - Must roll when pushed or pulled. - Must be able to move on a flat surface. - Challenge – Can it move up or down a slope?
Lesson 6	Evaluate LO: I can evaluate my final product. Children discuss what went well for their vehicle and what needed improving. Children discuss how they can achieve an improved product next time. Children highlight success of their process and what they enjoyed most. Small group discussion 8 max – fill in evaluation sheet.
Continuous provision	Making model vehicles with play doh. Children testing vehicles to carry a teddy. Designing in free time.