

**Year:** 1

**Subject:** Design and Technology

**Unit of Study:** Design and make a toy with moving parts.

**Linked Literature:** KS1 Making a Toy Car Instructions from Twinkl

Who am I?

Light and dark  
Jackson Pollock

The view from our school

Sea Art

Design and make a toy with  
moving parts

Beatrix Potter

| Vocabulary          |                                                                                                                                                                                                                                                                                |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Toy Car</b>      | Is a miniature representation of an automobile.                                                                                                                                                                                                                                |
| <b>Construct</b>    | To build or make something.                                                                                                                                                                                                                                                    |
| <b>Wheels</b>       | A circular object that revolves on an axle and is fixed below a vehicle or other object to enable it to move easily over the ground.                                                                                                                                           |
| <b>Axle</b>         | An axle is a rod or shaft that rotates the wheels and supports the weight of your <b>vehicle</b> .                                                                                                                                                                             |
| <b>Design Brief</b> | Is a short statement which describes some or all of the following: <input type="checkbox"/> the product to be made and its purpose; <input type="checkbox"/> who will use it; <input type="checkbox"/> where it will be used; <input type="checkbox"/> where it might be sold. |
| <b>Tools</b>        | A tool is anything that is used to make a change to something else or to help do a job.                                                                                                                                                                                        |

**I need to know (continued):**

...their own ideas to fit a design brief, using pictures and words to plan. They will need to follow a design criteria when constructing their toy car and be able to select from, and use a range of tools and equipment to join materials together to make a toy car. They will need to discuss and know the different resources needed to join materials together such as split pins, sellotape, staples as well as discussing their advantages and disadvantages.

Children will need to know how to follow instructions in order to build their toys cars with appropriate supervision.

When finished they will need to be able to say whether their toy car fits the design brief and how it could be improved .

**I need to do:**

Design purposeful, functional, appealing products for myself and other users based on design criteria.

Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].

Explore and evaluate a range of existing products.

Evaluate my own ideas and products against design criteria.

**Prior knowledge (from Development Matters)**

I know how to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

I know about the original use of different materials and then how to repurpose them to represent my own ideas, thoughts and feelings through design and technology.

**I need to know:**

How cars have evolved throughout time and that they will be designing and constructing their own toy car. They will need to evaluate pre-existing products and different models in addition to comparing their similarities and differences. They will need to know that a toy car has a moving part called wheels that require an axle to spin round. Children need to be able to think of...



**Recommended websites/ apps**

How to Build a Toy Car— [How to Build a Toy Car - Science Project - YouTube](#)

The development of axles for cars— [Simple Machine - Wheel and Axle - YouTube](#)

Wheels and Axles [Short Stories for Kids - Wheels and Axles - YouTube](#)

How to make a Lightning McQueen- [Lightning McQueen Toys Disney Cars DIY | Toilet Roll Craft | Cardboard Crafts - YouTube](#)



Can I design purposeful, functional, appealing products based on a design criteria?

Can I select from and use a range of tools and equipment to join materials together to make a toy car?

Can I evaluate a product against a design criteria?