

Design Technology Year 2 Cars Summer Term

Prior Learning: In Year R children will have: *Safely used and explored a variety of materials, tools and techniques, experimenting with design, texture, form and function*

Cross curricular Links – Science – exploring materials

Famous Car Designers <https://www.goodwood.com/grr/road/news/2021/3/the-12-best-car-designers/> Look at where being a car designer could take us!

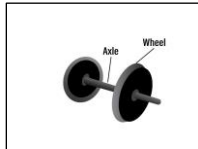


1. TWAL: to understand a design brief TWAL: how moving wheels and axles work

We will be given a design brief of creating a toy car for Year R to play with on their hill
We will learn how wheels work by exploring a range of model and toy vehicles. We will consider what parts are needed to make them move, how are they fixed on and how do they move around



Wheels are connected to an axle.



3. To explore how to make wheels move on an axle

We will be given construction kits with wheels and axles as well as other resources such as cotton reels, wooden wheels, straws etc. to make a product that moves. We will look at how wheels and axles may be assembled as either fixed axles or free axles. We will make sure the axles run freely within the holders.



Free axles move with the wheels and fixed axles are fixed to the chassis.

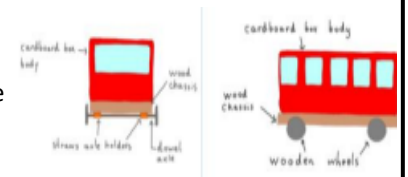
4. To explore ways to create our chassis and use materials to finish their products

We will look at how we could use to create our chassis, what shapes will we use? What could we add to create different features/parts of a vehicle? Once complete, how will we finish our work – we will explore and experiment



5. TWAL: how engineers design a wheeled vehicle.

We will plan what we want our vehicle to look like, how we will build it and what tools and equipment we will need.

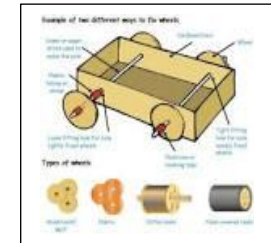


We will draw a diagram of it and label it.

We will make sure that it is purposeful, functional and appealing.

6. TWAL: to create a wheeled vehicle.

We will use our designs and apply our knowledge and skills to finish creating our final vehicles.



We will select materials that are suitable to fit our design brief.

7. TWAL: to evaluate our work.

We will evaluate our toy car and decide what we liked, what skills we have learned and what we will improve next time.



Great designers can say what they like and what they would do better next time!



axle

wheel

chassis

fixed

assemble