**Design & Build Lego Cars**

Students will have fun as they design and build a Lego car. This activity for kids will challenge their design skills as they try and build a vehicle that will fit they specific needs required of it.

Use the lesson plan and help your students build some cool Lego cars while allowing scope for more challenges if you have motors or Lego Mindstorms equipment available.

**Introduction & building :**

* Lego is a great resource for building various objects so today let’s make use of it to make some awesome Lego cars!
* We want cars that are fast, sleek and sporty as well as rugged and powerful. Would yours be better suited to driving up a steep mountain, going over rocky terrain or speeding around a race track?
* Before they start, let the students think about what kind of car they want to build, what it well be suited for doing and how they intend to make it.
* Talk about some of the important things their cars will need, like wheels, axles and a good steering system.
* Show the children how to use the Lego pieces and even make a basic example vehicle for them so they get the idea.
* Choose whether you’d like the children working individually or in pairs (the decision might come down to how much Lego equipment you have).

**Testing:**

* Set up an area for testing. It’s great if you have different surfaces for the students to test on and even better if you’ve got an uphill road and a racetrack. The kids can work in small groups to test their cars, making changes to the design as they go.
* You can also introduce competitions such as races, hill climb challenges, rough terrain challenges or a test of strength to see who has made the strongest car. If you have small prizes available then they make a great incentive for the students to do their best.
* This activity can be done with basic Lego equipment but works even better with motors or Lego Mindstorms robotic equipment which allows the students to program their cars to perform the actions they want