STEM (Science/technology/Engineering/Maths) CHALLENGE

Can you design a car for the future?

As the world is forever changing with new and improved technology, our daily lives are adapting to these changes. One industry that is always changing and thinking ahead to the future is the automotive industry (cars and vehicles).

Electric cars and autonomous driving are rapidly increasing in popularity and will soon be part of everyone's everyday life. Compared to traditional cars, they're easier to use, more environmentally-friendly, and more efficient. This means they're an example of intelligent mobility: a type of mobility that changes, enhances and improves lives for the better. Already cars can park themselves, use sensors to ensure stopping distances, use touchscreens and even have keyless entry.

We want you to design an all-electric vehicle that will use new technology to enhance and improve people's lives. The design should help make travelling and driving easier and more efficient by using new technology and performing functions current cars can't do. The design can be anything you like; you can even use new technology not currently being used for cars (like magnetic levitation!). We want you to be as creative as you want - it's a car of the future after all!

Your challenge: watch the video from Nissan and look out for the 'Imagine' statements that appear – it might be worth pausing the video to carefully read each one.
https://www.youtube.com/watch?v=aGfwX9QgIRM

Complete the following tasks:

Task 1-

Take a survey - discuss with family members who drive, what they believe would improve their cars in the future. For example, would they like their car to be able to stop at red lights automatically? Or be able to avoid the red lights altogether? Or connect with other cars in some way? Maybe it will have face recognition to unlock the car?

Task 2-

Watch the video again and choose three (or more) 'Imagine' statements from it as your design criteria, and begin designing your car for the future. Create a detailed sketch of your car design and label it showing the different functions it has and how it will improve and enhance people's lives.

Task 3-

Write a short paragraph (no more than 250 words) explaining the features and technology your car has and how it will significantly impact on the driver's life in the future. Why should your car be produced? What are its unique selling points (USP)?

Enjoy designing the future!