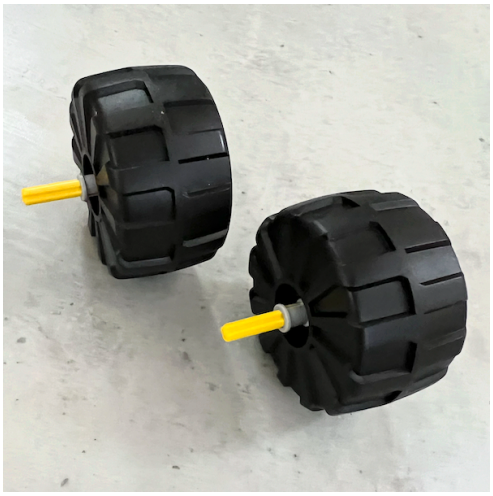
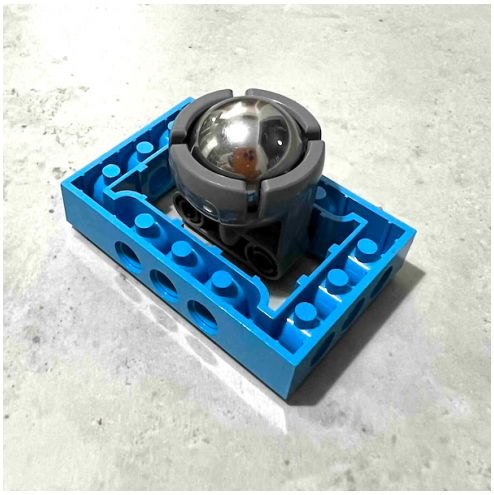
Booster Car

Register/login at https://scratch.mit.edu

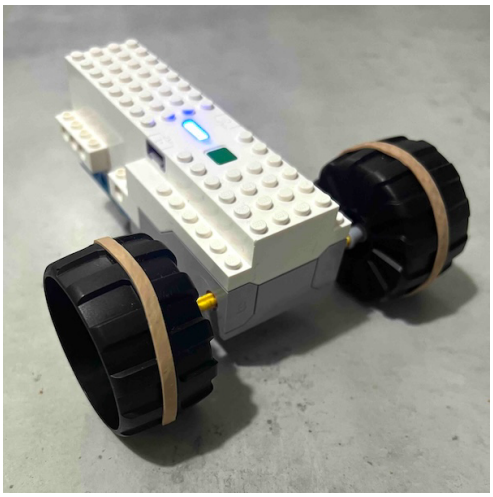
A remote-controlled car that can go forward and in reverse.

1. Create a new Scratch project, add the **LEGO BOOST** extension, and connect the **BOOST**.
2. Find and build two wheels with a cross-shaped axle to fit into motors A and B on front of the BOOST.





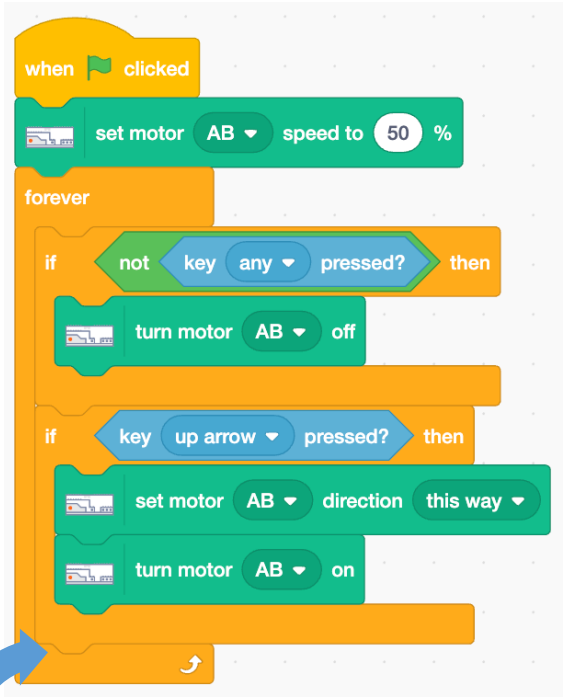
3. You need a wheel at the back. The image (left) shows one design idea, using a caster wheel.
4. Add all the wheels to the BOOST.



5. Decorate your car with your own Lego designs so it doesn't get mixed up with somebody else's car.

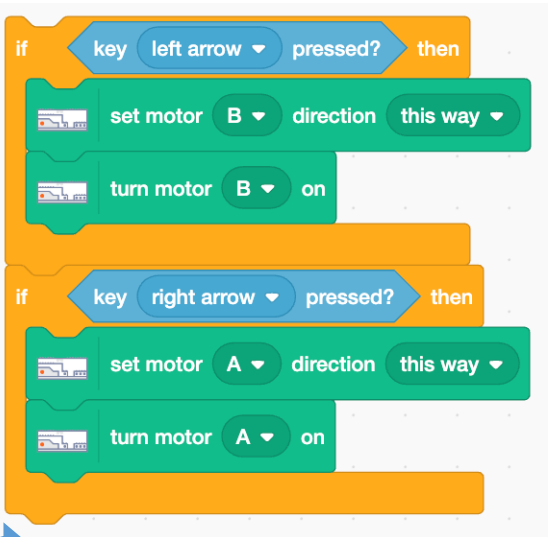
Now write code to control the car from Scratch. Use the arrow keys to drive it.

6. Add code (right) that **sets the motor speed** then in a **forever** loop detects **if no key is pressed** and **turns both motors off**.
   The code responds to the **up arrow** by **setting the motor direction** to forwards, "*this way*", before **turning both motors on**.



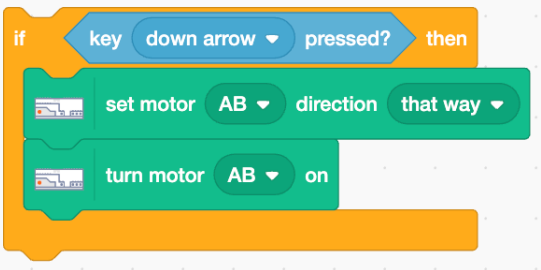
Add steering.

7. Add code (right) at the end of the loop to detect the **left** and **right** arrows. The left arrow **turns on** the right-hand motor (B). The right arrow **turns on** the left-hand motor (A).



Add reverse.

8. Add code at the end of the loop that detects the **down arrow** and **sets the motor direction** in reverse, or "*that way*".



If the wheels skid then wrap elastic bands around them for better grip.

Save** your code with a good name. **File > Save now