

# UNIT B Lab, part 2 : Robot Race

### vocabulary

- gear ratio
- rotational speed
- robot control

## materials

Make sure you have all of the following materials before you start the lab:

- lego robot kit
- communications tower

#### instructions

#### 1. programming challenges

- Complete as many of the following programs as you can.
- After you get each program to work, draw the code in the boxes provided and explain your approach (i.e.; physical design and robot control).
- (a) Program your robot to go as fast as possible for 4 second. Explain your physical design (i.e.; gear ratios and other modification)

(b) Program your robot to complete the path, provided by the instructor, as fast as possible. Explain your physical design(i.e.; gear ratios and any other modification) and robot control (i.e.; smooth turn vs sharp turn).

