Name _____

Class _____

Robot

Challenge

Sketches

You will have:

wooden spar,

thick and thin cardboard,

two geared motors,

buttons,

crumble to control them,

castor wheel,

wooden wheels,

axles

Only spend 10 minutes on each sketch.

Aim to beat one challenge in every sketch.

Go onto the back if you want to create a fifth or sixth sketch.

Names

Class/Form

Robot

Challenge
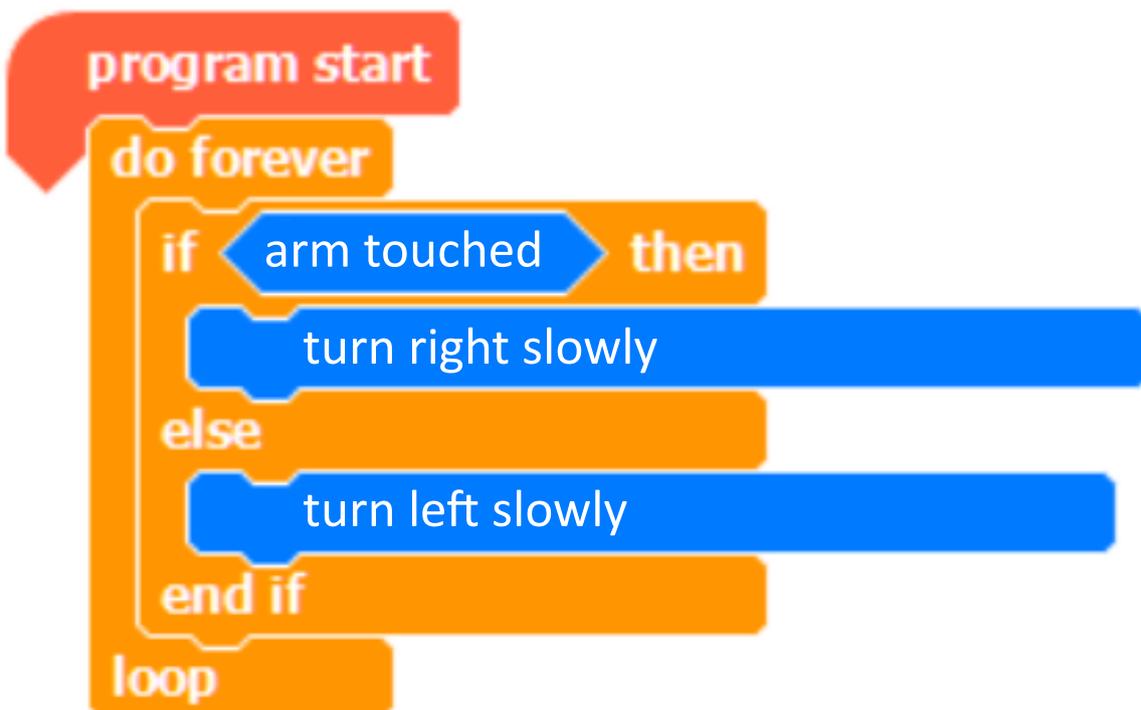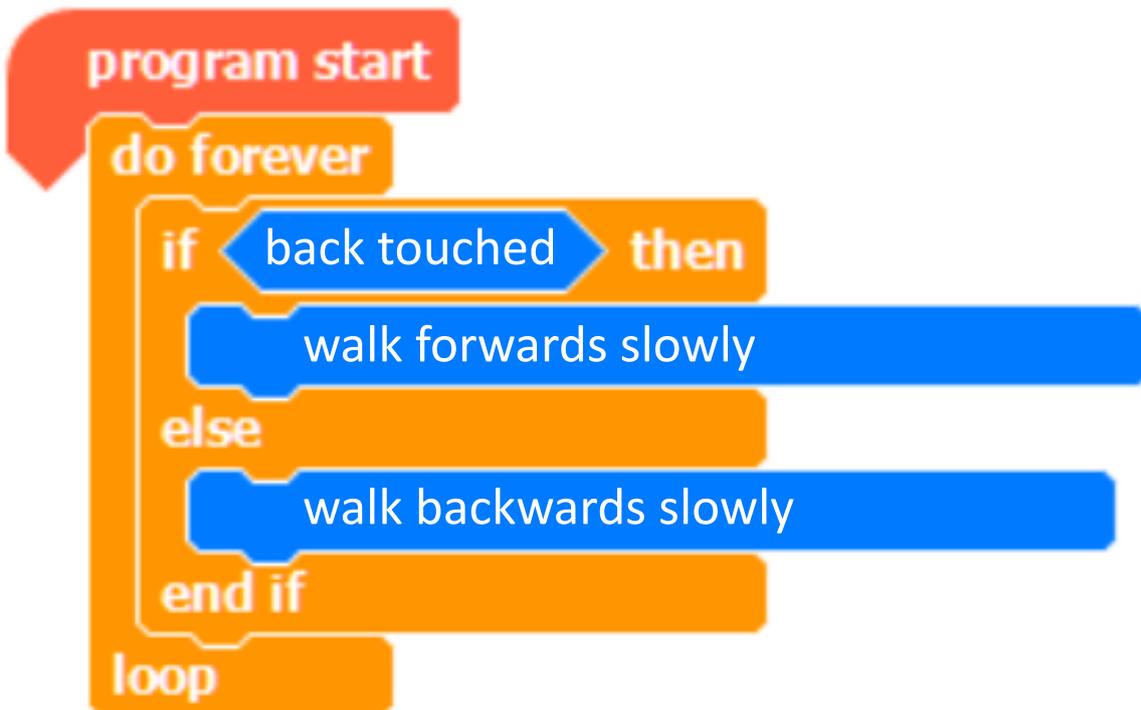
Group Choice

Design Considerations

Shape

Length

Width

Height

Wheel Type

Wheel Position

program start
do forever
if back touched then
walk forwards slowly
else
walk backwards slowly
end if
loop

program start
do forever
if arm touched then
turn right slowly
else
turn left slowly
end if
loop

Robot Challenges Assessment Sheet Name_____ Class _____

RC4

I did this well 😊

I did this ok or I did this a little 😐

I tried this but it didn't work or I didn't do this at all 🙁

I worked with my team to evaluate ideas and choose the best features to make.	
I drew a detailed robot design.	
I worked with my team to construct our robot.	
I listened to other members of my team, taking their ideas seriously.	
I lead my team as _____ captain, helping everyone to play a part.	
I tested and debugged our robot and programming.	
We took part in the competition and learnt (fill in what you learnt).	
I debugged a part of my program or fixed a part or our construction.	

Sticker	I got this sticker for
Sticker	I got this sticker for
Sticker	I got this sticker for

Robot Challenges Assessment Sheet

Name _____ Class ____

RC5 B = Where you are **before** the project A = Where you are **after** the project	I don't understand what it is yet.	I know what it is but don't do it yet.	I do it a little.	I do it a lot.	I do it a lot and can explain how.
1	I can evaluate my solutions against set criteria.					
2	I can design criteria to evaluate my creations.					
3	I can contribute useful ideas to a partner or group.					
4	I can encourage others to share their ideas.					
5	I lead using all the people talent in my group.					
6	I learn from setbacks and don't let them put me off.					
7	I can persevere even if the solution is not obvious.					
8	I look for a range of solutions to the same problem.					
9	I look for how a project can be extended.					
10	I can break complex problems into parts.					
11	I can concentrate on the most important part of a problem.					
12	I can identify patterns in problems & solutions.					
13	I can adapt existing ideas to solve new problems.					
14	I make predictions about what will happen.					
15	I experiment through predicting, making, testing & debugging.					
16	I can develop, test and debug until a product is refined.					