

## Zombie Attack - RCX

### *Suggested Time*

90 minutes

### *Challenge*

In this activity, a group of students each build an RCX robot. Each RCX is assigned a number. It will then have to tag the other RCXs with the number by using mail. 5 tags and the RCX takes on that RCX's number. The winner is the RCX that has given its number to the most other RCXs at the end of the time limit.



### *Age*

15-18

### *Topics*

Programming & Communication

### *Subjects*

Technology

### *Programming Themes*

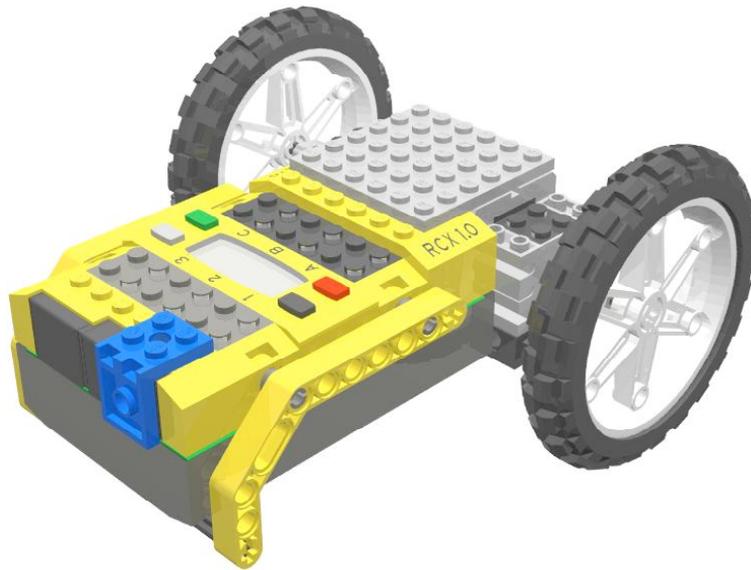
Containers, Containers' Containers, Events, Motor Forward, Mail, Set Display, Jumps/Lands, Loops

### *Materials*

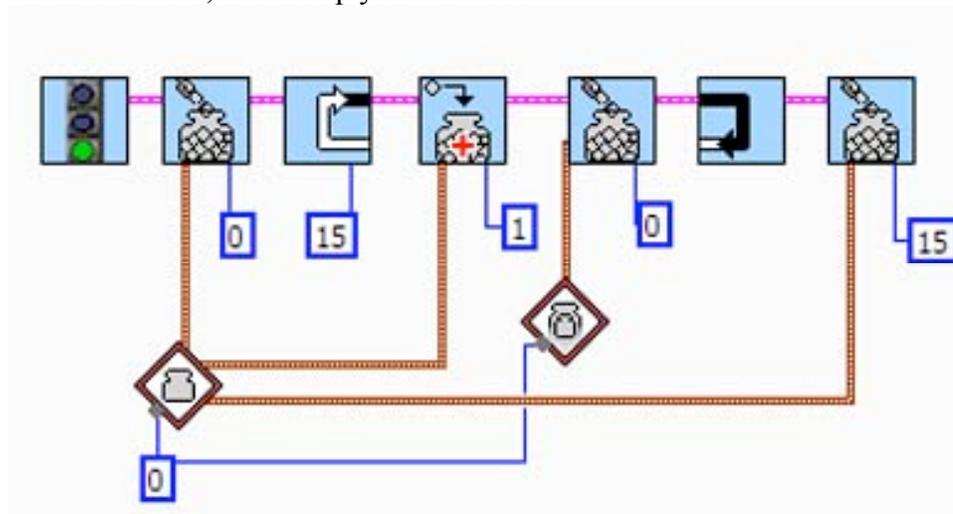
Multiple RCX Cars

***Building  
Instructions***

1. Build an RCX car/creature, keeping in mind that you need to be able to send out your number while avoiding the messages from others. You are NOT allowed to cover your IR receiver.

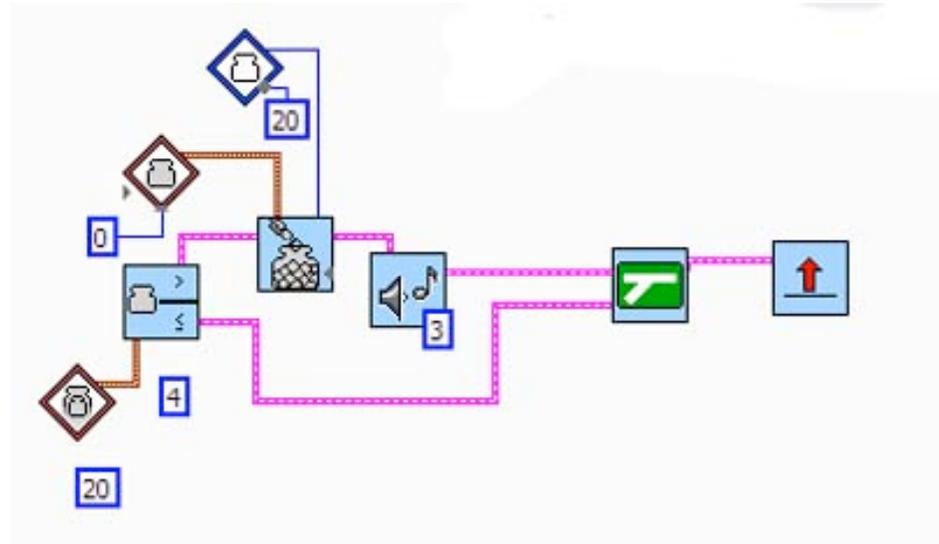
***Programming  
Instructions***

1. Using ROBO LAB Investigator 5, first initialize your RCX, set all the variable to zero, and set up your number.





### 5. Too many hits changes your number.



#### *Related Activities*

- Echo Locator
- Birthday Decoder

#### *Building and Programming References*

- The RCX

#### *Knowledge Base*

- How can you tell the difference between an even and an odd number?
- Can you create a program that can send large values in the mail?
- Can you create a car/creature that will play laser tag with other cars/creatures?
- Can I reprogram someone else's RCX?
- What is an event?
- Is it possible to load a program on 2 different RCXs from the same VI?
- Using the timer and RCX display
- Why do I need to zero sensors/containers?
- My container is not working.
- I tried to use a loop but nothing happened.
- What is a container?
- What is the container's container?

***Classroom  
Management***

1. Build an RCX car/creature, keeping in mind that you need to be able to send out your number while avoiding the messages from others. You are NOT allowed to cover your IR receiver. In this challenge, the building is as important as (if not more important than) the programming.
2. Each competitor must have some identical elements in his/her program to ensure fair competition. The programming for this challenge is fairly difficult.