



**ELENCO**  
Learn by doing.



Meet



My first coding robot.

**Mission:** code and  
explore with EL10T



# User Manual

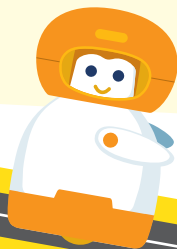
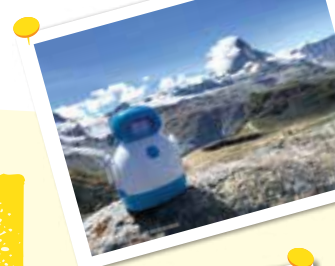
**3+**

Copyright © 2019 by Elenco Electronics, Inc. All rights reserved. No part of this book shall be reproduced by any means; electronic, photocopying, or otherwise without written permission from the publisher.

# INTRODUCTION



EL10T, is a happy, friendly robot. He loves to move around, traveling from place to place. Sometimes he just visits town but he also goes much further - exploring outer space! Suitable for children ages 3 years and up, EL10T follows the instructions given to him, moving forward, left, and right to reach each desired destination.

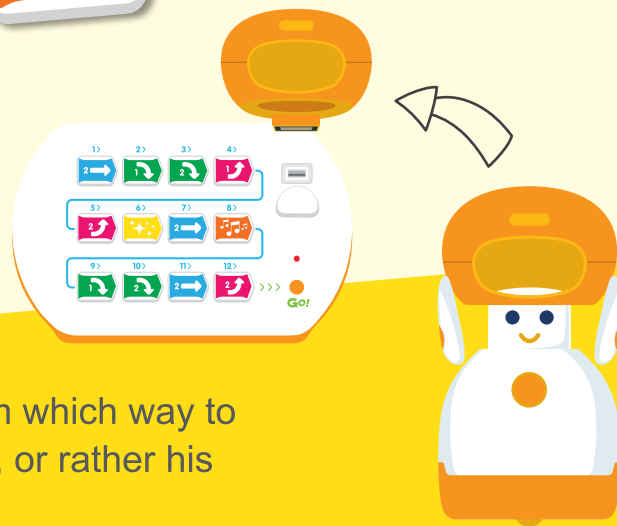




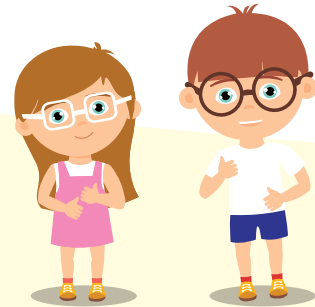
3 levels of play, light and sound blocks, and slot together roadblocks add to the fun. This is a great introduction to coding, (see page 19), as he moves with each command.



He is totally controlled by you as you program him on each travel adventure, while you are practicing and learning some great logic and problem solving skills. The block sequence is basically programming your robot. You are telling him which way to move (literally putting the ideas in his head, or rather his helmet!).



A fun idea to explain this process is... 'getting dressed in the morning'. Write down each step in getting dressed and then follow those instructions, or better still, read them out to someone else - maybe your brother or sister.



Getting dressed  
in the morning

1.xxxxxx

2.xx..x....

3.xx....x...



You will soon find that if they follow your instruction EXACTLY as you say it, there will be a few problems at the beginning, because we all assume the other person knows how to do things, so you really need to write the instructions carefully so nothing is missed out or misunderstood.

You may have to rewrite a few times before you get it right. This is the same problem solving activity that a computer programmer has to tackle. A computer has no idea how to do things before you tell it what to do.

Getting dressed  
in the morning

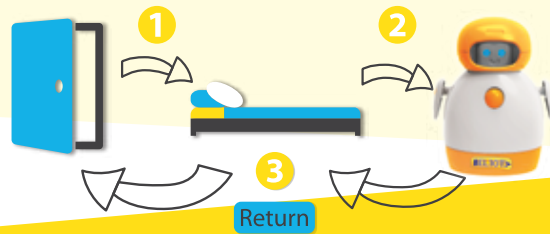
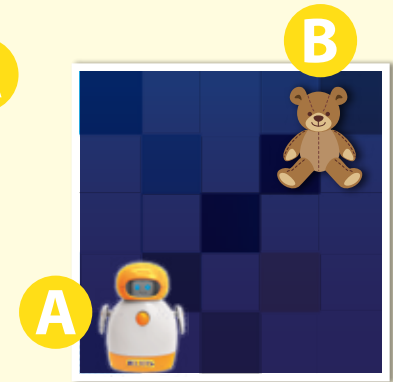
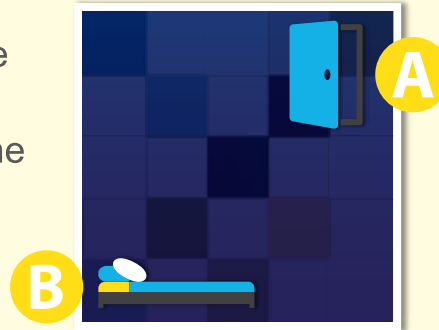
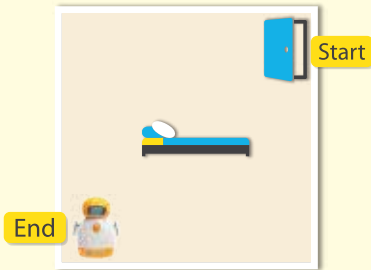
1.O+\_+O+O+O

2.O+\_+)O-)+

3.O+)+++)X



When you have mastered your Mission Cards, try making EL10T move from point A to B in your house, maybe from the door to your bed, or from toy to toy. Note how far he goes in one movement, so you do not make his destination too far. The distance should be based on the map dimensions.



Or, maybe you can take it in stages, so 1) from door to bed, 2) from bed to toy, 3) from toy back to the door, etc. You will have to rearrange your blocks and reprocess each time. Have fun!

## Main Parts



1 EL10T the Coding Robot

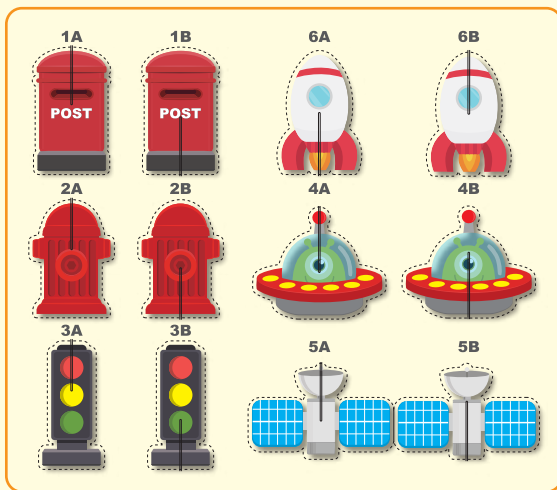
2 Control Panel

## 3 Direction Blocks

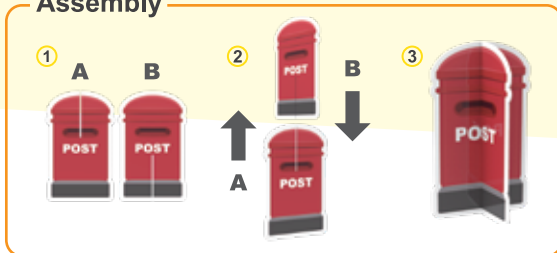
	Quantity	
Forward 	5	
Forward x2 	3	
Left turn 90° 	4	
Left turn 90°x2 	1	
Right turn 90° 	4	
Right turn 90°x2 	1	
Light 	1	
Sound 	1	

# Accessories

## 4 Roadblock Cards




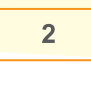
### Assembly



## 5 Map (2 Sides)



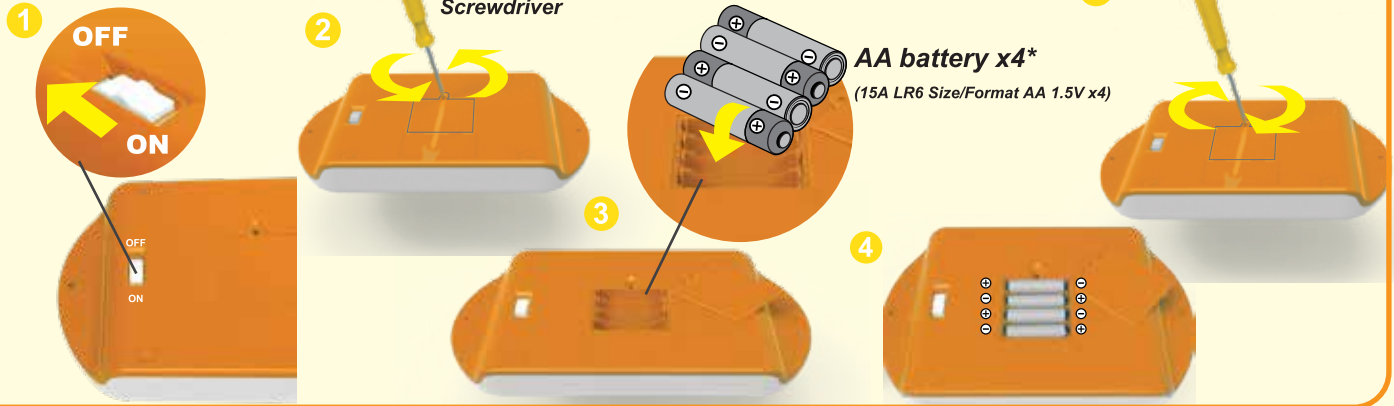
## 6 Mission Cards

	Beginner	Intermediate	Advanced
			
Quantity:	2	2	2
			
Total:	16 double sided cards		

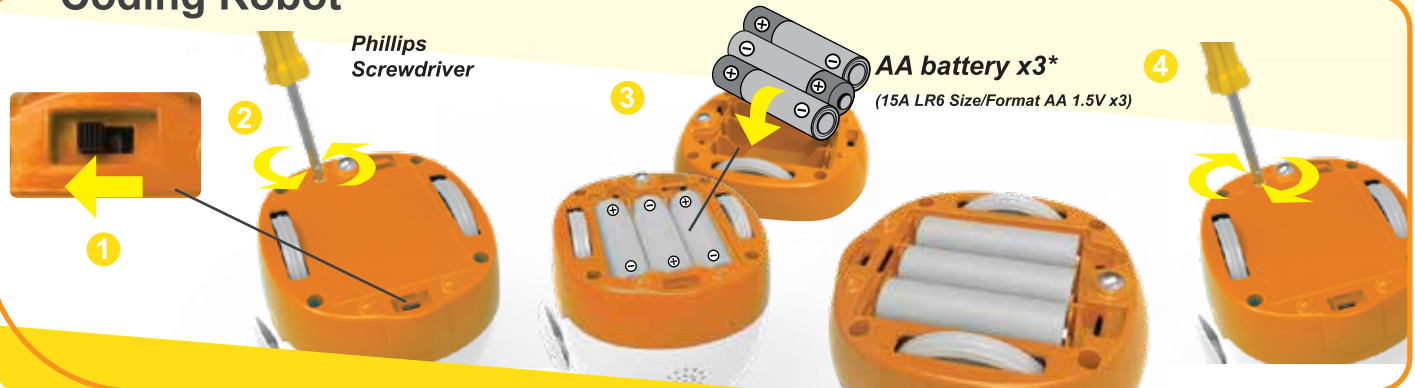


# Battery Installation

## Control Panel



## Coding Robot



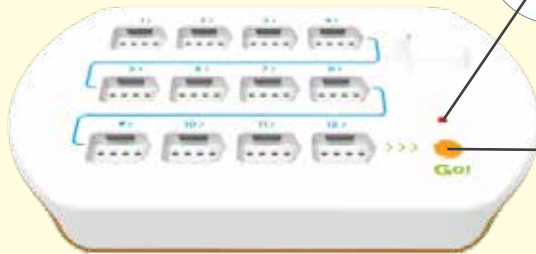
\*Battery removal and replacement is only to be undertaken by an adult.



## Control Panel

Top

Process  
Light



Go!

Upload Button

OFF

ON

ON/OFF Button

Base

OFF

ON

## EL10T (Coding Robot)

Top



Action Button  
(Start / Stop)

OFF

ON

ON/OFF Button

Base



# How to Play?

1



Turn the Control Panel ON. The red process light is on because there are no coding inserts in place.

2



Based on the direction you want the robot to take, place the individual coding movement blocks on the Control Panel in the order EL10T must move to reach his destination.




























Pull off EL10T helmet and place onto the Control Panel as shown. When the process light changes to green, press the upload button. The green light will shine while the data transfers to the helmet. When the green light stops shining, the transfer is complete.



Turn EL10T on, he will sound and his eyes will light. Replace the helmet back onto EL10T's head, each eye will flash twice. Press the action button on his chest to make him move.

## Map

	A	B	C	D	E
5					
4					
3					
2					
1					

	A	B	C	D	E
5					
4					
3					
2					
1					

11

## Mission Cards

There are 3 levels of Mission Cards: Beginner, Intermediate and Advanced.  
You can randomly select a Mission Card to complete the route, or play in order of difficulty from Beginner to Advanced.

### Beginner



4 routes / set



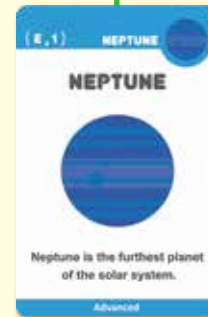
### Intermediate



4 routes / set



### Advanced



8 routes / set



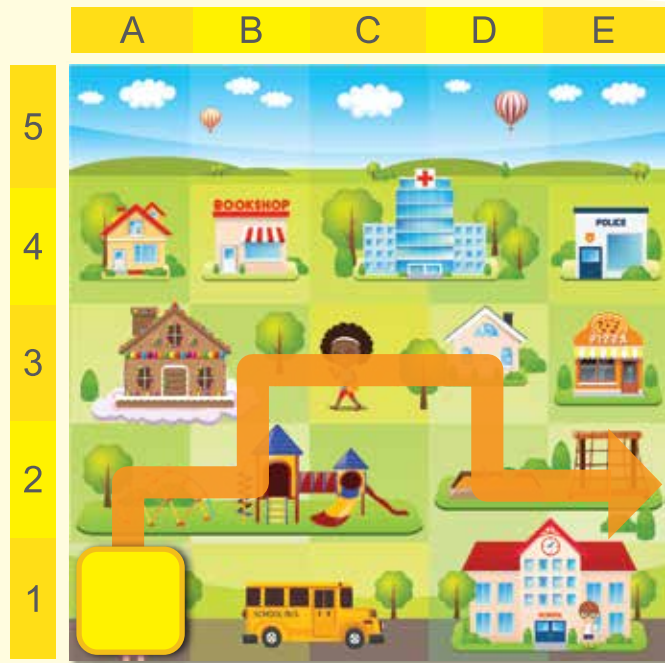
# — Play with Accessories —

## Beginner

Route and button icons are provided for you to follow.



- 1 Follow the instructions on the bottom of the selected Beginner card, and insert the coding movement blocks onto the Control Panel in the order shown.
- 2 Place EL10T's helmet onto the control unit to process as shown above. When completed reattach the helmet (as shown on page 10).

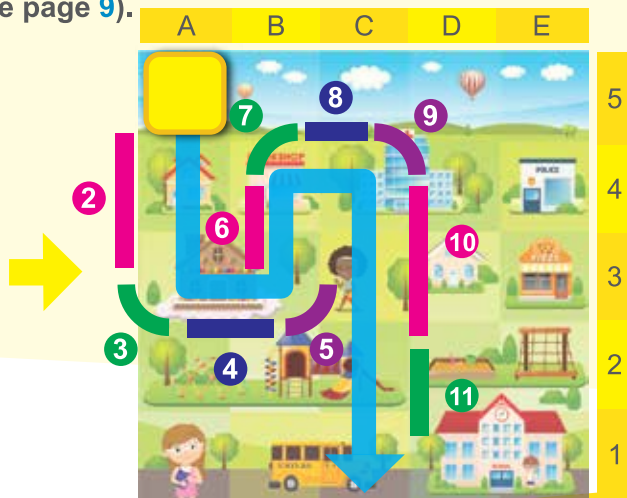


- 3 Place EL10T on the color blocked square shown on your Mission Card. Press his action button to make him move.

## Intermediate

These cards only show the route to follow. You need to think of the steps required to match the route and place the relevant coding movement blocks in the correct order onto the Control Panel.

- 1** Study the card, (see example shown) and work out what moves are needed to match the colored route. Place the movement blocks onto the Control Panel. Process as before (see page 9).
- 2** Place EL10T onto the square shown on your Mission Card, and press his button. Watch him move, did you get it right?



- Diagram illustrating the sequence of steps for the path:

  - Step 1: Forward x2 (Blue arrow pointing right)
  - Step 2: Left turn 90° (Pink arrow pointing up)
  - Step 3: Forward (Blue arrow pointing right)
  - Step 4: Right turn 90° (Green arrow pointing down)
  - Step 5: Left turn 90° (Pink arrow pointing up)
  - Step 6: Forward (Blue arrow pointing right)
  - Step 7: Right turn 90° (Green arrow pointing down)
  - Step 8: Forward (Blue arrow pointing right)
  - Step 9: Right turn 90° (Green arrow pointing down)
  - Step 10: Forward x2 (Blue arrow pointing right)
  - Step 11: Forward (Blue arrow pointing right)



# — Play with Accessories

## Advanced

The Advanced cards only show you the final destination to reach. You need to work out your own route.

*Starting point*



- 1 In this example you need to get EL10T to school. First, decide which of the 5 squares at the top of the map you want to start from; (shown route starts at the 2nd square, but you can start from a different position).

- 2 Now work out the route or routes that you would like EL10T to take. Perhaps you would like to write these down so you do not forget. Place the movement blocks onto the Control Panel in order. Process as shown on page 9.

- 3 Place EL10T on your chosen starting place and press his button. There are lots of routes EL10T can take to get to school, how many can you find?



- 4 Here is an example of a route you might try, but it's more fun finding your own way!

# — Play with Accessories

## Advanced (2)

## Roadblock

For a harder challenge, each map has 3 available roadblocks. Players can choose which Advanced Mission Card to use.

### \* Self-Training (1 player)

Player can only put 1-2 roadblocks on the map per round



### Roadblocks (City)

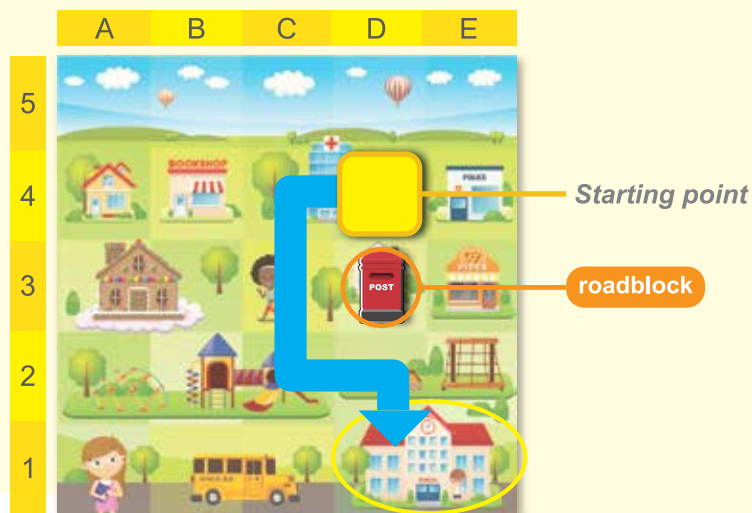


In order to avoid the collision with roadblocks, you need to think of a new route to the destination.



### Self-Training (1 player)

- 1 For example, if the school is your chosen destination, and you have placed a roadblock (postbox) on (3, D), you need to find a route to avoid it.



- 2 If you start at the Police Station (4, D), this might be a route you would take.

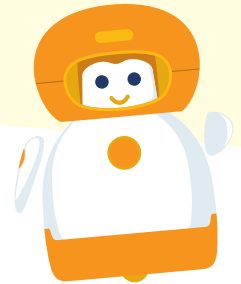
# WHAT IS CODING?

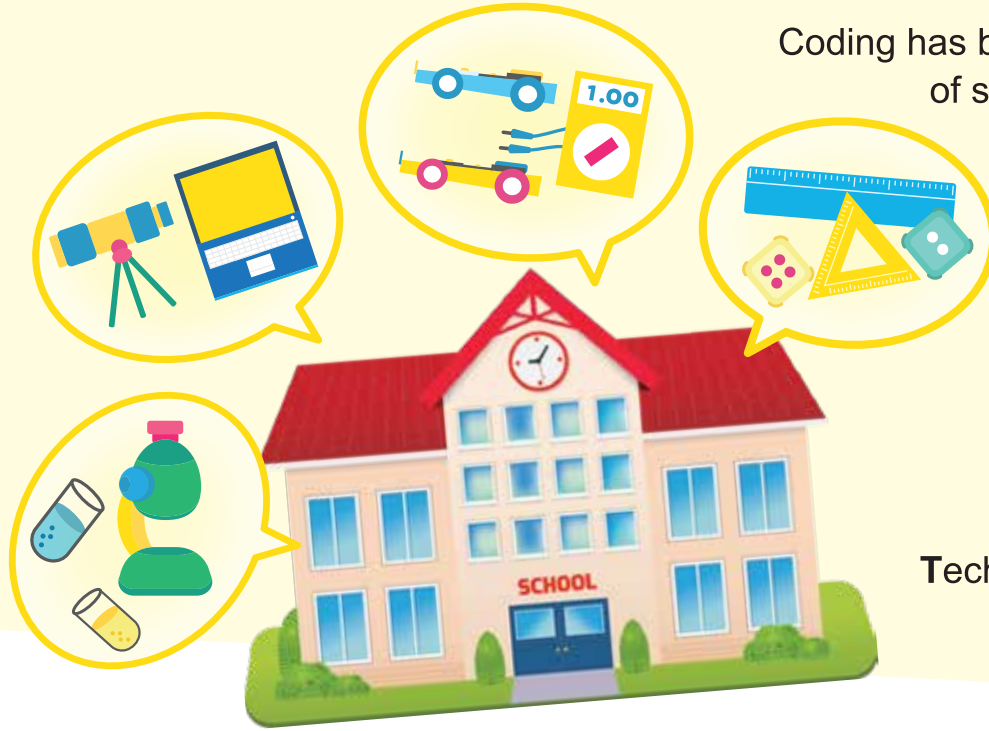
In the simplest of terms, CODING is telling your computer (or your robot), what to do in a language it understands.



If you only speak English and someone asks you to do something in Chinese, it's impossible to follow the instructions.

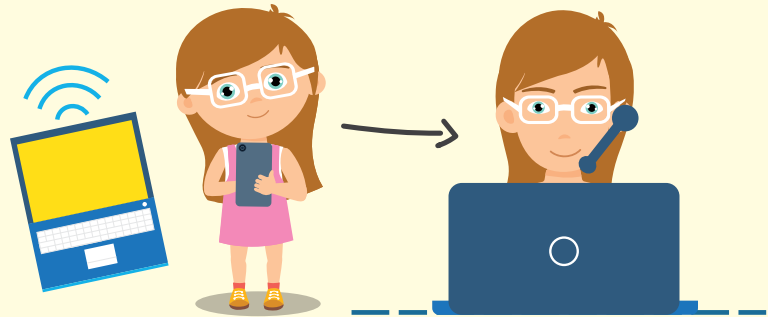
EL10T offers children a first fun step in learning to code.



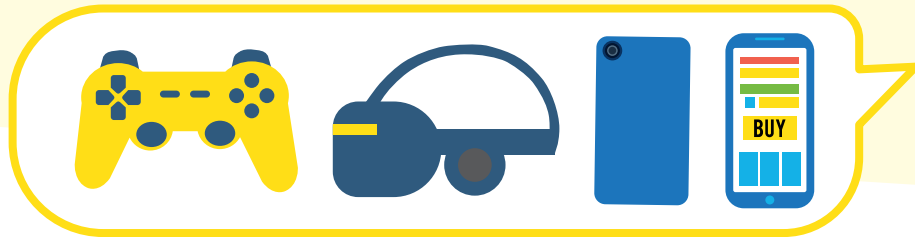


Coding has become an important part of school curriculum in many countries, and is often taught to pre-schoolers. You probably have heard about STEM, which is a curriculum based on the idea of educating children in four specific disciplines — **Science**, **Technology**, **Engineering** and **Mathematics**.

It has often been said that the children in a family know how to use today's technology quicker and better than the adults, which is great as they will be the problem solving technologists of the future.



Even if your child is more creative than technical, with all the advances in phones, game consoles, online shopping, virtual reality gadgets etc, technology will still feature strongly in their lives. It's not just for computer geniuses!



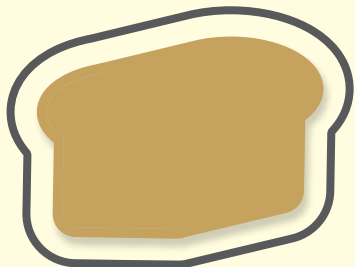


Nowadays, children have been exposed to technology from a very young age. Many things around us use computers, not just smart phones and tablets, but also things like traffic lights, and cash machines. So...computers need instructions to function. We know how to use them, but not necessarily how to program them.

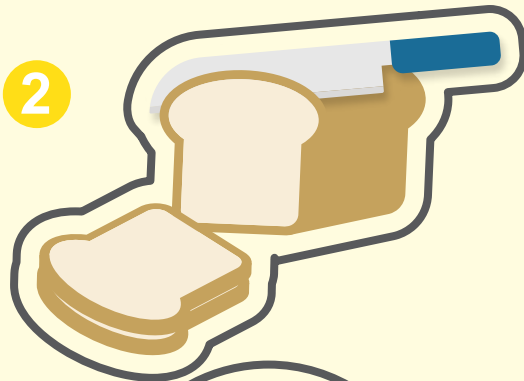


Coding breaks up a big problem (end result) into smaller steps. For example, if you want to tell someone to make a sandwich, they first need to find the bread, cut the bread, butter the bread, find the fillings. etc.

1



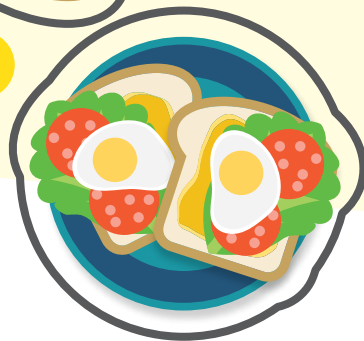
2



3



4

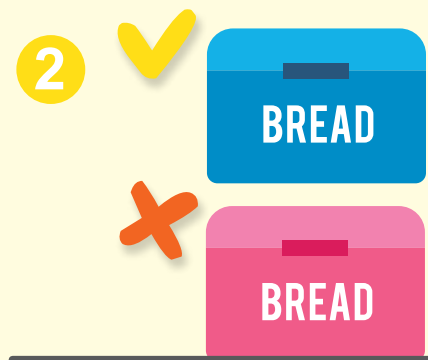


BUT, you cannot say 'go to the bread bin. You need to count the steps and the direction needed first, to get to the bread bin. Then you need to identify the bread bin, 'it's the blue container'. You cannot say get the bread, you have to instruct how to open the bin and extract the bread!

1



2



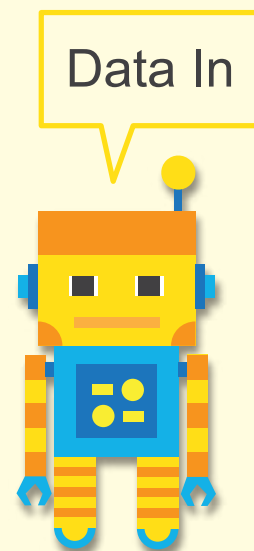
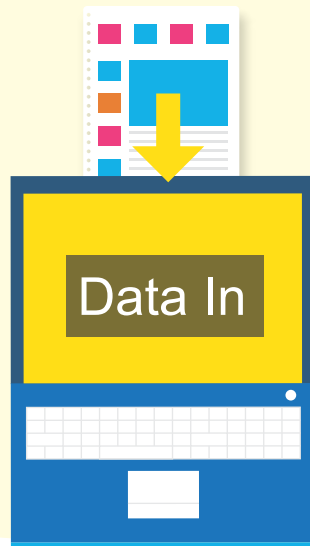
3



4

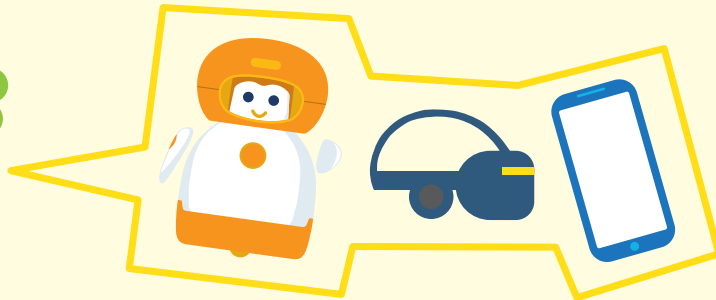


Very exacting, but once it is written, the computer (or human being) will be able to remember it time after time. When we first learn how to do things we go through this process thinking 'first I do this' and 'then I do that', until it becomes second nature.



Remember, a computer is without a brain or knowledge until it is programmed with good accurate instructions (string of actions).

What items are there in your home that follow code to function?





**ELENCO ELECTRONICS INC.**  
**150 Carpenter Ave.**  
**Wheeling, IL 60090 USA**  
**ELENCO.COM**  
**Copyright ©2019. All rights reserved.**

Requires 7 x 1.5 Volt batteries

Batteries not included.

Non-rechargeable batteries are not to be recharged.

Rechargeable batteries are to be removed from the toy before being charged.

Rechargeable batteries are only to be charged under adult supervision.

Different types of batteries or new and used batteries are not to be mixed.

Only batteries of the same or equivalent type as recommended are to be used.

Batteries are to be inserted with the correct polarity.

Exhausted batteries are to be removed from the toy.

The supply terminals are not to be short-circuited.

Do not dispose batteries in fire as they may explode or leak.

Do not mix old and new batteries.

Do not mix alkaline batteries, Standard (Carbon-Zinc) or rechargeable batteries.

Battery removal and replacement is only to be undertaken by an adult.



Colors and Styles may vary.  
Made in China