

# Kodu Module 1 Slides

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# XBox Sticks and Shoulder Buttons



# A-B-X-Y, Start, and Back Buttons



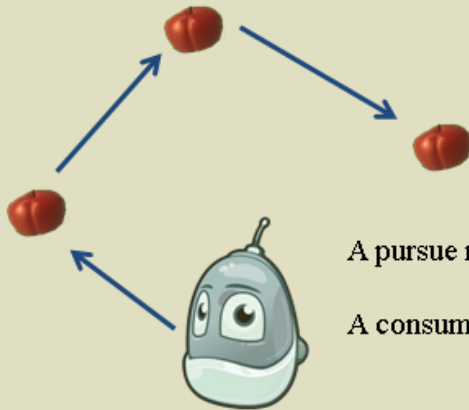
# Apple1X World



# Pursue and Consume Idiom

## Pursue and Consume

Make the Kodu go to objects and eat them.



A pursue rule involves *motion*.

A consume rule *uses up* the object.

## Pursue and Consume



General Form:

WHEN see *thing* DO move toward

WHEN bump *thing* DO *consume it*

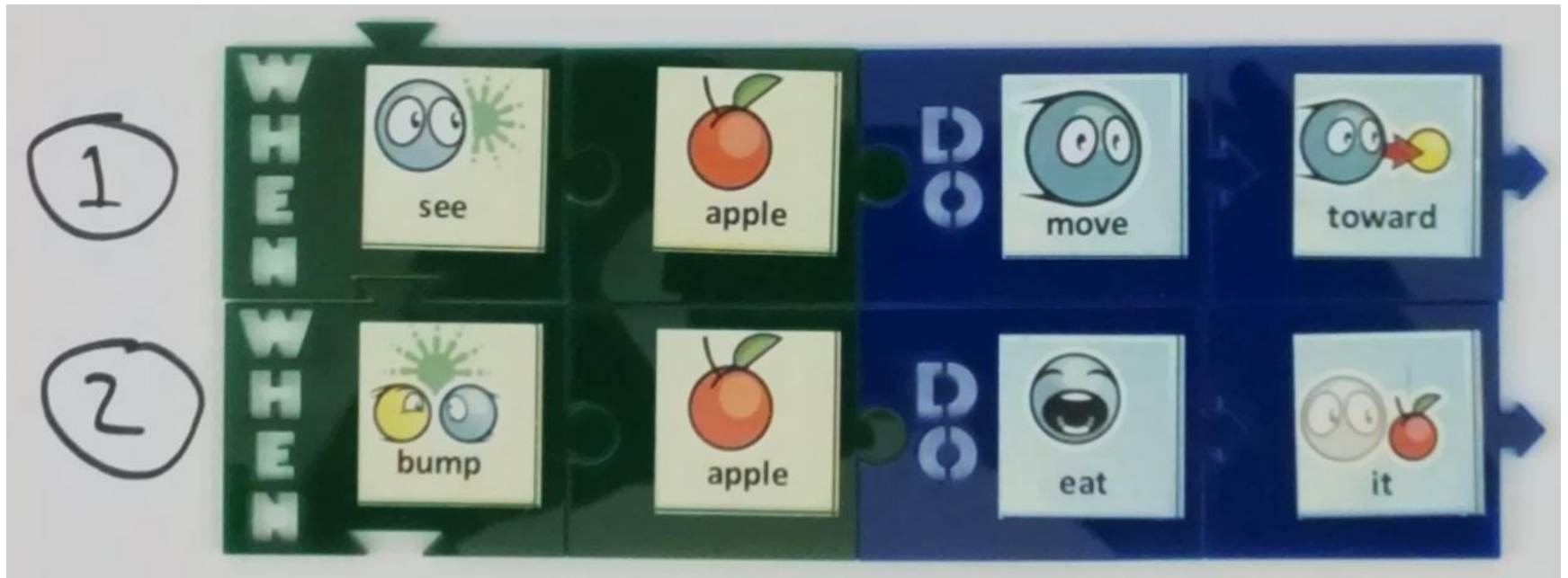
“Consume” can be “eat”, “grab”, “vanish”, or something else.

Filter by color:

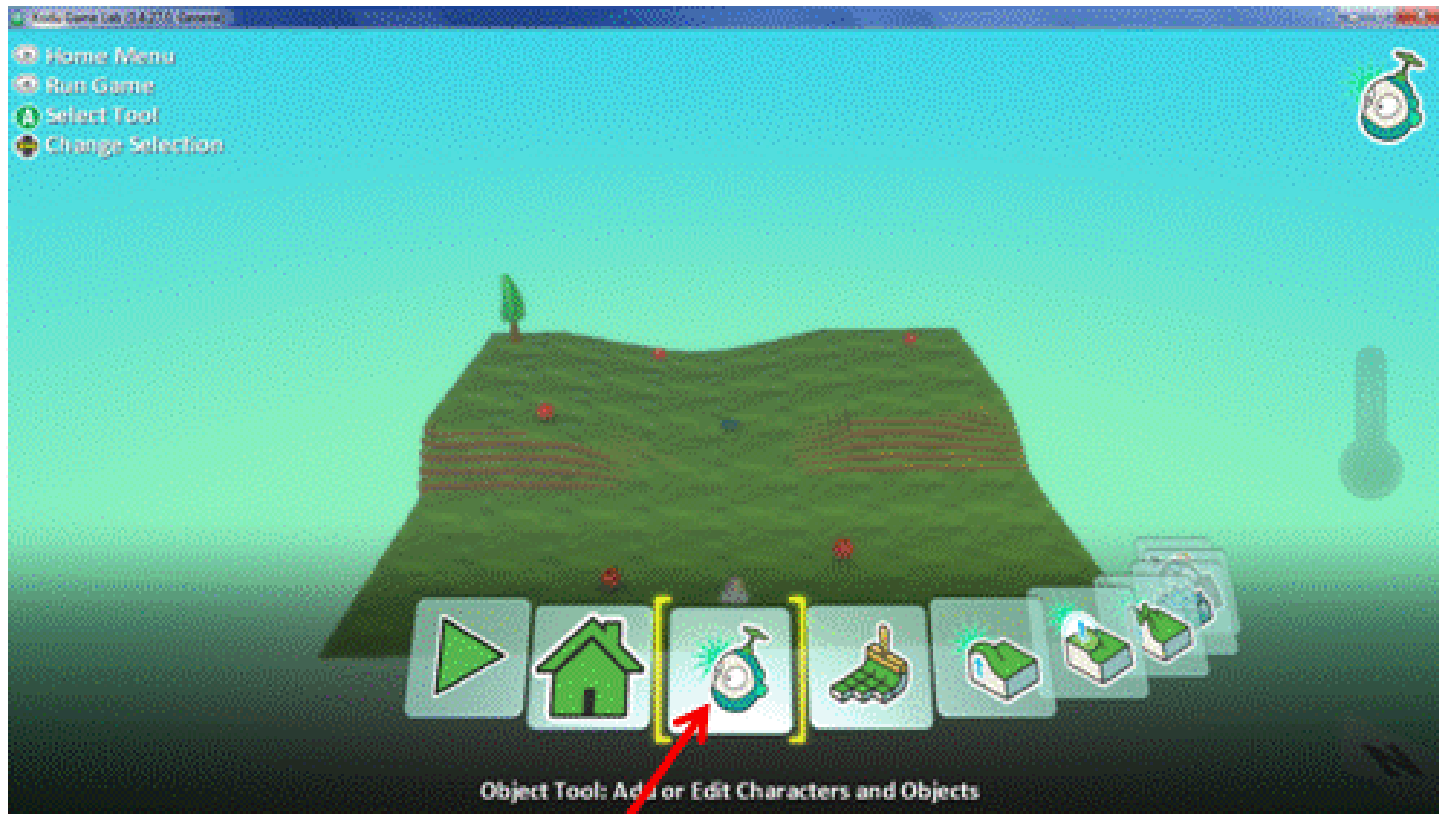
WHEN see *color thing* DO move toward

WHEN bump *color thing* DO *consume it*

# Tiles for Eating Apples

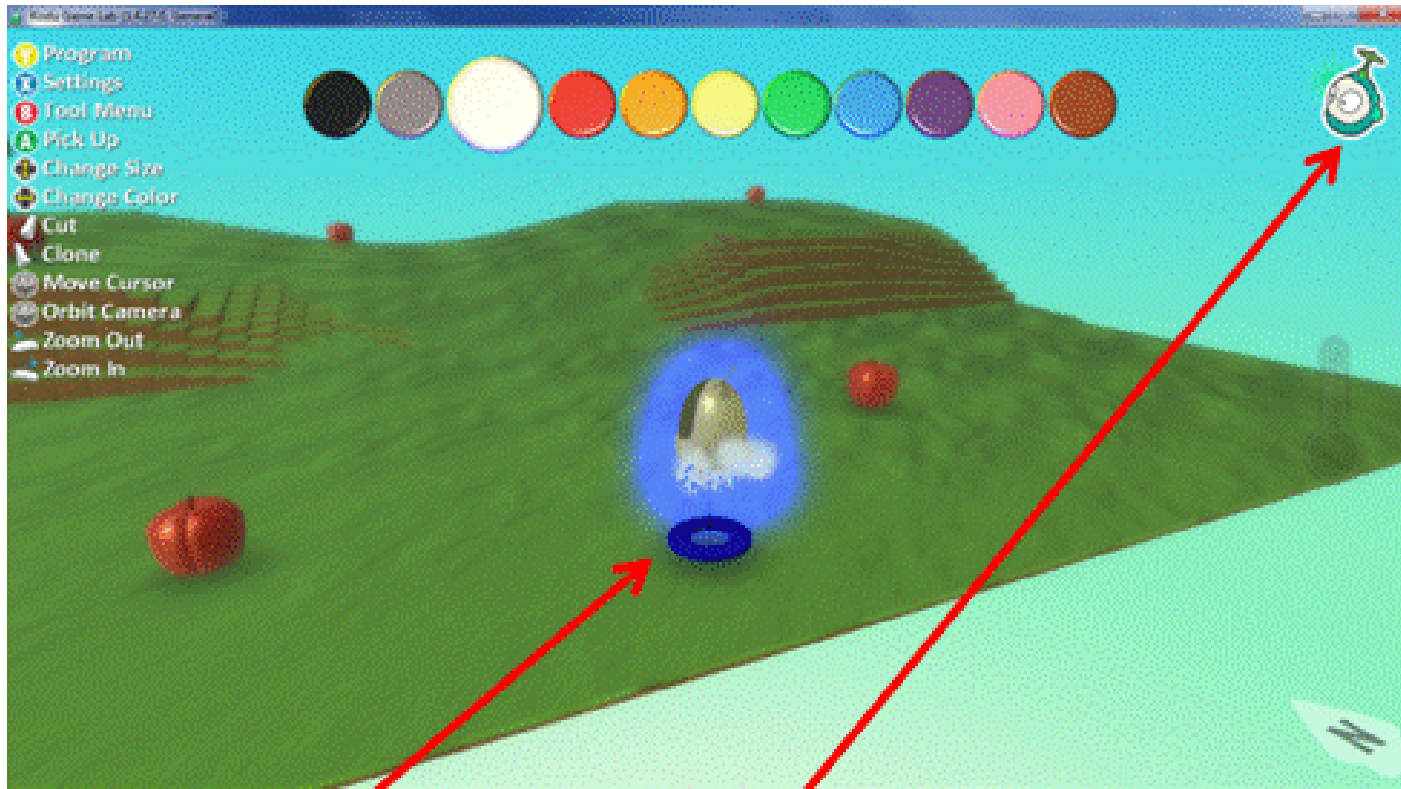


# The Tool Menu



Object tool: press A to select.

# The Object Tool



Cursor from object tool is on the Kodu.  
Press Y to program the Kodu.

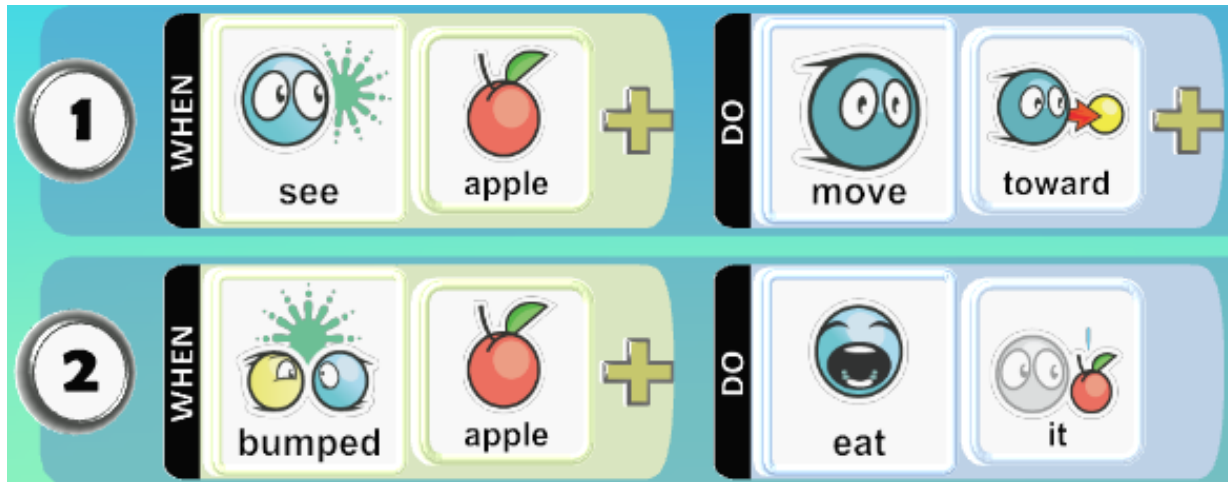


# The Rule Editor



Editing the Kodu's rules.

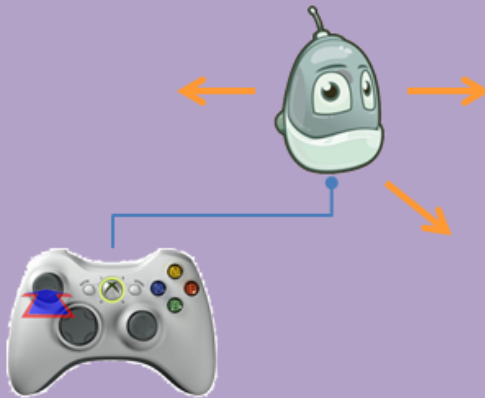
# Eating Apples



# Let Me Drive Idiom

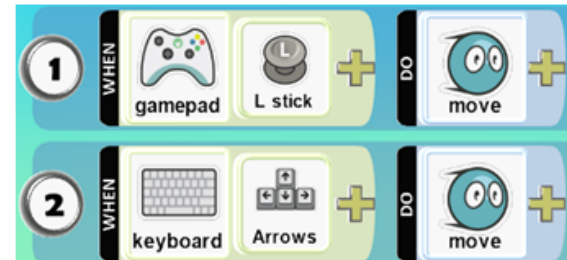
## Let Me Drive

Use the left stick or the arrow keys to drive a character.



## Let Me Drive

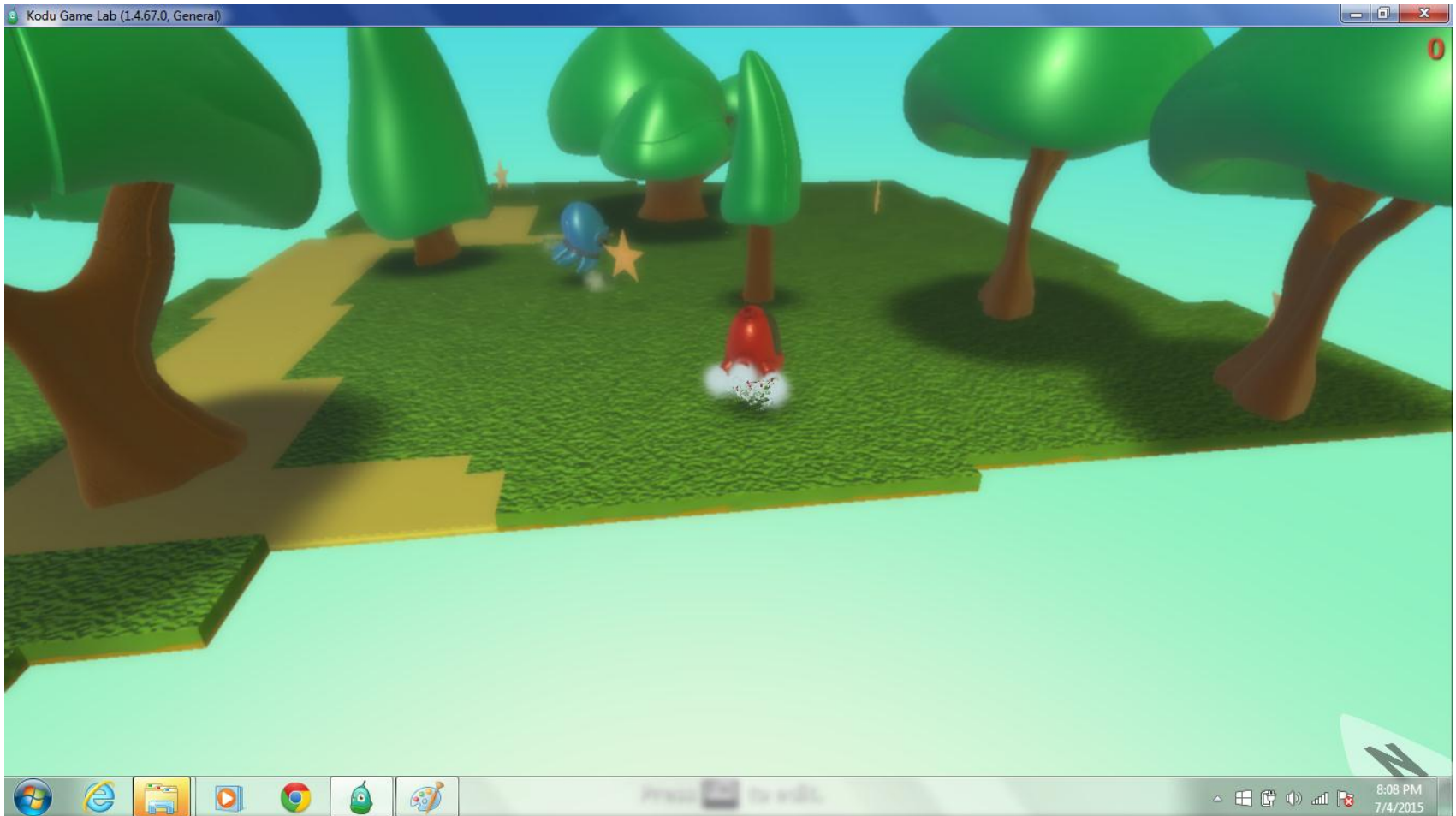
Use the left stick or the arrow keys to drive a character.



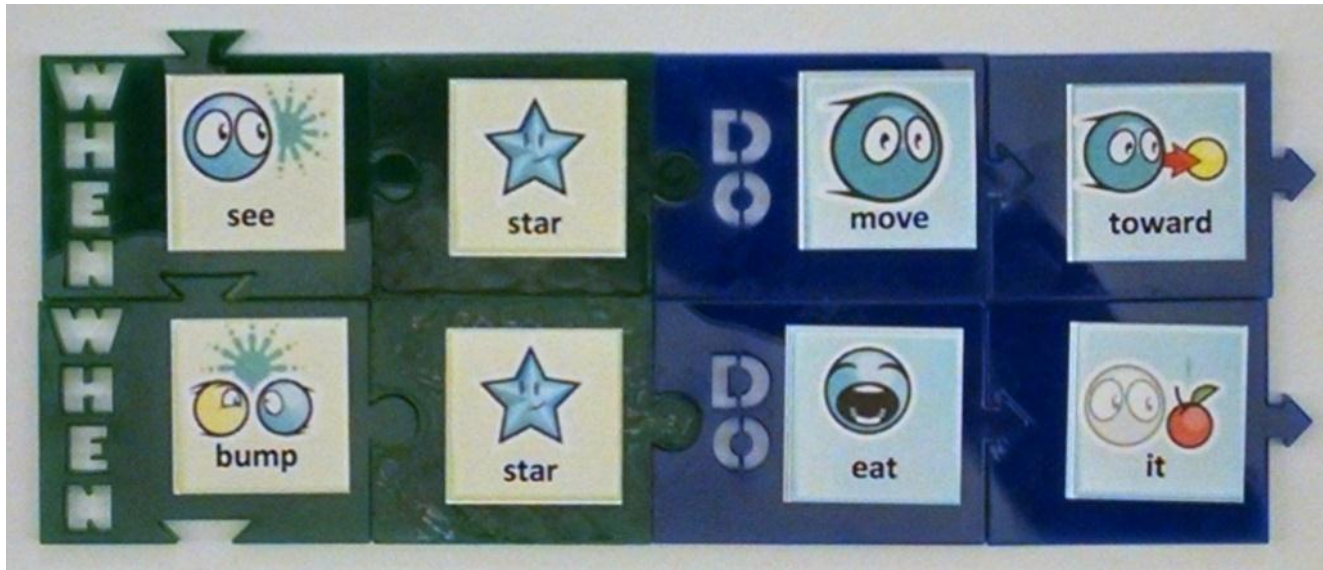
Notes:

1. When the left stick is not being pressed, the character is free to move on its own.
2. The right stick and/or the WASD keys can be used to drive a second character, or add additional motions such as up/down.
3. Another way to guide a character is to have it follow the cursor:  
WHEN see cursor DO move toward

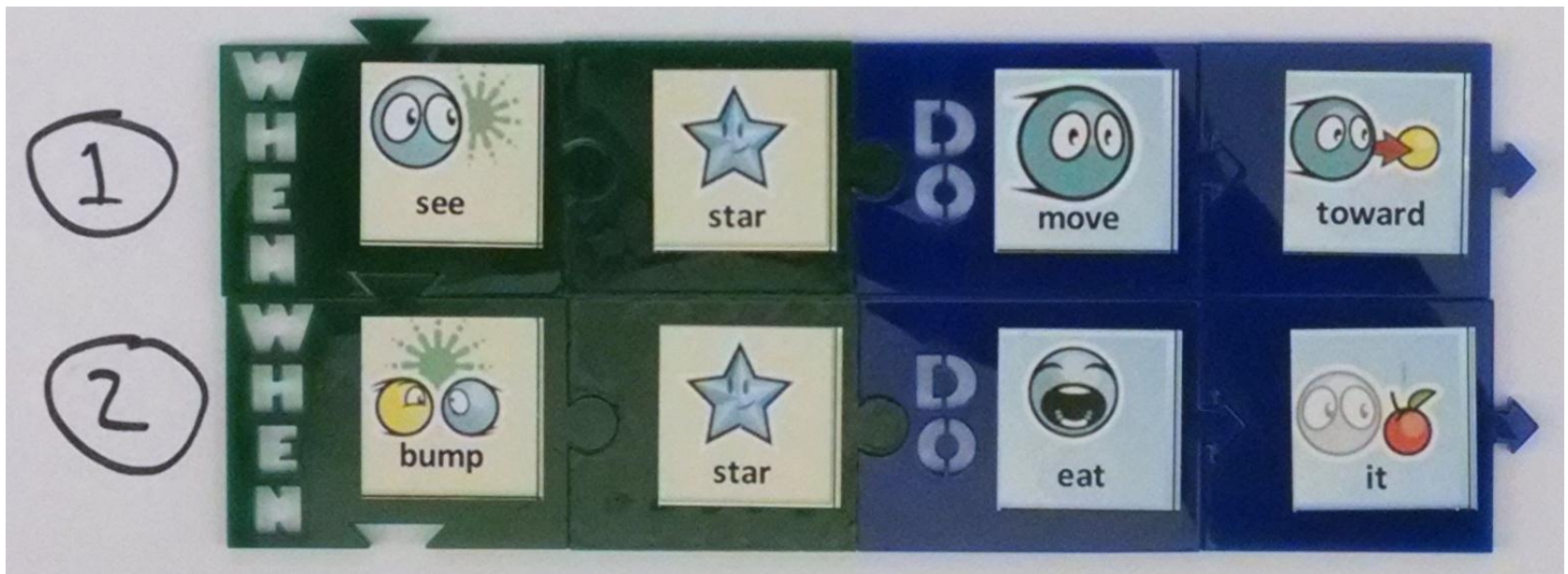
# Star1X World



# Tiles for Eating Stars



# Tiles for Eating Stars

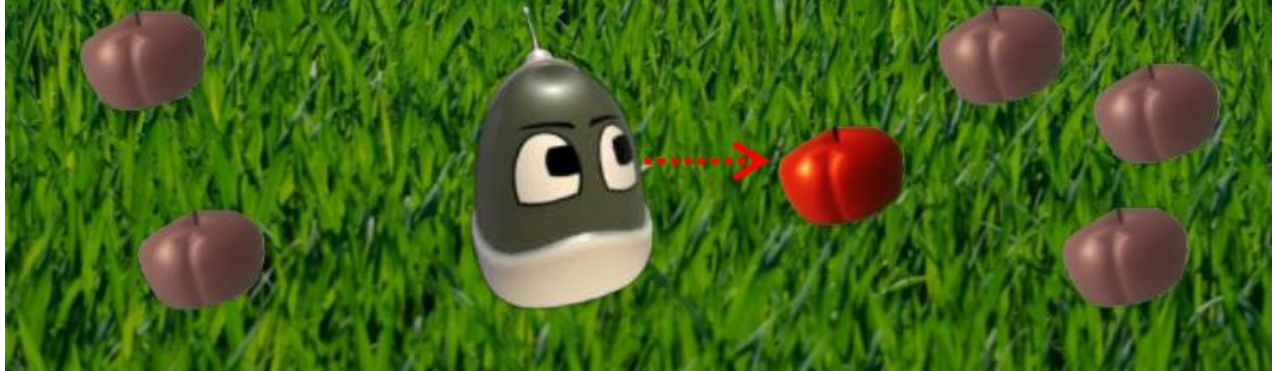


# Flee1X World



# First Law of KODU

Rules pick the closest matching object.





# Second Law of KODU

Any rule that can run, will run.

The diagram shows four KODU code blocks and a character:

- Block 1 (top):** WHEN: bumped + apple (marked with a red X). DO: eat + it.
- Block 2 (middle):** WHEN: see + apple (marked with a green checkmark). DO: move + toward + quickly. A red dotted arrow points from the 'quickly' block to a red apple.
- Block 3 (bottom):** WHEN: see + apple (marked with a green checkmark). DO: move + toward + quickly. A red dotted arrow points from the 'see' block to a character.
- Block 4 (bottom):** WHEN: bumped + apple (marked with a red X). DO: eat + it.

Annotations:









- Seeing + Moving:** Yellow text with a red dotted arrow pointing from the character to the 'see' block in Block 3.
- same behavior as:** Blue text with a red dotted arrow pointing from Block 3 to Block 2.
- Not Bumping:** Yellow text with a red dotted arrow pointing from the character to the 'bumped' block in Block 4.

# Third Law of KODU

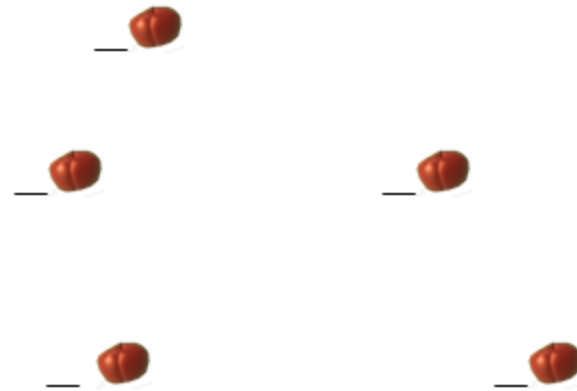
When actions conflict, the earliest wins.



# Review













1	WHEN	 see	 apple	+	DO	 move	 toward	+
	2	WHEN	 bumped	 apple	+	DO	 eat	 it

In what order will the kodu eat the apples?



# Review

Which rule says to go to the nearest star?

<b>WHEN</b>  see	 star	+	<b>DO</b>  eat	 it	+
<b>WHEN</b>  bumped	 star	+	<b>DO</b>  move	 toward	+
<b>WHEN</b>  see	 star	+	<b>DO</b>  move	 toward	+

# Review

Which rule tells the kodu to eat the star when it reaches it?

