

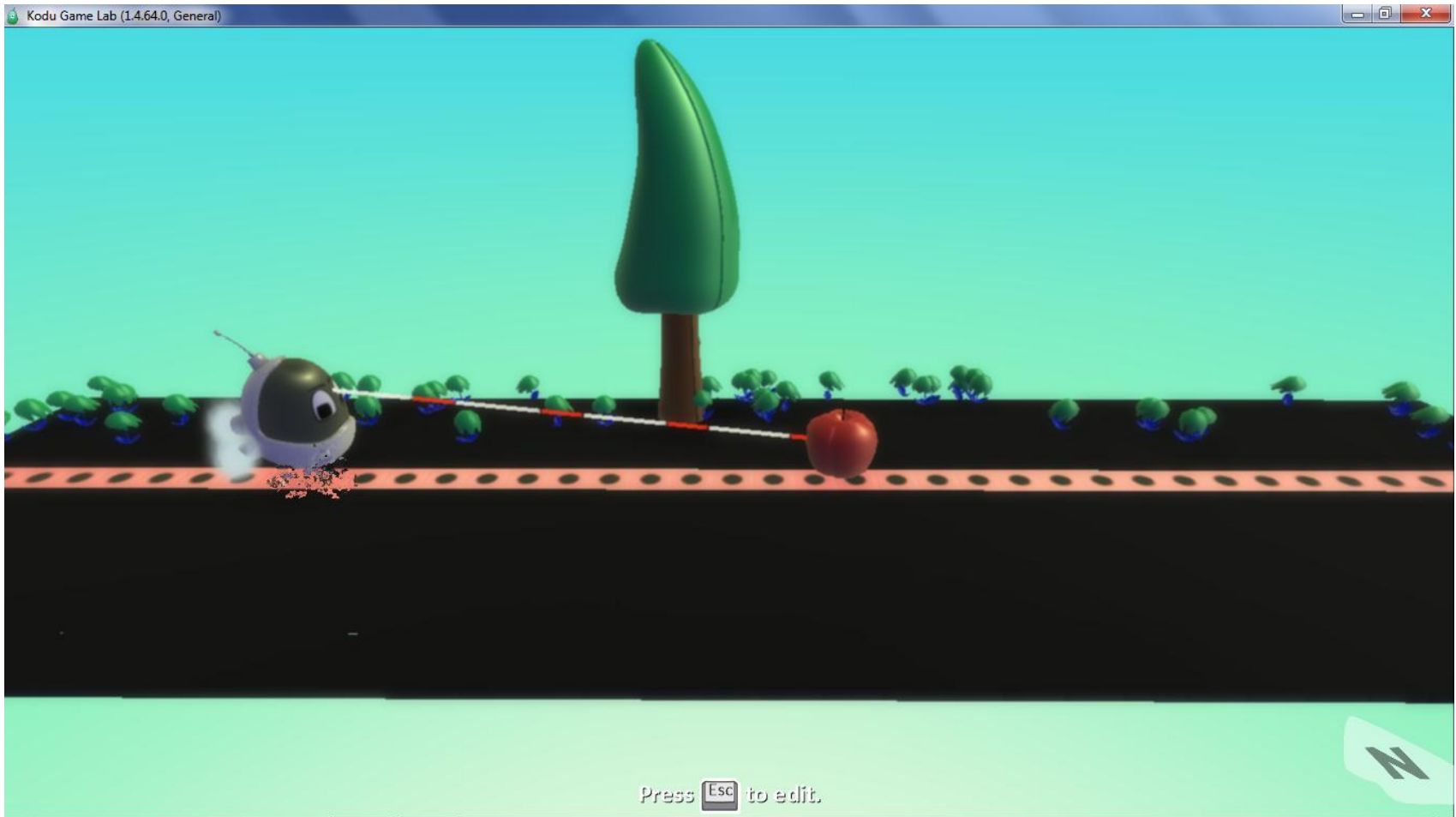
Kodu Module 3 Slides

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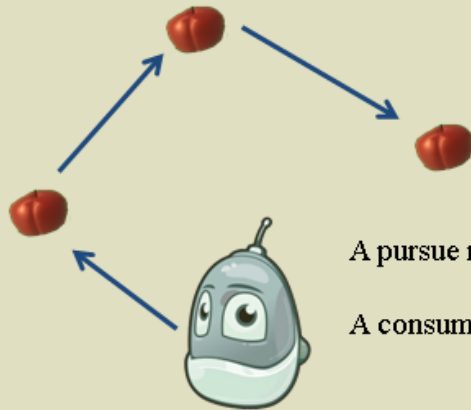
Measure1 World



Pursue and Consume Idiom

Pursue and Consume

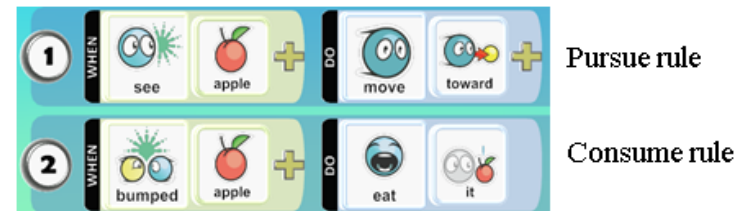
Make the Kodu go to objects and eat them.



A pursue rule involves *motion*.

A consume rule *uses up* the object.

Pursue and Consume



General Form:

WHEN see *thing* DO move toward

WHEN bumped *thing* DO *consume* it

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

Filter by color:


WHEN see *color thing* DO move toward


WHEN bumped *color thing* DO *consume* it

Do Two Things Idiom

Do Two Things

Make the Kodu take two actions with one rule.

WHEN *something* ... DO **this** 

and also → DO **that** 

Do Two Things

When you've bumped an apple, eat it *and also* play the coin sound.



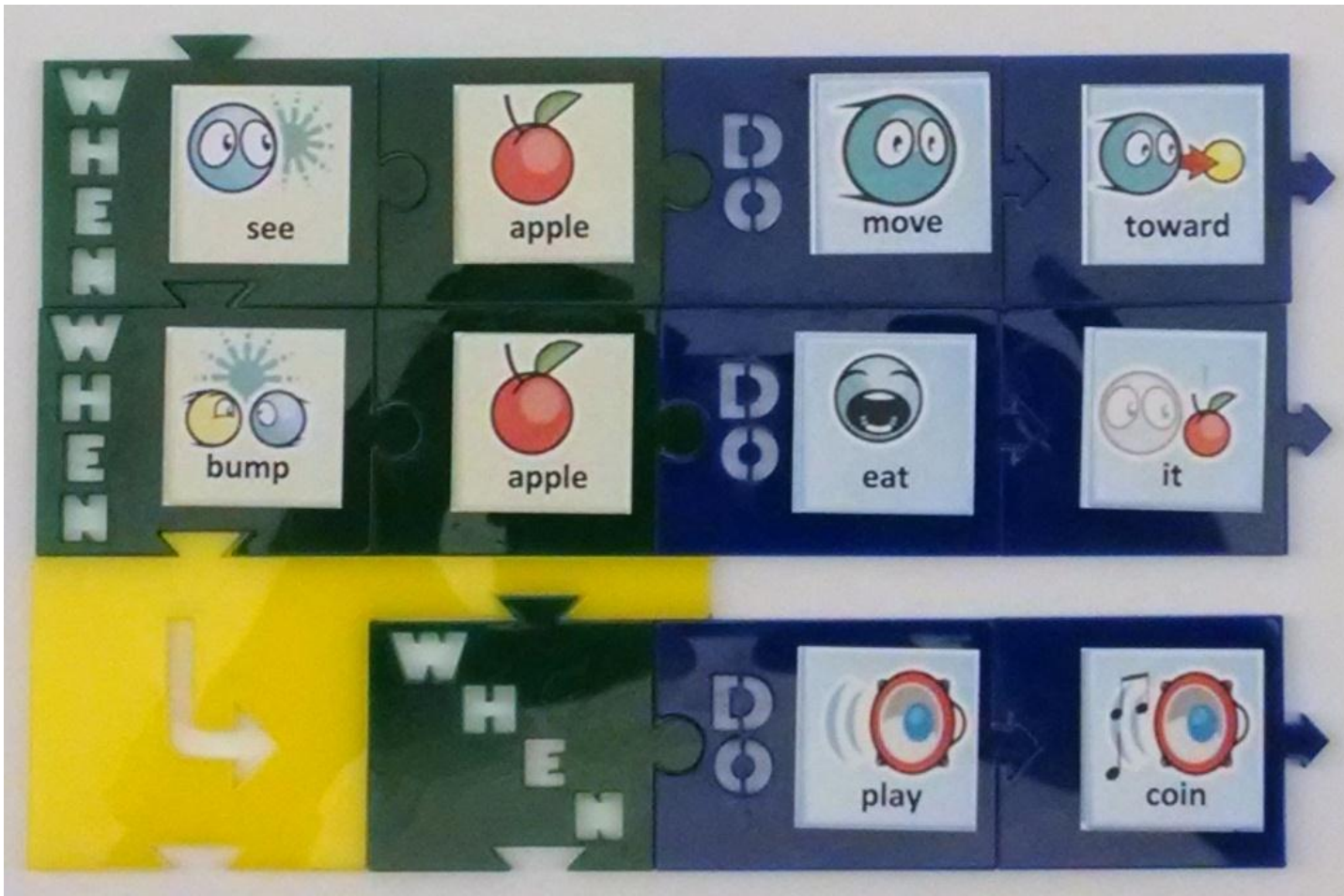
General Form:

WHEN *something* DO *action1*

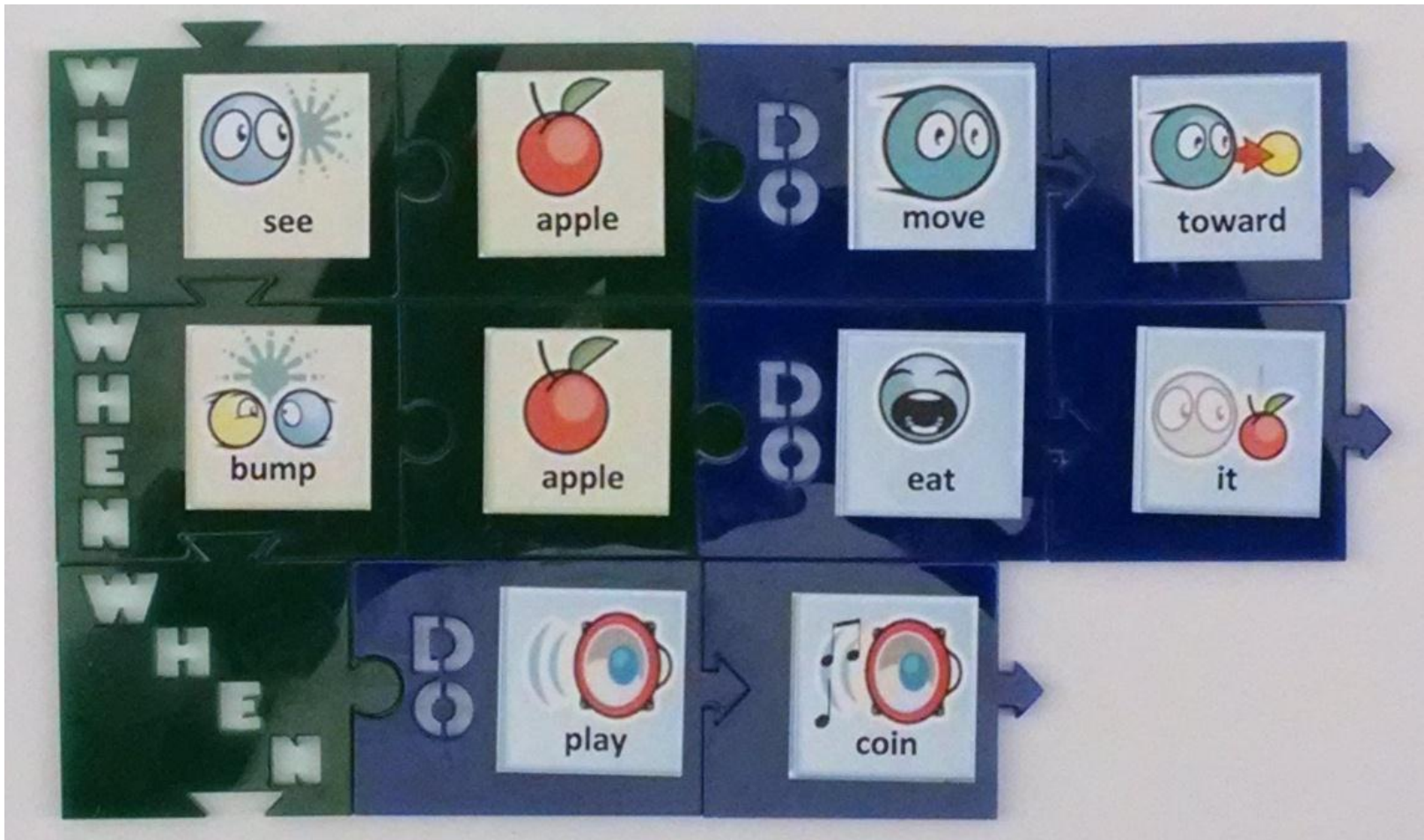
↳ WHEN DO *action2*

Indenting the second rule makes it dependent on the WHEN part of the rule above.

Eat An Apple and Play A Sound

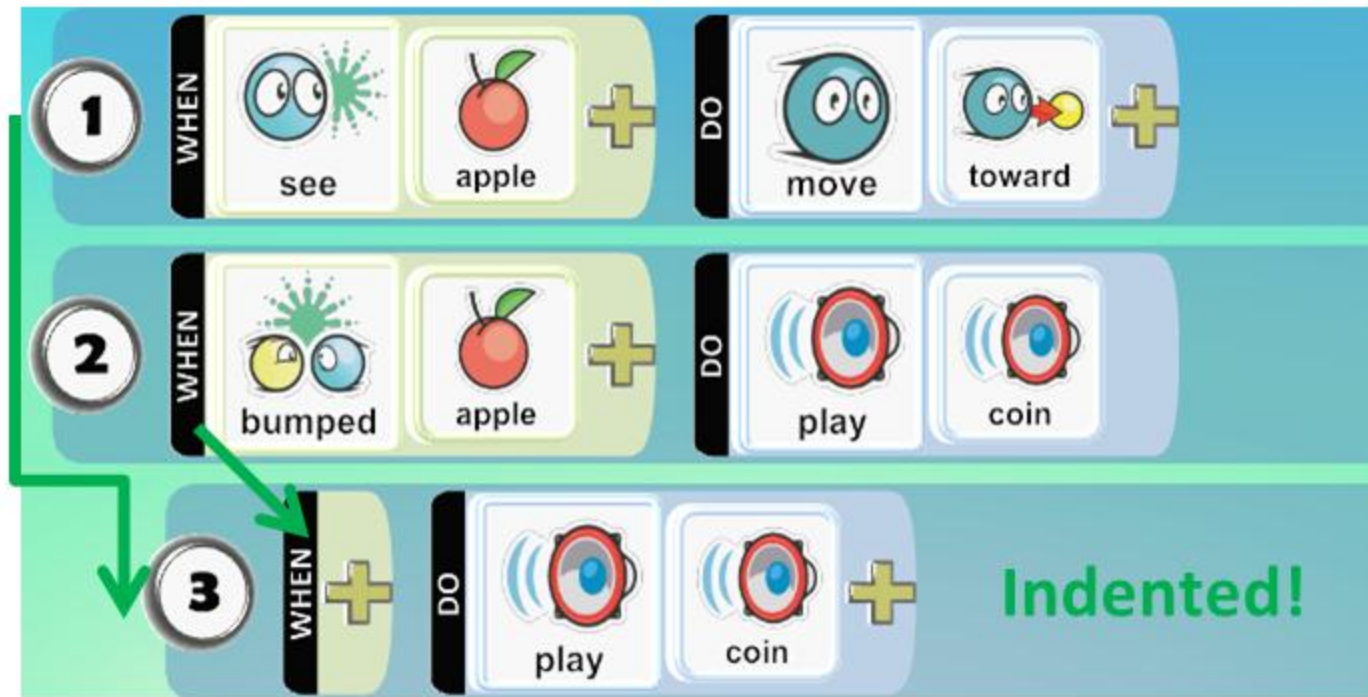


Missing Indentation



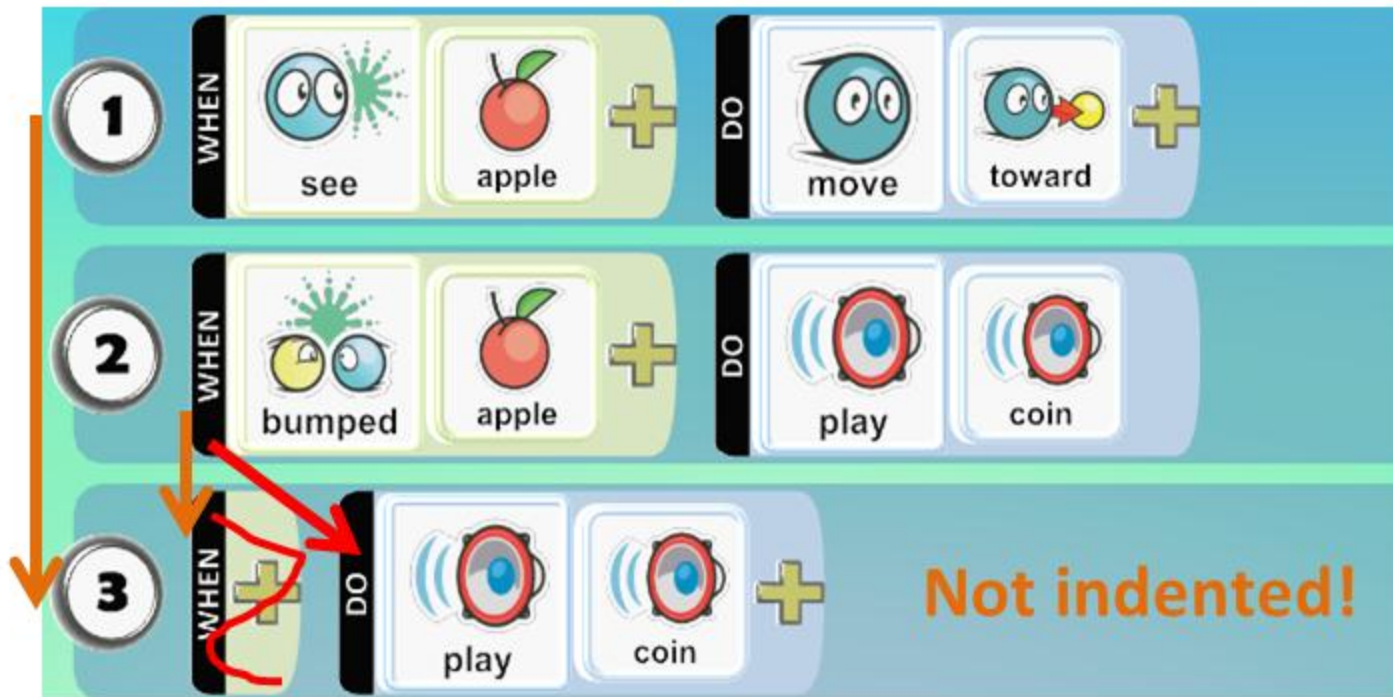
Rule 3 Is Indented

The rule number and WHEN marker are both indented relative to rule 2.



Rule 3 Is Not Indented


Don't compare the WHEN part of rule 2 against the DO part of rule 3.



Count Actions Idiom

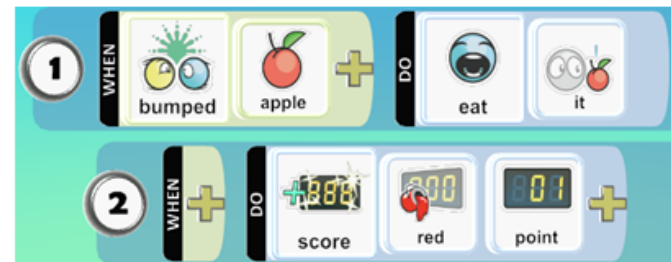
Count Actions

Make the Kodu keep a count of an action it takes.
This is a special case of Do Two Things.

WHEN *something* DO **action**  **+1**
↳ *and also* → score **color** 1 point

Count Actions

When you eat an apple, add one to the red score.

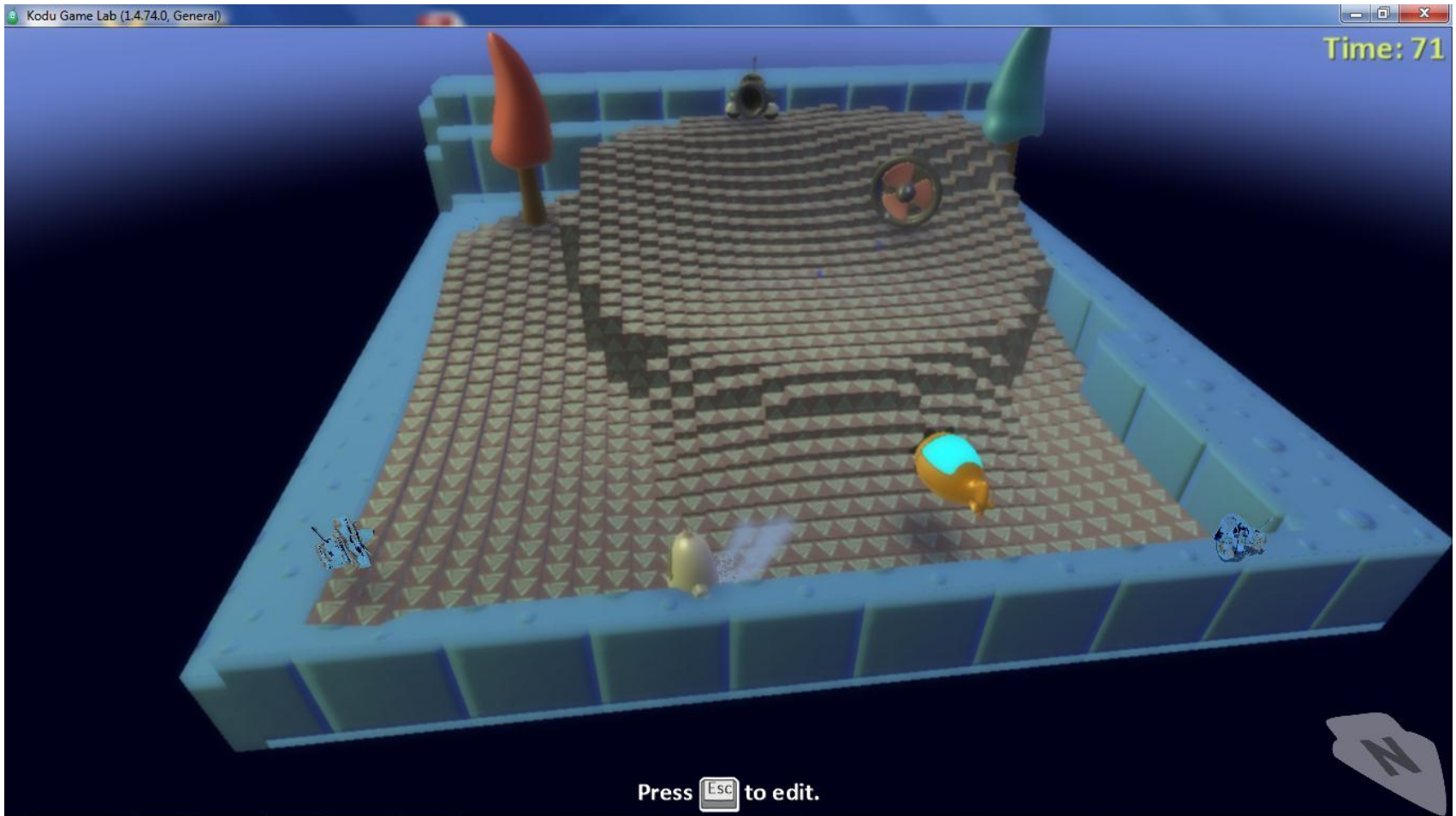


General Form:

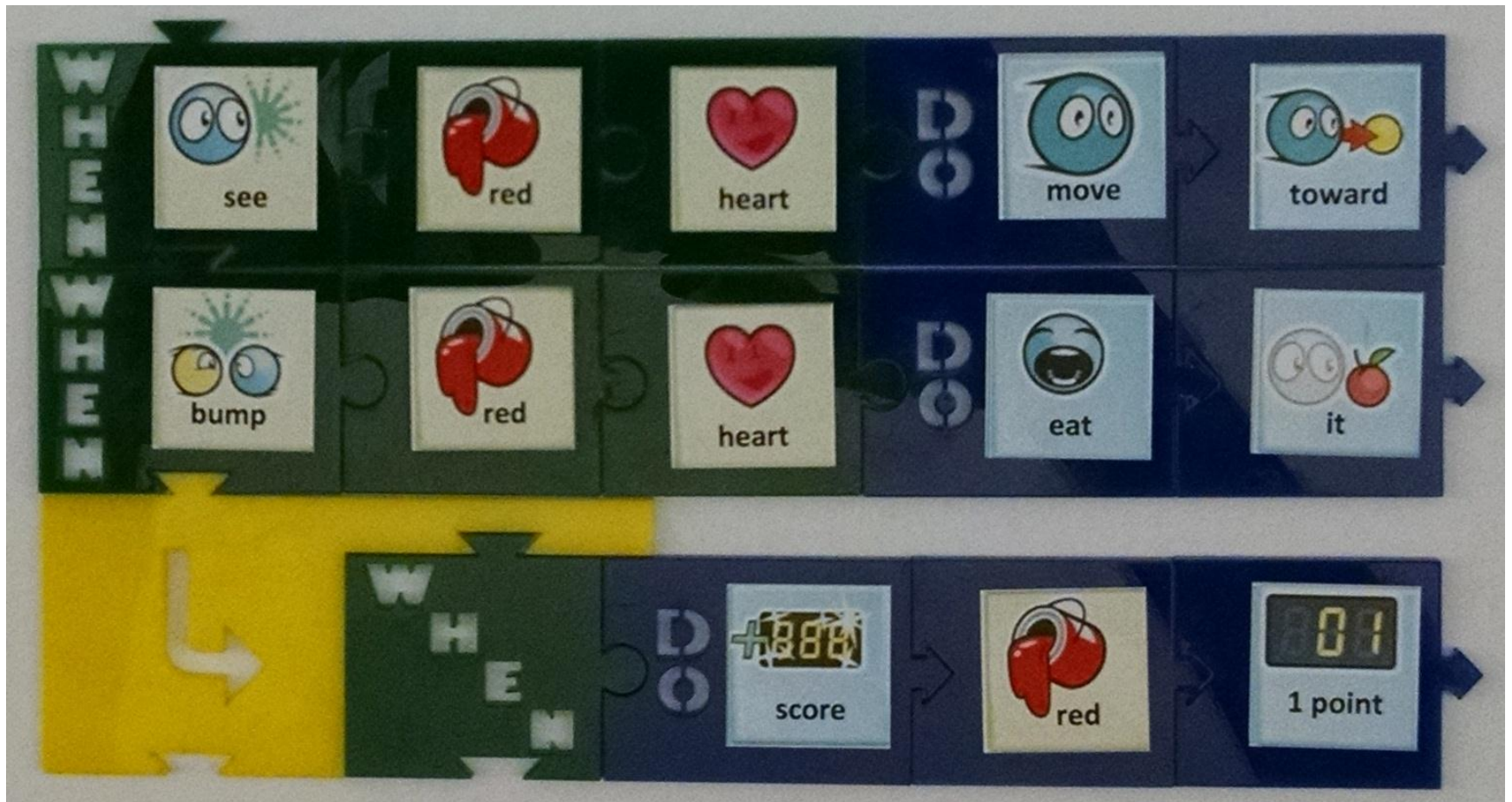
WHEN *something* DO **action**
↳ WHEN DO score **color** 1 point

Scores named by colors, such as "red", are displayed automatically.
Scores named by letters, like "A", are kept but not displayed.

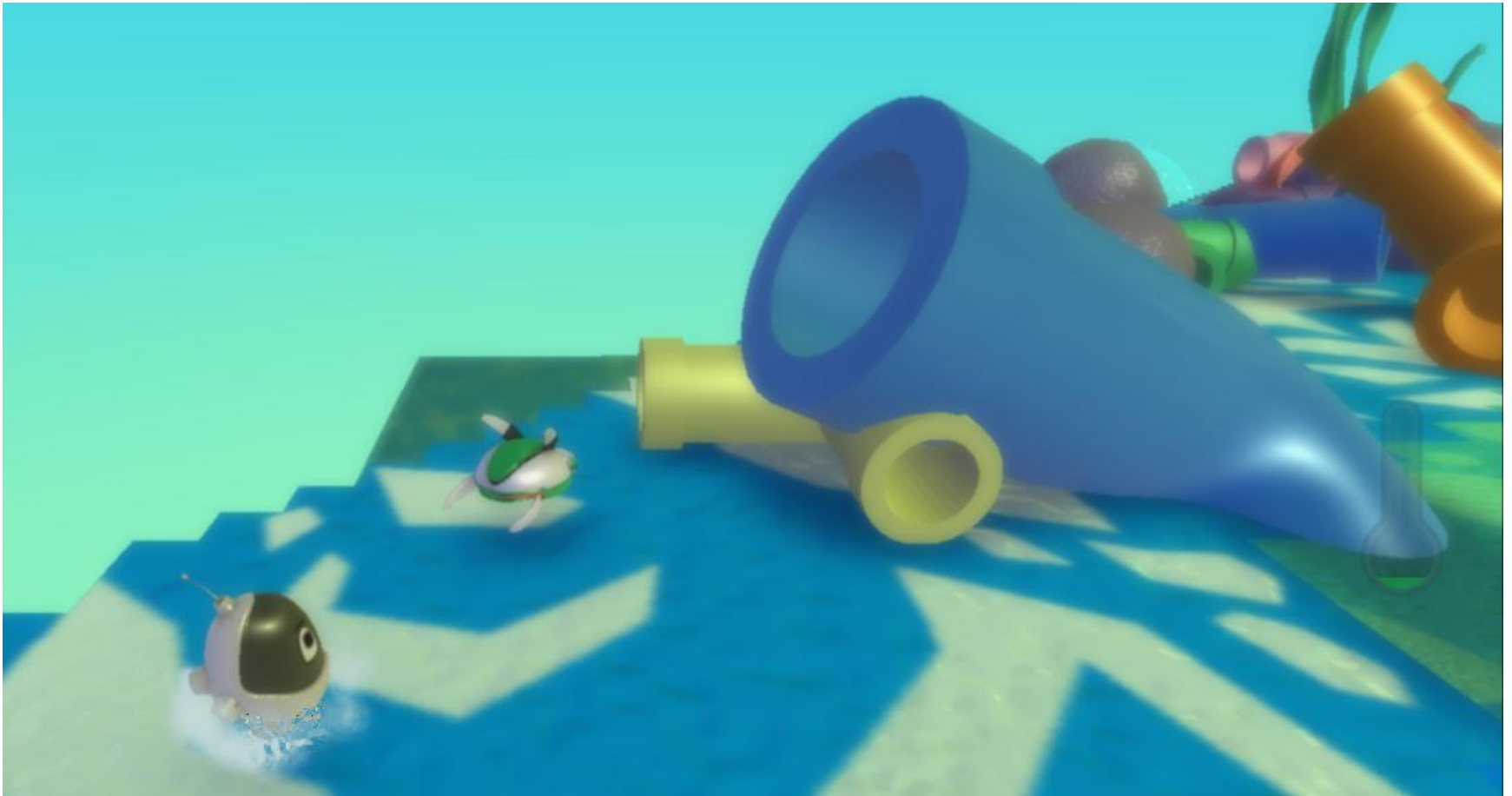
HeartCannon1X World



Eat and Count Red Hearts



BoomPipes1 World



Giver1 World



Two Idioms Combined

Which rules implement Pursue and Consume?
Which rules implement Count Actions?

The image displays three Kodu rules, each with a 'WHEN' and 'DO' section. Rule 1 (Pursue) has 'WHEN' blocks for 'see', 'red', and 'heart' with a plus sign, and 'DO' blocks for 'move' and 'toward' with a plus sign. Rule 2 (Consume) has 'WHEN' blocks for 'bumped', 'red', and 'heart' with a plus sign, and 'DO' blocks for 'eat' and 'it'. Rule 3 (Count Actions) has a 'WHEN' block with a plus sign, and 'DO' blocks for 'score', 'red', and 'point' with a plus sign.

1 WHEN see red heart + DO move toward +

2 WHEN bumped red heart + DO eat it

3 WHEN + DO score red point +

What Do These Rules Do?

