UNPLUGGED WORKSHEETS

Kodable

This workbook belongs to: _____

NAME

CONTENTS

HOUR OF CODE

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Name: _____ **Date:** _____

Sequence Solver

Example:

Directions:
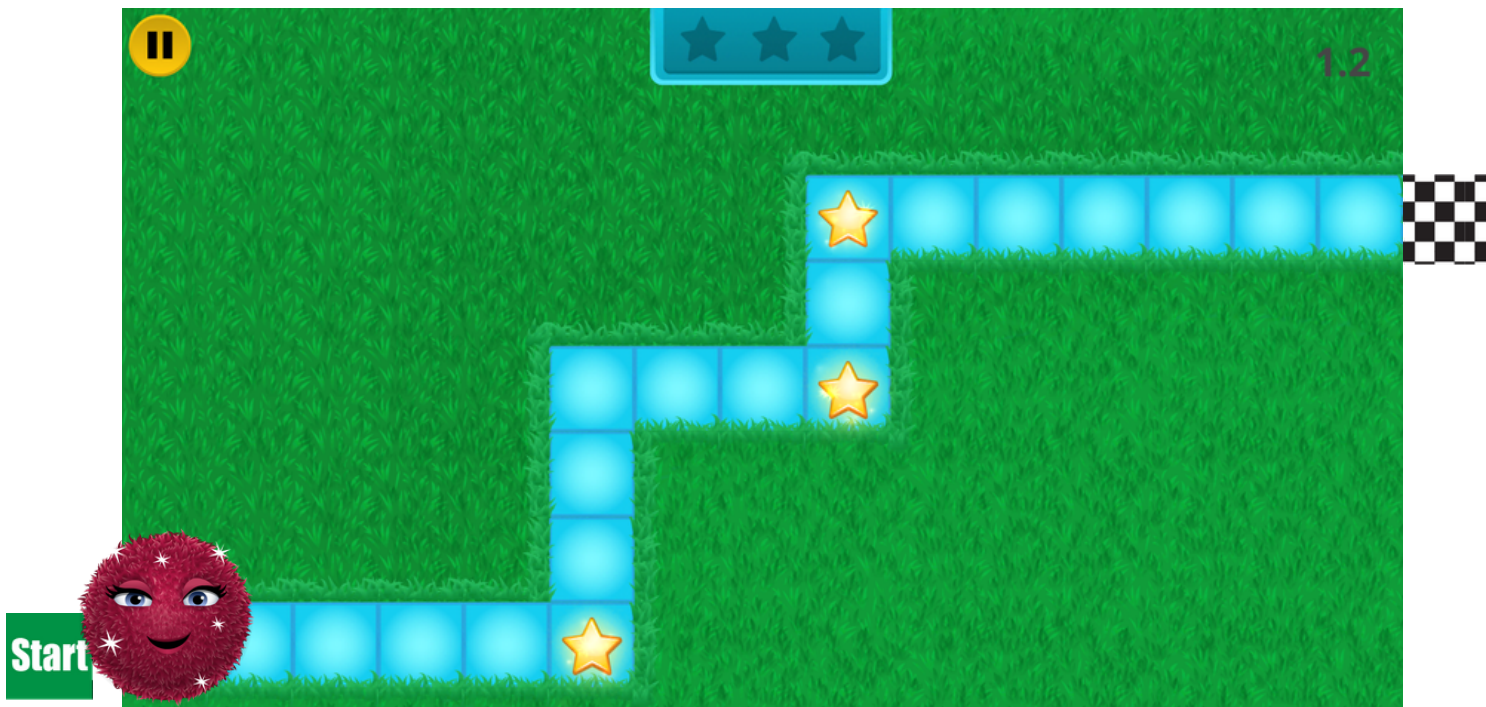
Help the Fuzz get through the maze!

Draw the missing arrows to tell the fuzz which way to roll to get to the end of the maze.

Now you try!

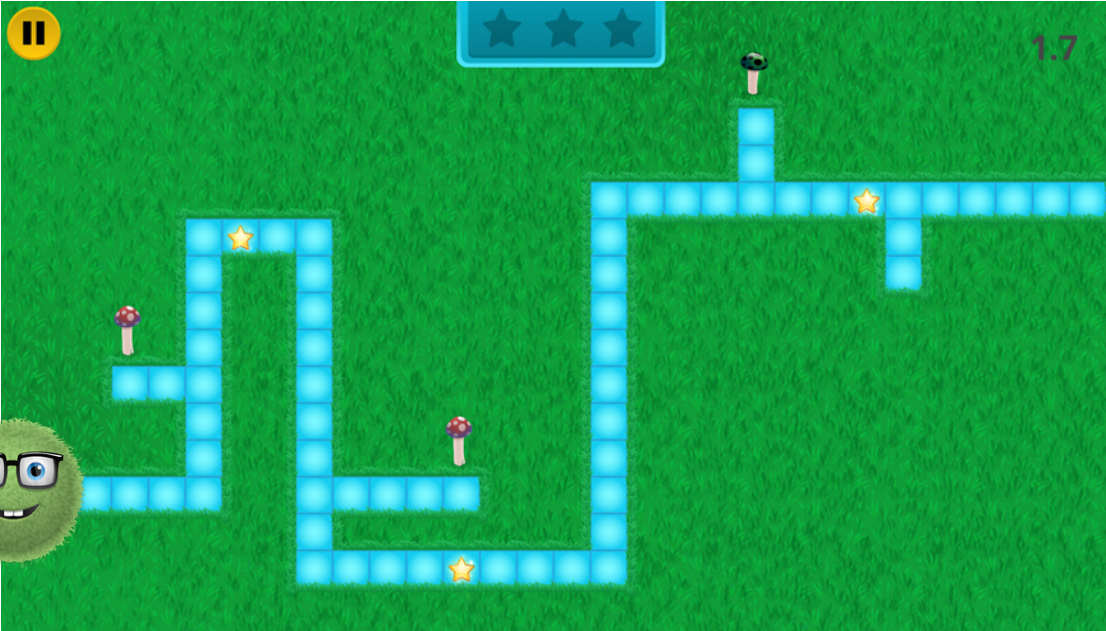What goes here?
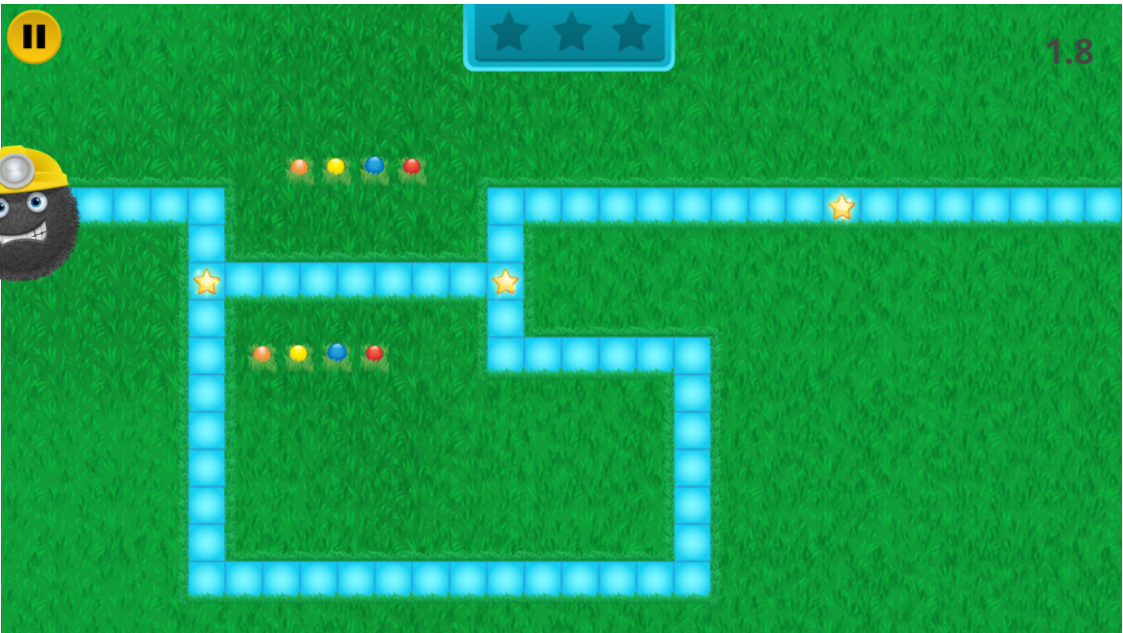
Draw the arrows to show the fuzz how to get through the maze.

Name: _____ **Date:** _____
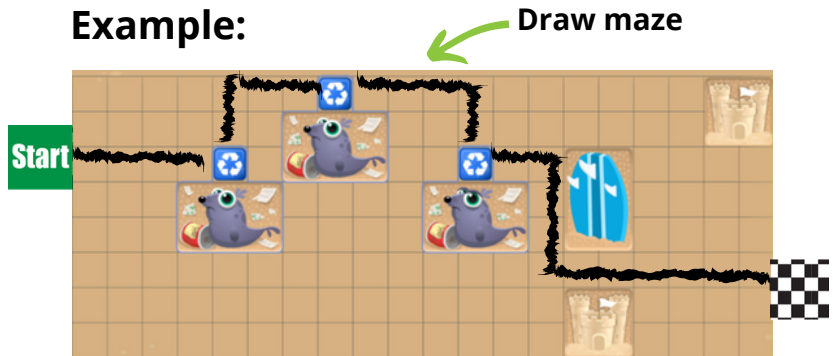
Beach Cleanup

Directions:

1. Draw a path from the start tile to the end tile that connects with all the blue recycle tiles.
2. Write the arrow commands in the command bins that would solve the maze!

Maze Rules:

- Must connect with all the pieces of trash.
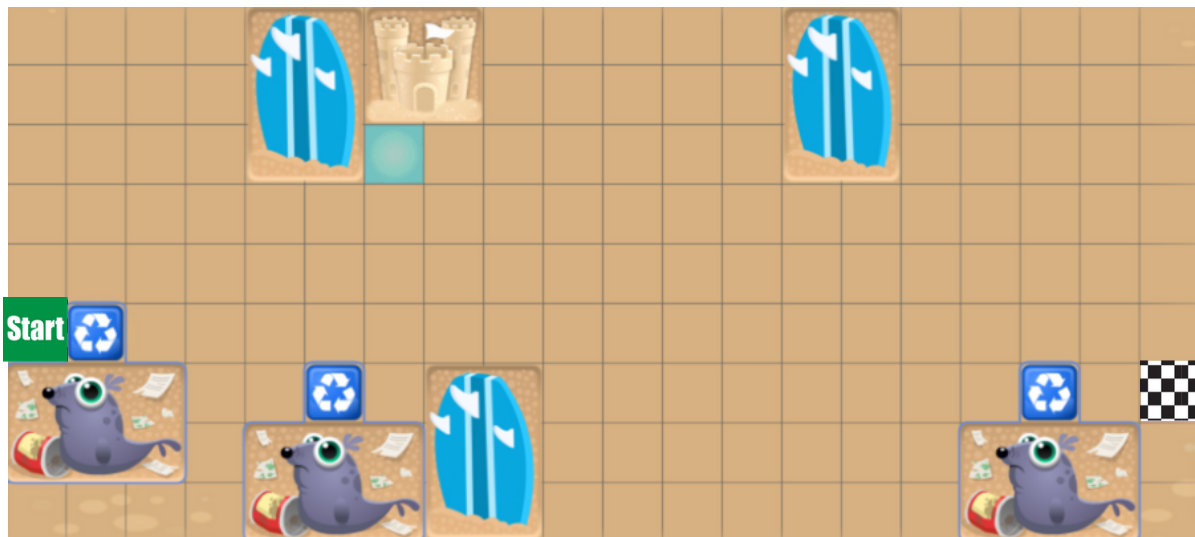- Can't cross over any obstacles (objects or sea creatures)

Example:

Write code

→ ↑ → ↓ → ↓ →

Now you try! Draw the path that connects the recycle tiles

Write code

☐ ☐ ☐ ☐ ☐ ☐ ☐

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Name: _____ **Date:** _____

Draw the path that connects the recycle tiles

Write code

Write code

4

Name: _____ **Date:** _____

Draw the path that connects the recycle tiles

Write code → ▢ ▢ ▢ ▢ ▢

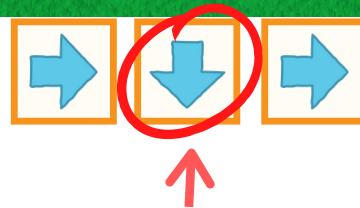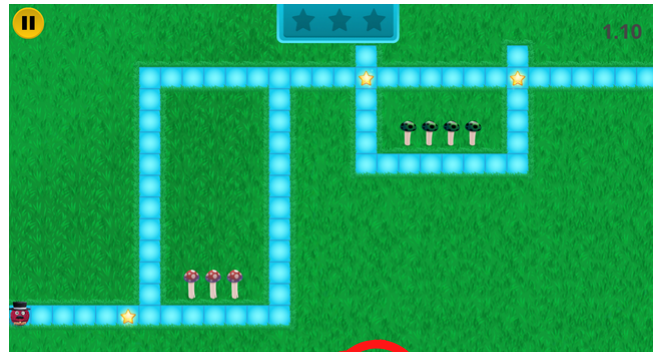**Write code** → ▢ ▢ ▢ ▢ ▢ ▢ ▢

Find the Bug!

Example:

Directions:

One or more of the commands in the code is wrong.

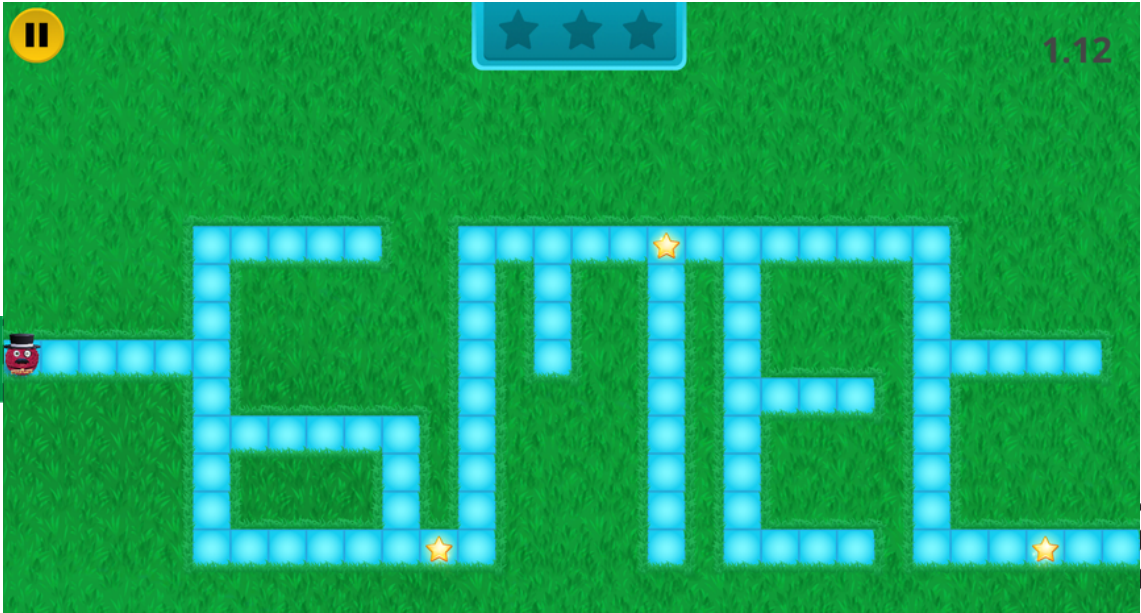Find the incorrect commands, circle them, and write the correct command below it.

Now You Try!

Which of these commands is wrong?

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Name: _____ **Date:** _____

Circle the command that is incorrect.

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Bug Hunting

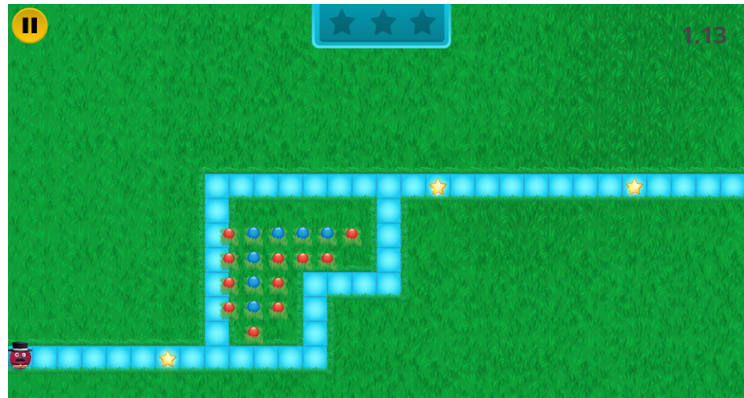**Name:** _____ **Date:** _____

Example:

Directions:

One of the Fuzzes has the correct code to solve the maze.

Circle the fuzz with the correct code! Put an "**X**" through any incorrect command.
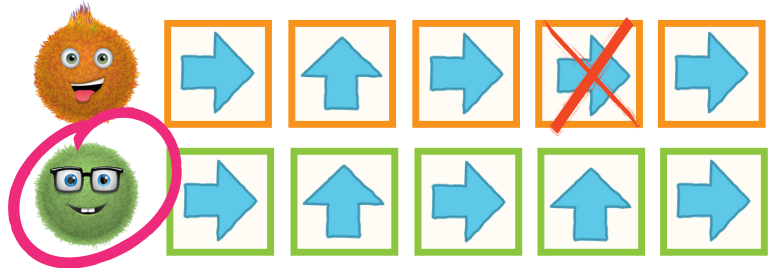
Now You Try!

Which fuzz has the correct code?

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Name: _____ **Date:** _____

Circle the fuzz with the correct code. Put an "X" through any incorrect commands.
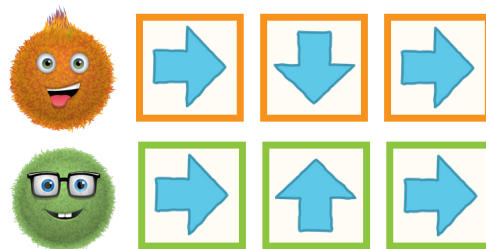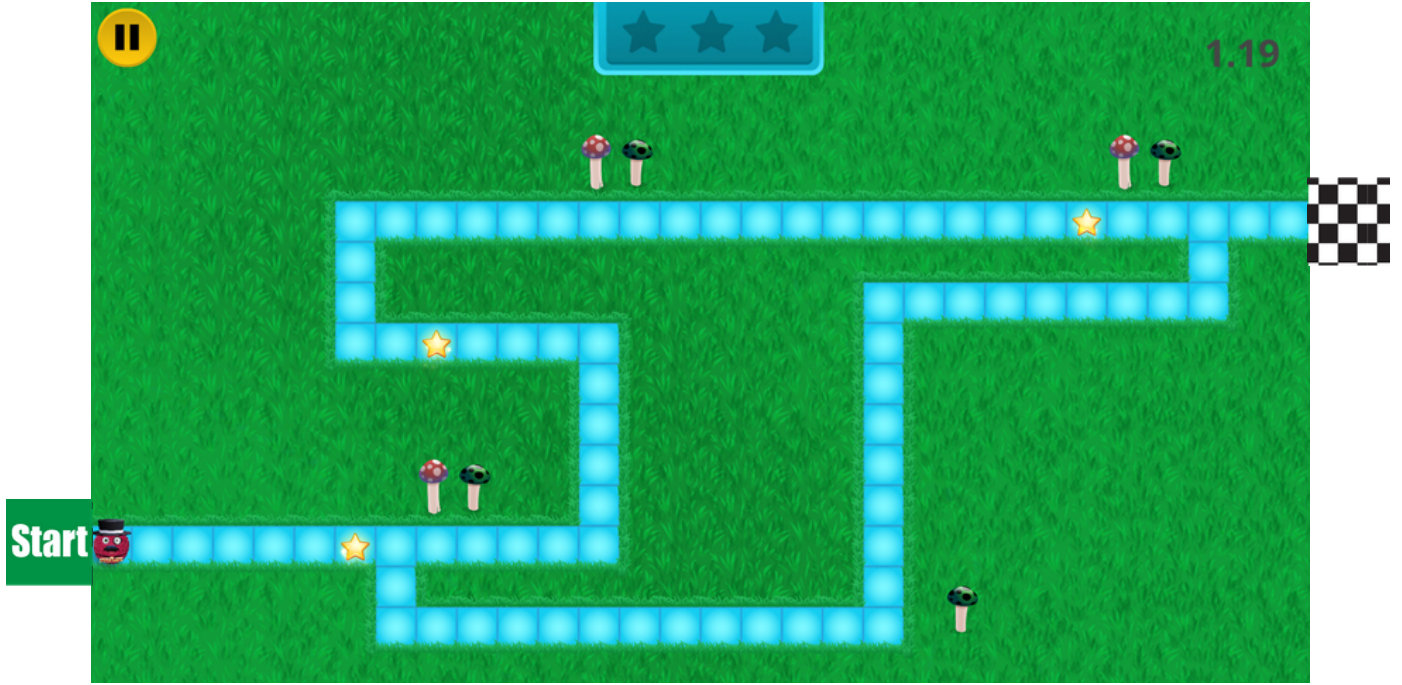

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Name: _____ **Date:** _____

Circle the fuzz with the correct code. Put an "X" through any incorrect commands.

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What if...

Directions:

Complete each conditional statement.

Draw a picture to go along with it!

Example:

If you water the garden, **then**...
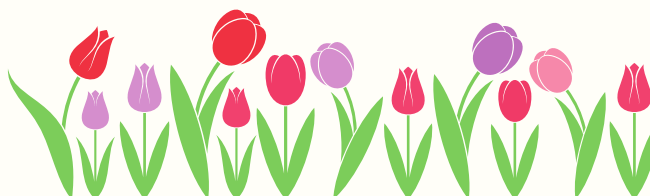
The flowers will grow!

Now You Try!

IF it is cold outside, **THEN...**

_____

What might happen? Finish the sentence

Name: _____ **Date:** _____

IF it is a holiday **THEN...**

_____

IF it is the weekend, **THEN...**

_____

Name: _____ **Date:** _____

Make up a couple of your own!

IF _____**, THEN...**

_____

IF _____**, THEN...**

_____

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Creative Conditions

Directions:

Pick an image and use it as inspiration to write a short story. What would happen next? It's up to you!

if... (choose an image)

then... (what happens next? Write your story in the space below)

_____

_____

_____

_____

_____

_____

_____

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Name: _____ **Date:** _____

Rules Apply

Directions:

1. (Circle) the **rules**

2. Put a [rectangle] around the **conditions**

Helpful Tips:

A **rule** is something that tells your program the direction to run.

A **condition** is an exception to a rule. It tells your program to change directions.

Now You Try!

Circle the rules. Rectangle the conditions:

Name: _____ **Date:** _____
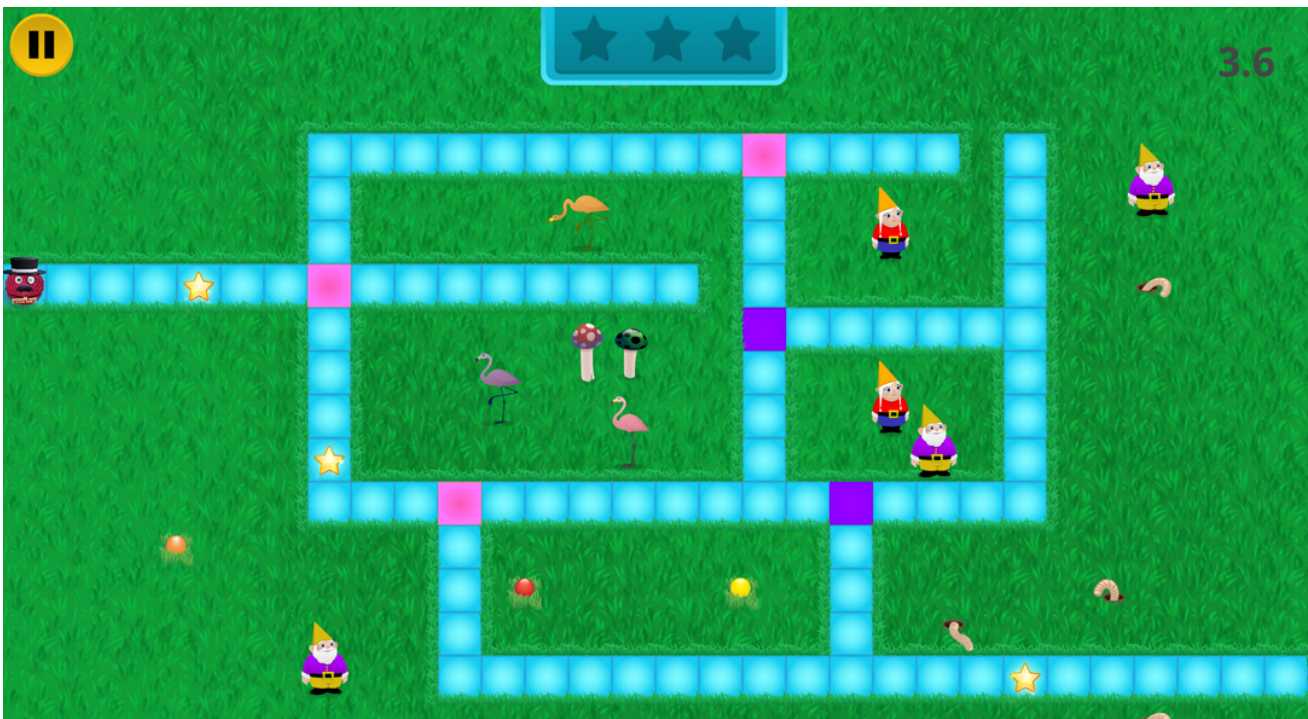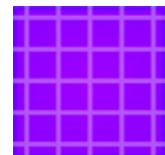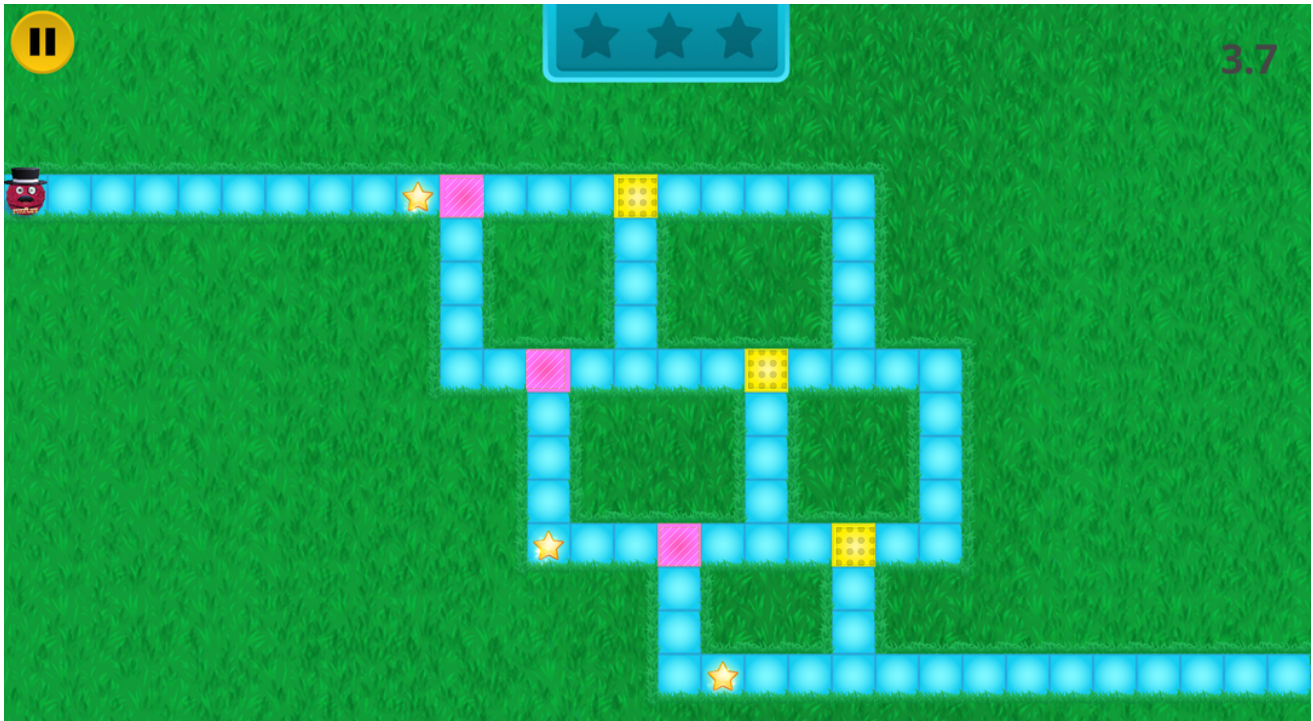
Circle the rules. Rectangle the conditions:

How do you decide which ones are **conditions** or **rules**? Explain:

_____

_____

_____

_____

_____

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How Many Loops?

Example:

Directions:

Help the fuzz reach the star!

Write the number of times the fuzz needs to loop (repeat) the two commands.
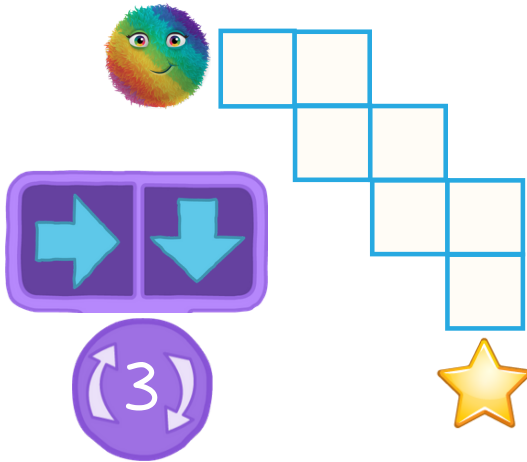
Now You Try!
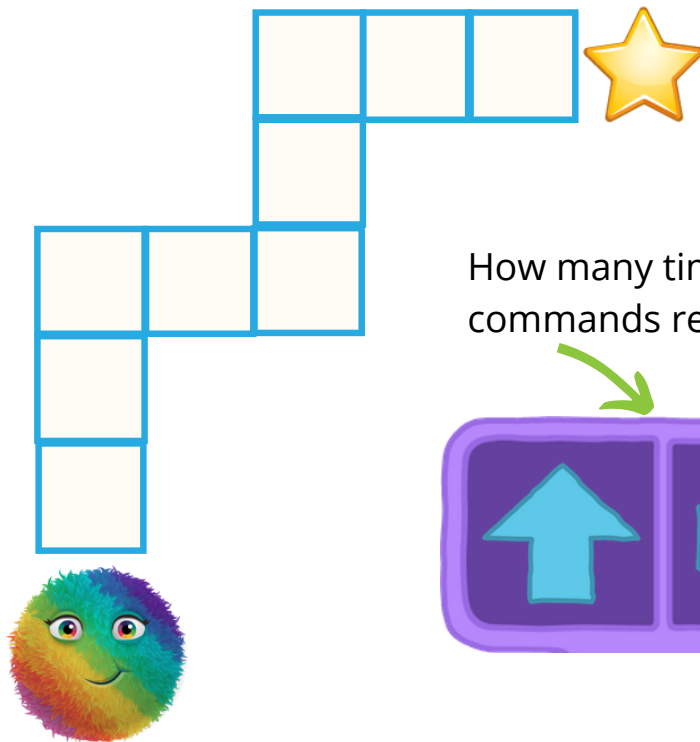
How many times are these commands repeated?
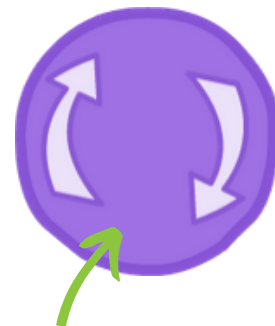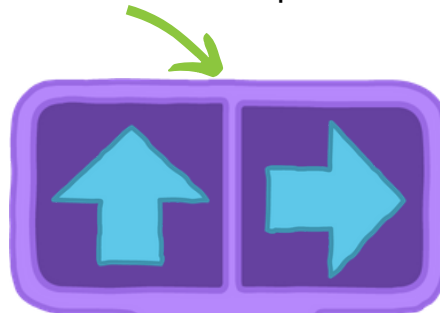
Write the number of loops here

Name: _____ **Date:** _____

Name: _____ **Date:** _____
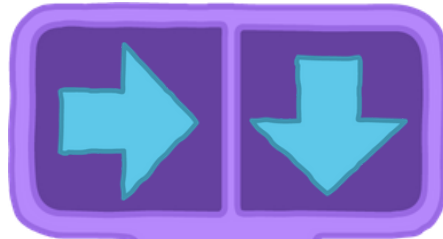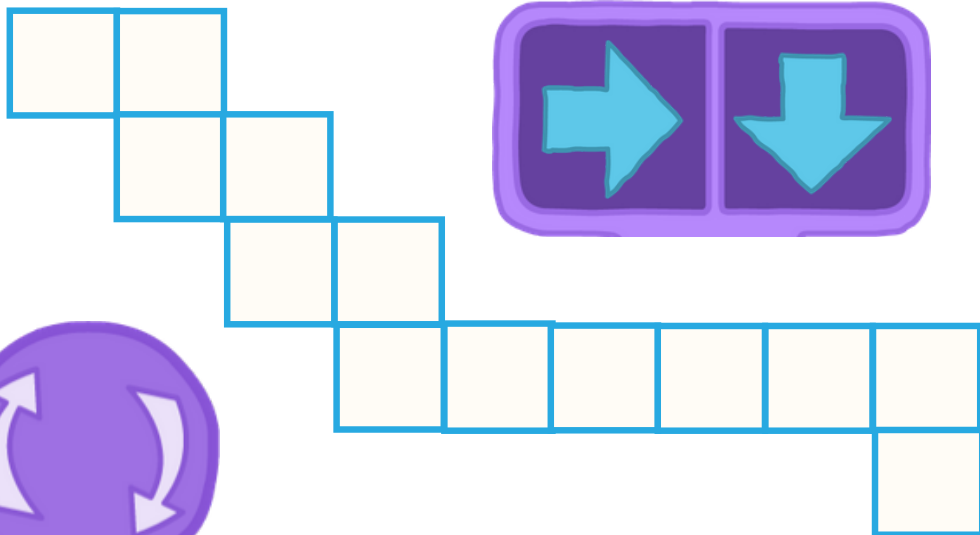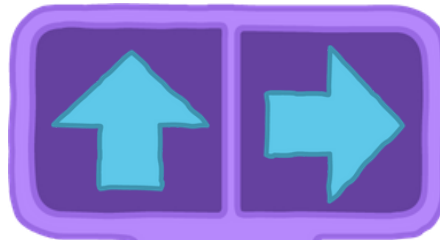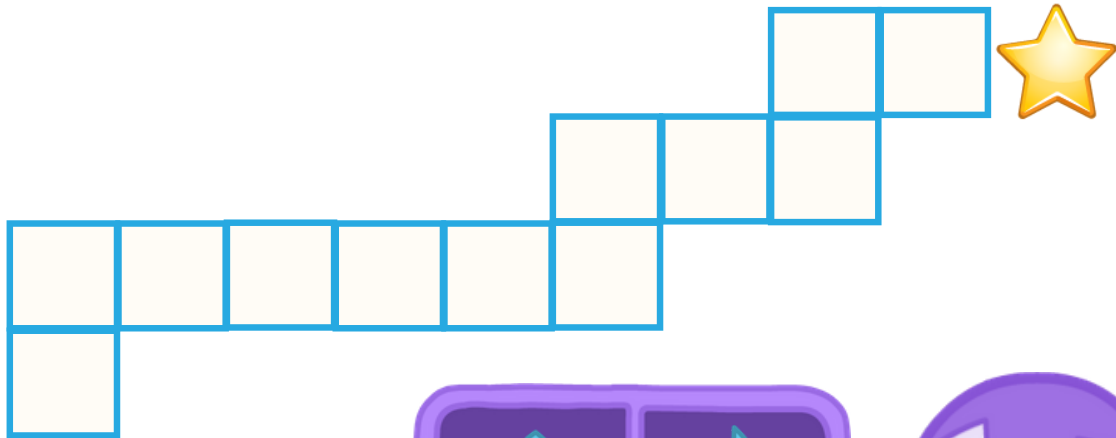
's Fuzzy Flex Program

_____
Name

Instructions: In the boxes below, draw or write out the 3 exercises in your routine:

In each loop, write the number of times the move should be repeated.

Share your program with a friend or family member to test it out!

Make changes to the loops as needed.

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Name: _____ **Date:** _____

Familiar Functions

Example: criss-cross applesauce

Directions:

We've turned these daily routines into mental functions! Break down the steps for each task below.

Start
↓
Sit on Floor
↓
Cross Legs
↓
Hands in Lap
↓
Silent Voice
↓
Eyes Forward

✂ -
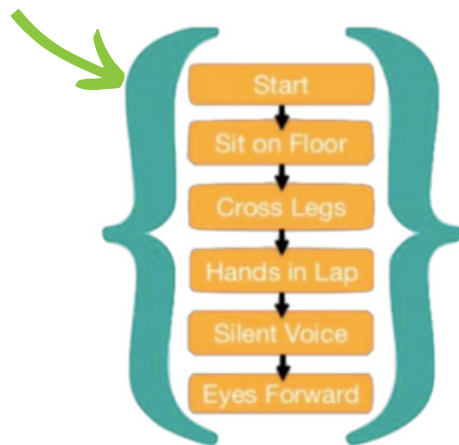
cook breakfast
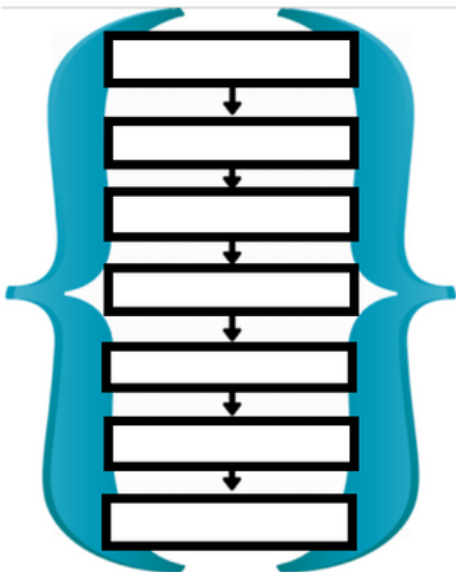
wash hands

✂ -
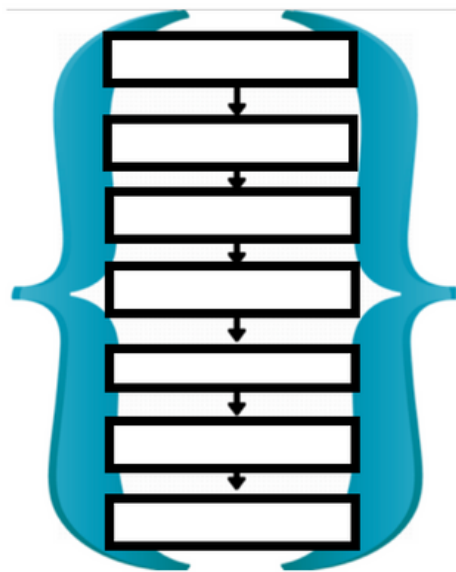
play fetch
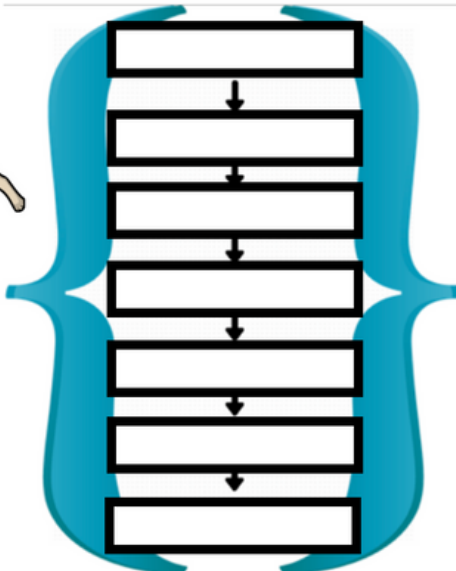
tie shoes
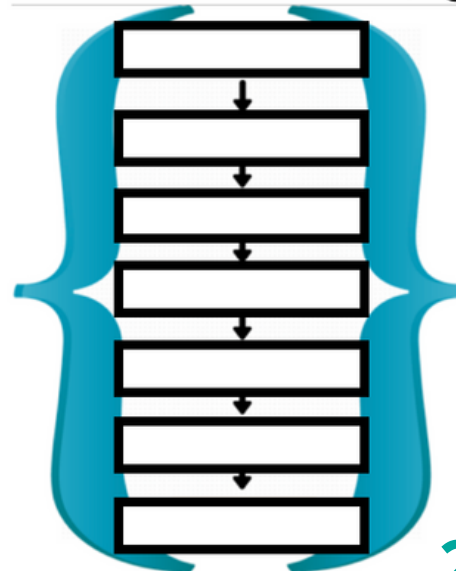
Name: _____ **Date:** _____

Fashionable Functions

Instructions: Write the sequence of steps you follow when you get dressed on the lines below.

function getDressed( ) {

1 --

2 --

3 --

4 --

5 --

}

If your function has more than 5 steps, add more lines!
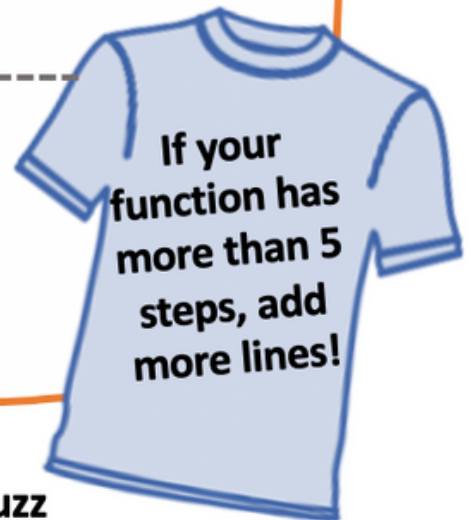
When you are done, think about the steps a **fuzz** takes to getDressed(). Would they be the same as yours?

Name: _____ **Date:** _____

Asteroid Sort

Directions:

1. Cut out the asteroids

2. Look at their values

3. Sort the asteroids based on the values into the correct variable containers!

R	P	4	2	B
Y	1	P	5	R
3	B	1	G	4

Strings:

Integers:

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Name: _____ Date: _____

Math with Integers

Directions:

Use integer values to calculate the total goals and goal differential for each soccer game.

Example:

Game 1

HOME	AWAY
3	0

var **homeGoals** = **3**
var **awayGoals** = **0**

var **sumGoals** = **homeGoals** + **awayGoals**;
  // **sumGoals** will be **3**

var **diffGoals** = **homeGoals** - **awayGoals**;
  // **diffGoals** will be **3**

Now You Try!

Game 2

HOME	AWAY
1	2

var **homeGoals** = ____
var **awayGoals** = ____

var **sumGoals** = **homeGoals** + **awayGoals**;
  // **sumGoals** will be _____

var **diffGoals** = **awayGoals** - **homeGoals**;
  // **diffGoals** will be _____

Game 3

HOME	AWAY
4	4

var **homeGoals** = ____
var **awayGoals** = ____

var **sumGoals** = **homeGoals** + **awayGoals**;
  // **sumGoals** will be _____

var **diffGoals** = **awayGoals** - **homeGoals**;
  // **diffGoals** will be _____

Sum: addition
Diff: subtraction

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Design your Hero

Name: _____

Date: _____

A **hero** can be a parent, sibling, grandparent, friend, teacher, coach, or anyone! What do you think makes someone a hero?

_____

Meet Kara!

This is Kara. She is someone's hero! Her unique properties are defined in the JavaScript code below.


```
kara = new Hero () ;

kara.hair = black
kara.eyes = brown
kara.job = doctor
kara.personality1 = kind
kara.personality2 = funny
kara.personality3 = brave
```

Directions:

Choose someone in your life you is a hero to you. Draw a picture of them and define their properties in the JavaScript template below.

```
_____ = new Hero () ;

_____.hair = _____
_____.eyes = _____
_____.job = _____
_____.personality1 = _____
_____.personality2 = _____
_____.personality3 = _____
```
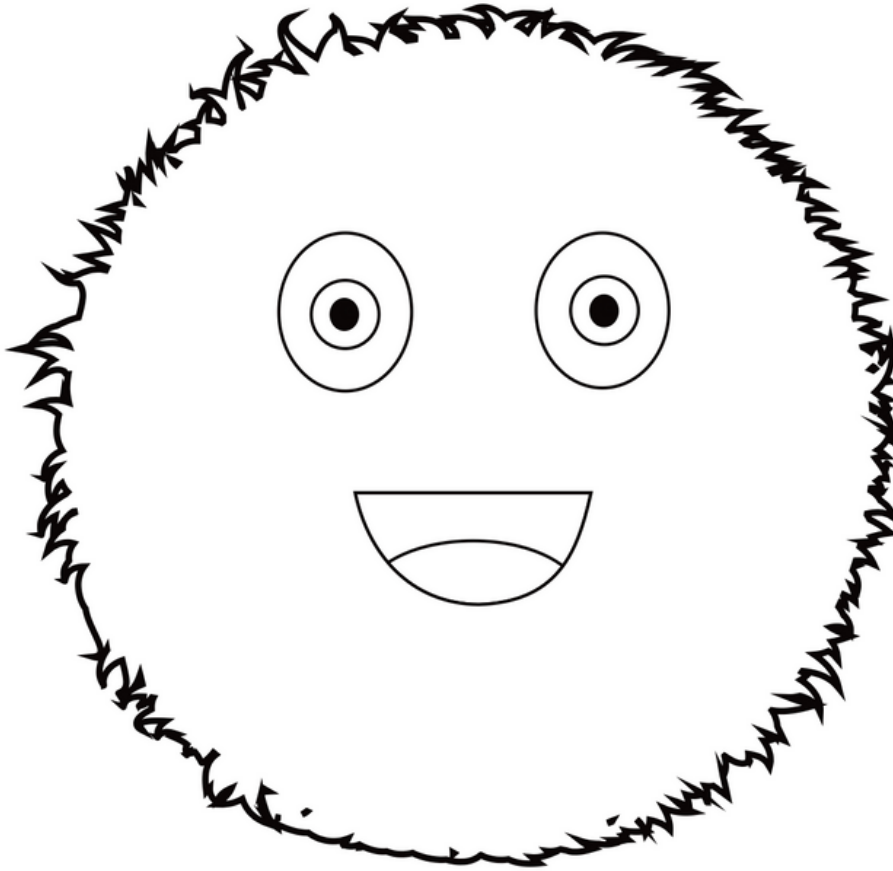
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Name: _____

Date: _____

Fuzz Builder with JavaScript

Directions:

Build a fuzz! Give it color and at least 3 accessories. Get creative! Then, define it's properties in the JavaScript template below.


```
_____ = new Fuzz () ;

        fuzz.body = _____
        fuzz.eyes = _____
        fuzz.mouth = _____
        fuzz.accessory1 = _____
        fuzz.accessory2 = _____
        fuzz.accessory3 = _____
```

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