UNPLUGGED WORKSHEETS

Kodable

This workbook belongs to: _____

NAME

CONTENTS

RECOMMENDED: 4TH-5TH GRADE

Name: _____ Date: _____

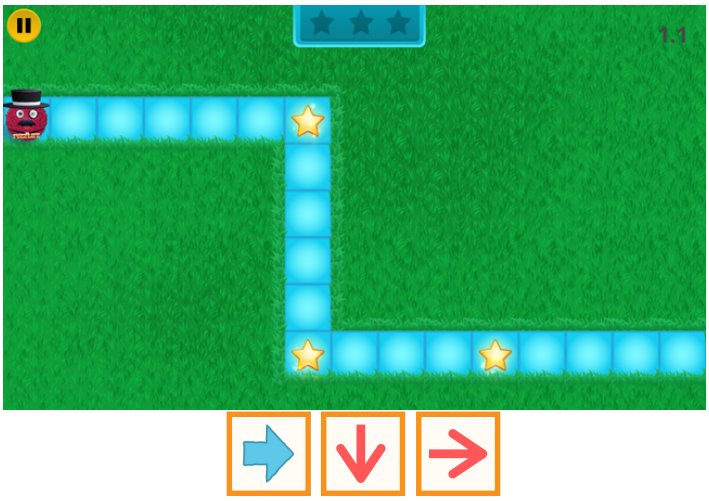
Sequence Solver

Directions:

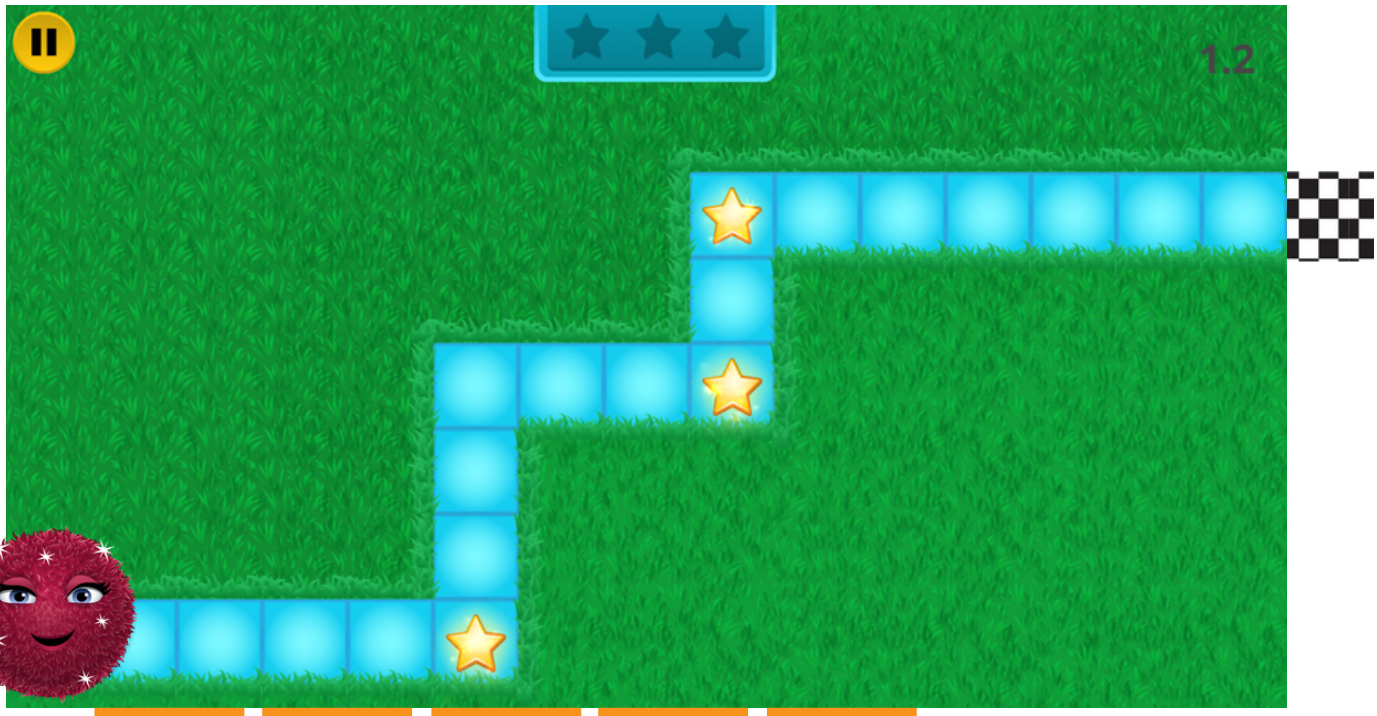
Help the Fuzz get through the maze!

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

Example:



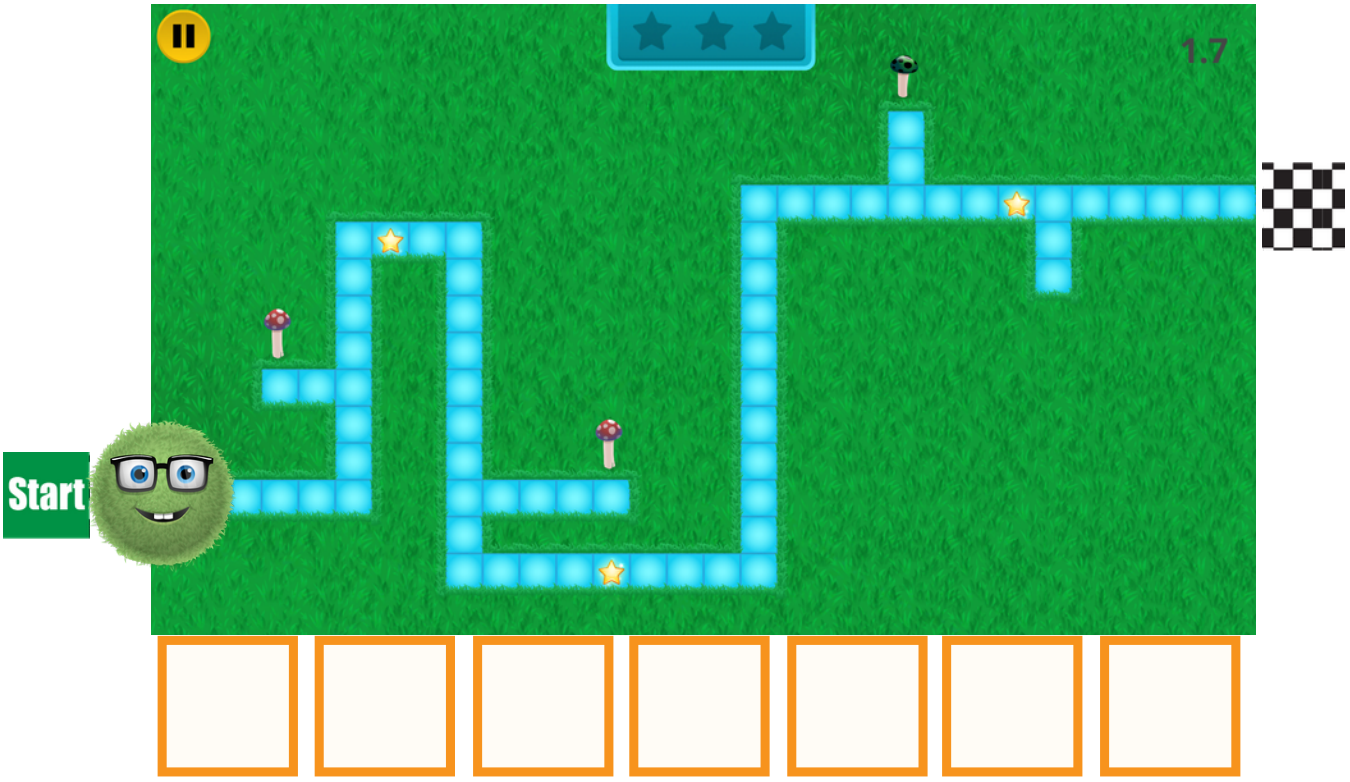
Now you try!

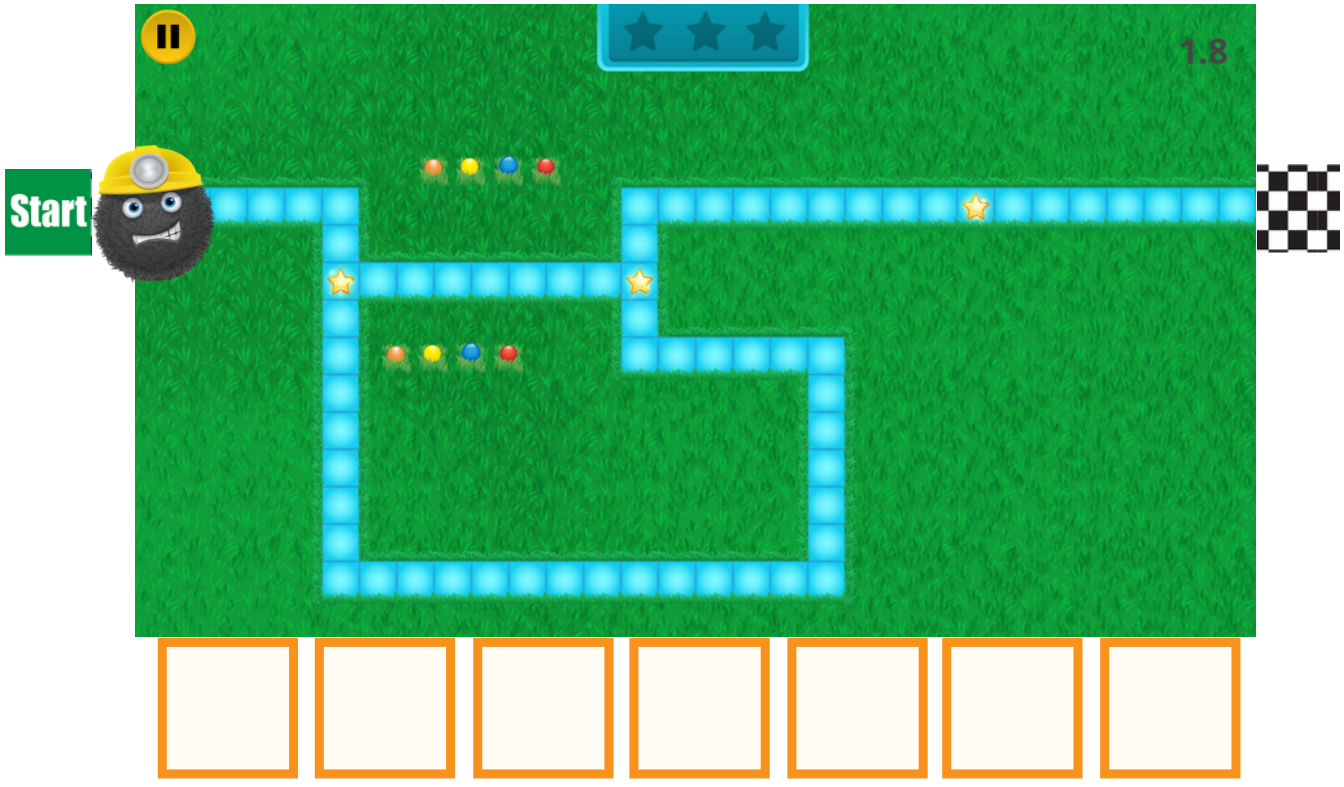


What goes here?

Name: _____ **Date:** _____

Draw the arrows to show the fuzz how to get through the maze.





Name: _____ Date: _____

Beach Cleanup

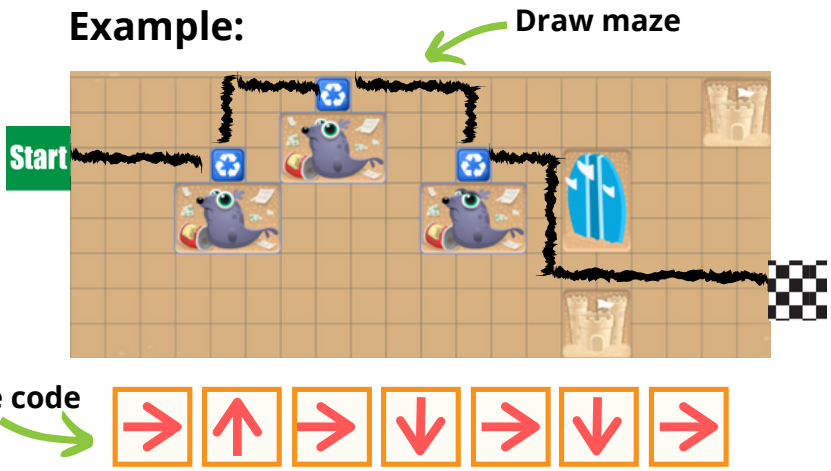
Directions:

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!

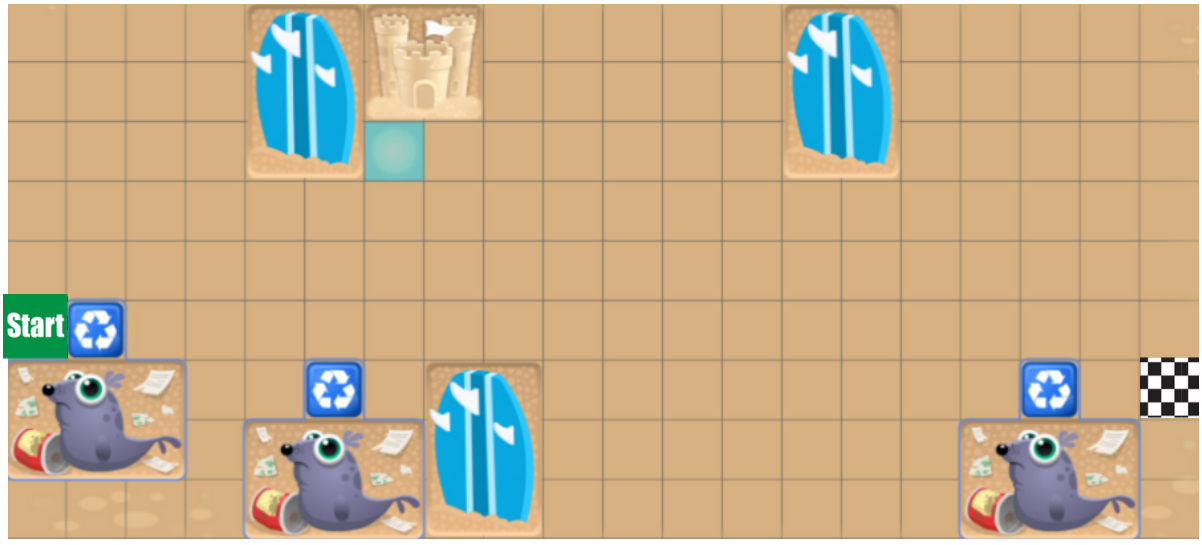
Maze Rules:

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

Example:



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



Write code

Name: _____ **Date:** _____

Draw the path that connects the recycle tiles

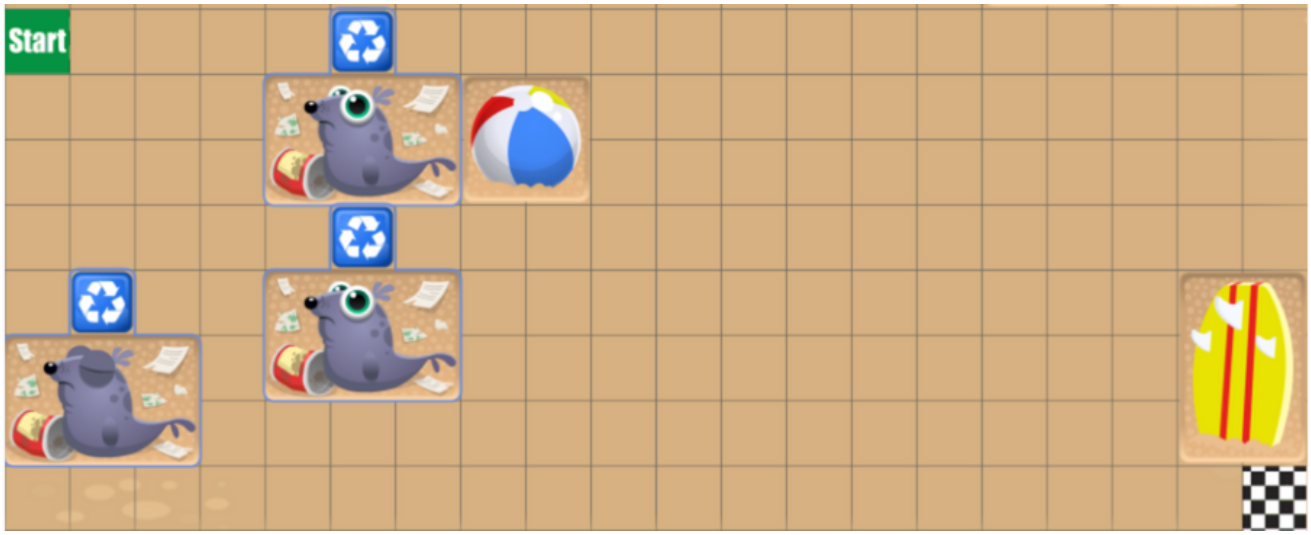
Write code

Write code

Name: _____ **Date:** _____

Draw the path that connects the recycle tiles

Write code



Write code

Name: _____ Date: _____

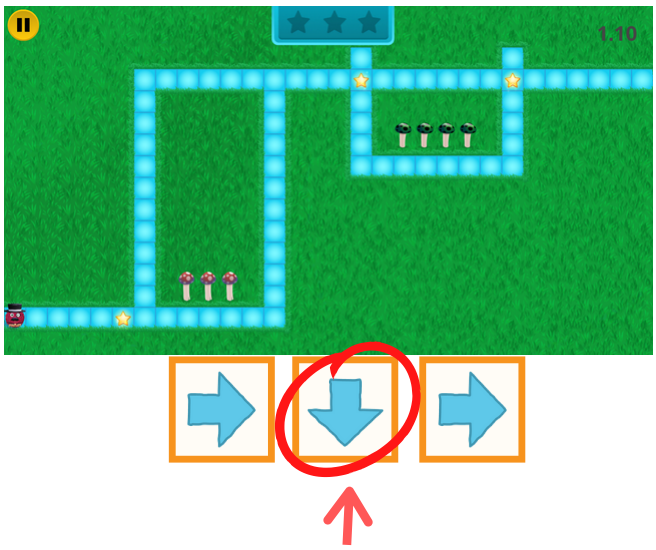
Find the Bug!

Directions:

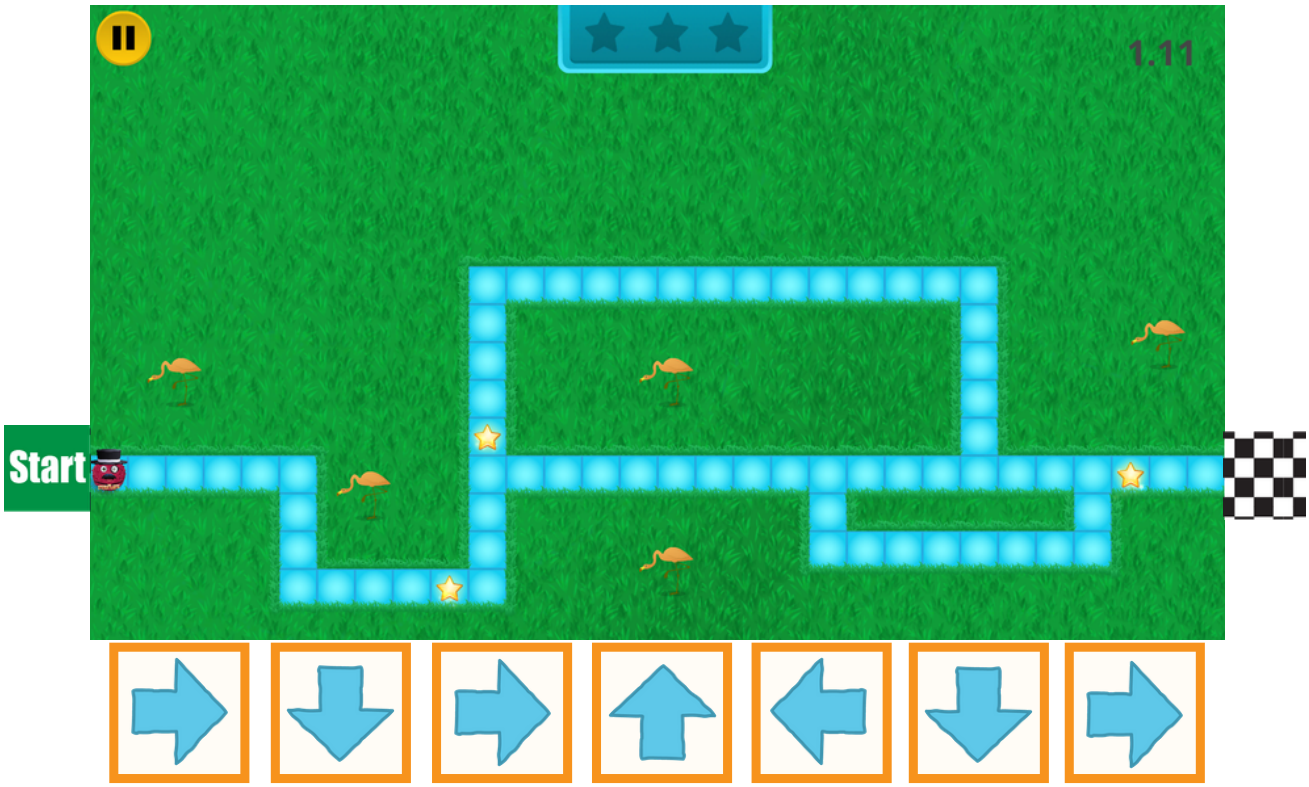
One or more of the commands in the code is wrong.

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

Example:



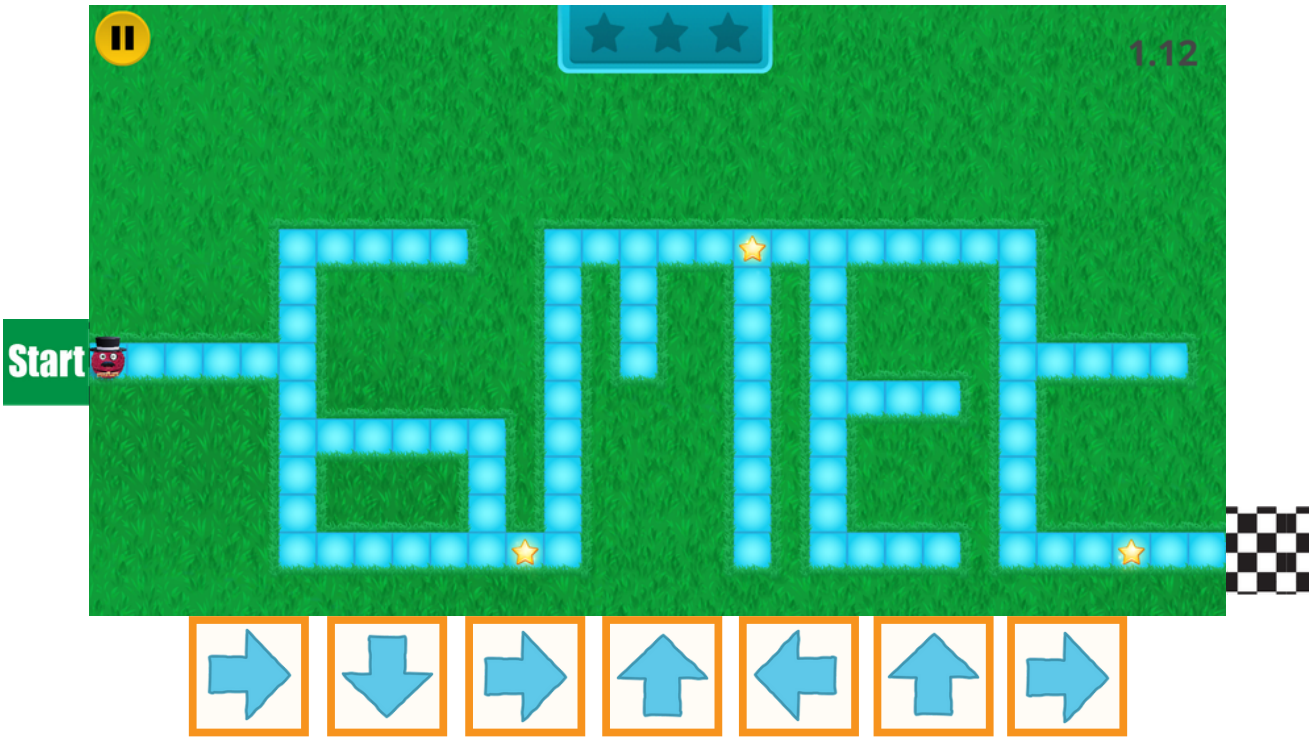
Now You Try!

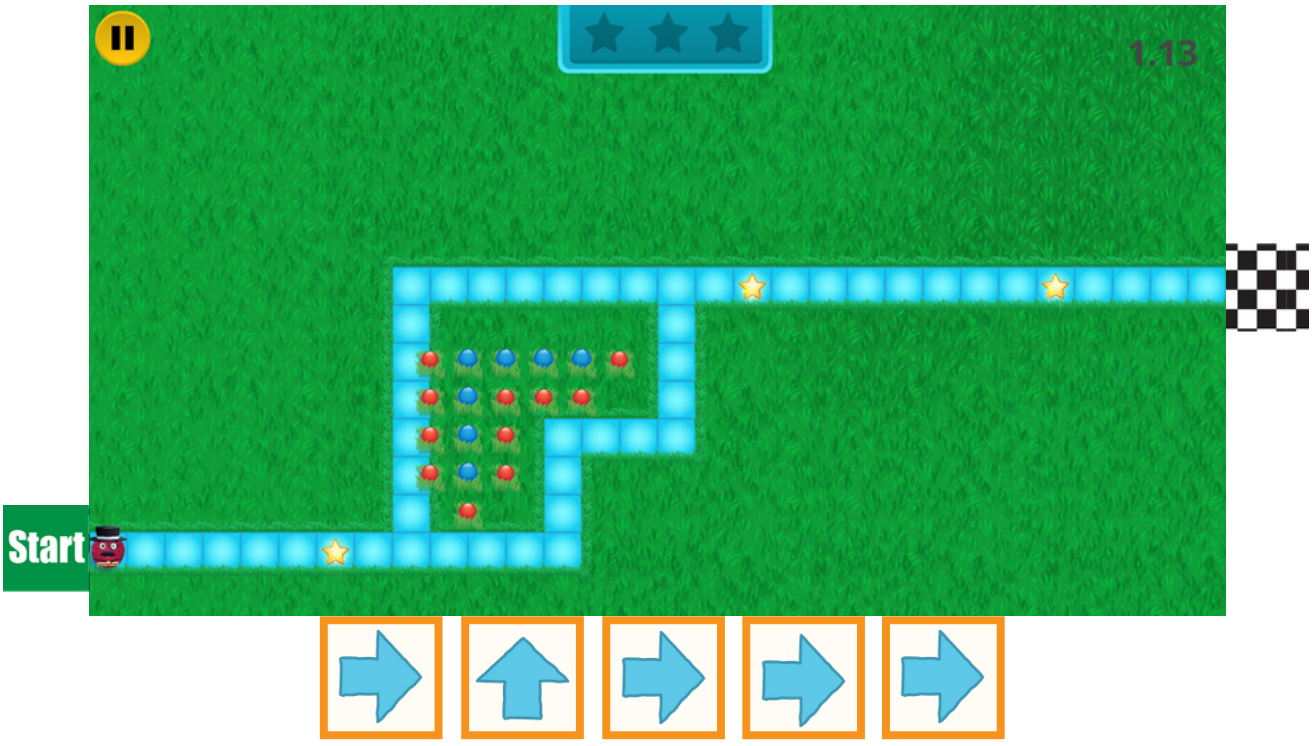


Which of these commands is wrong?

Name: _____ **Date:** _____

Circle the command that is incorrect.

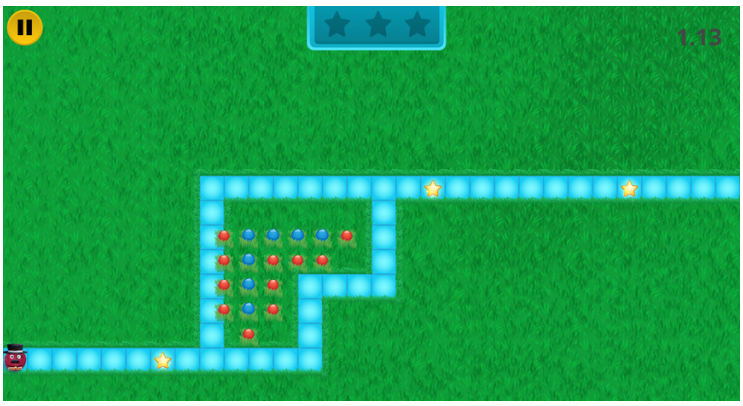


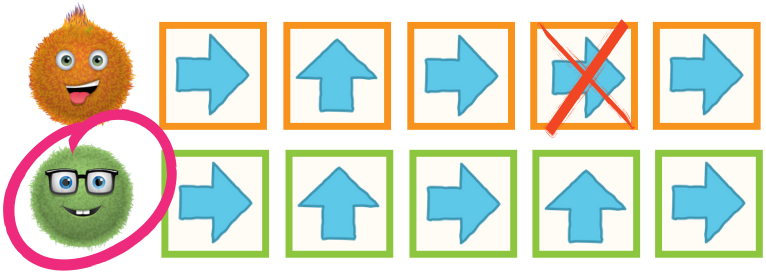


Name: _____ Date: _____

Bug Hunting

Example:





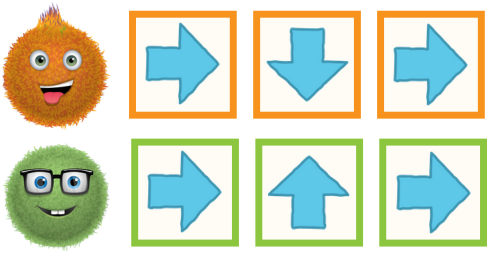
Directions:

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

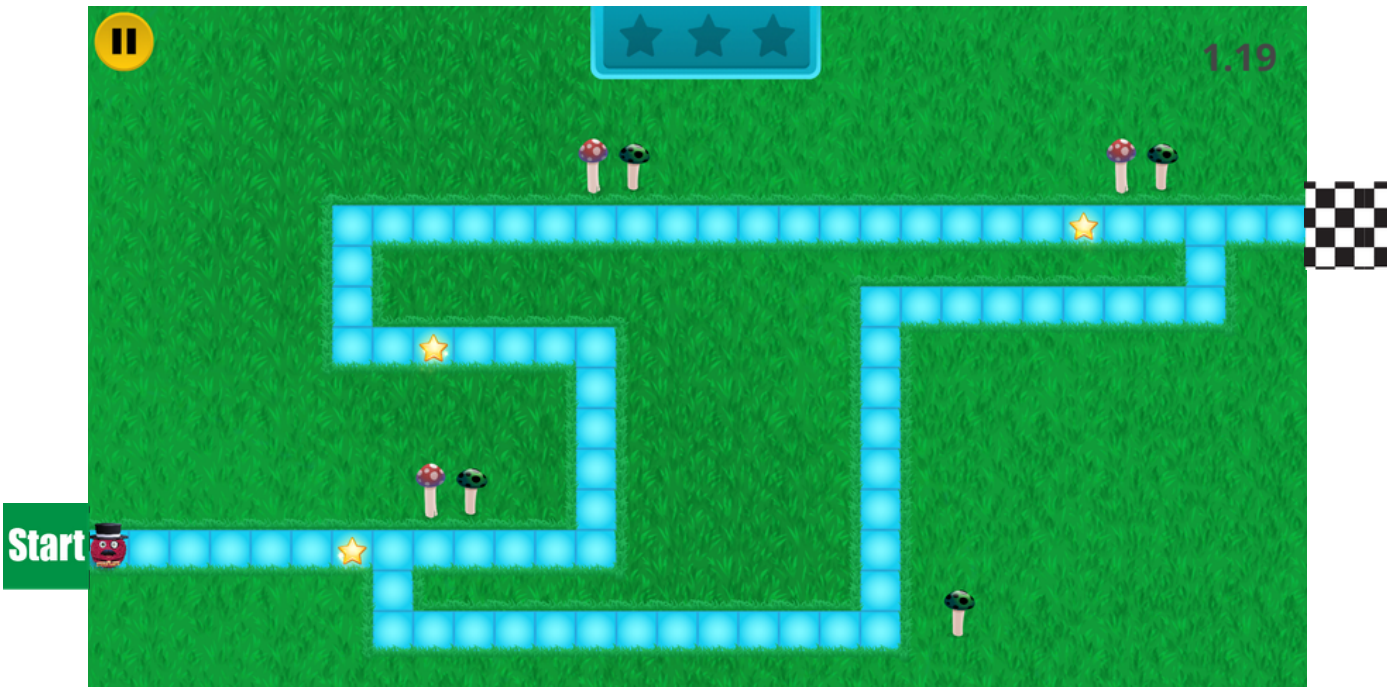
Circle the fuzz with the correct code! Put an "**X**" through any incorrect command.

Now You Try!

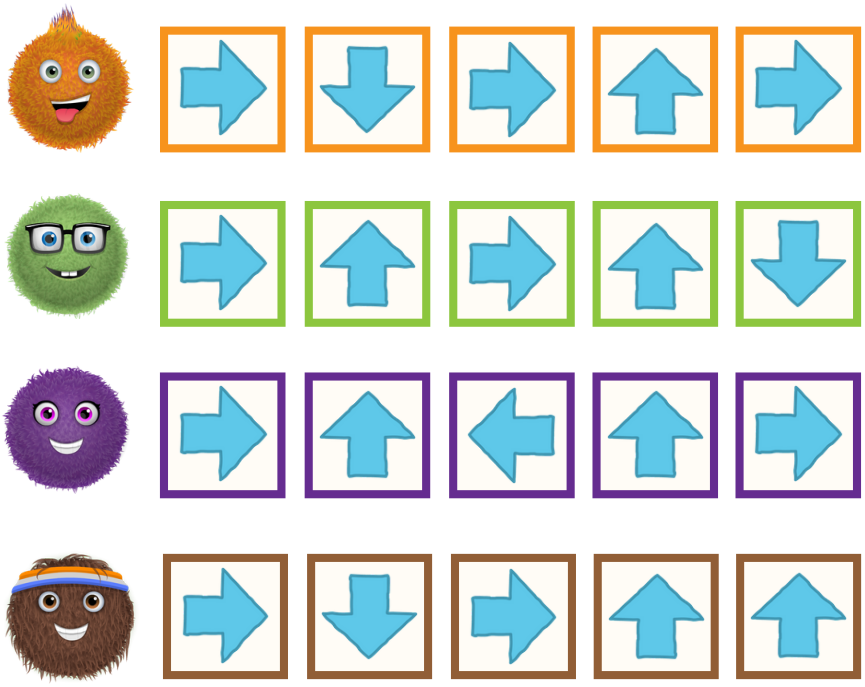
Which fuzz has the correct code?



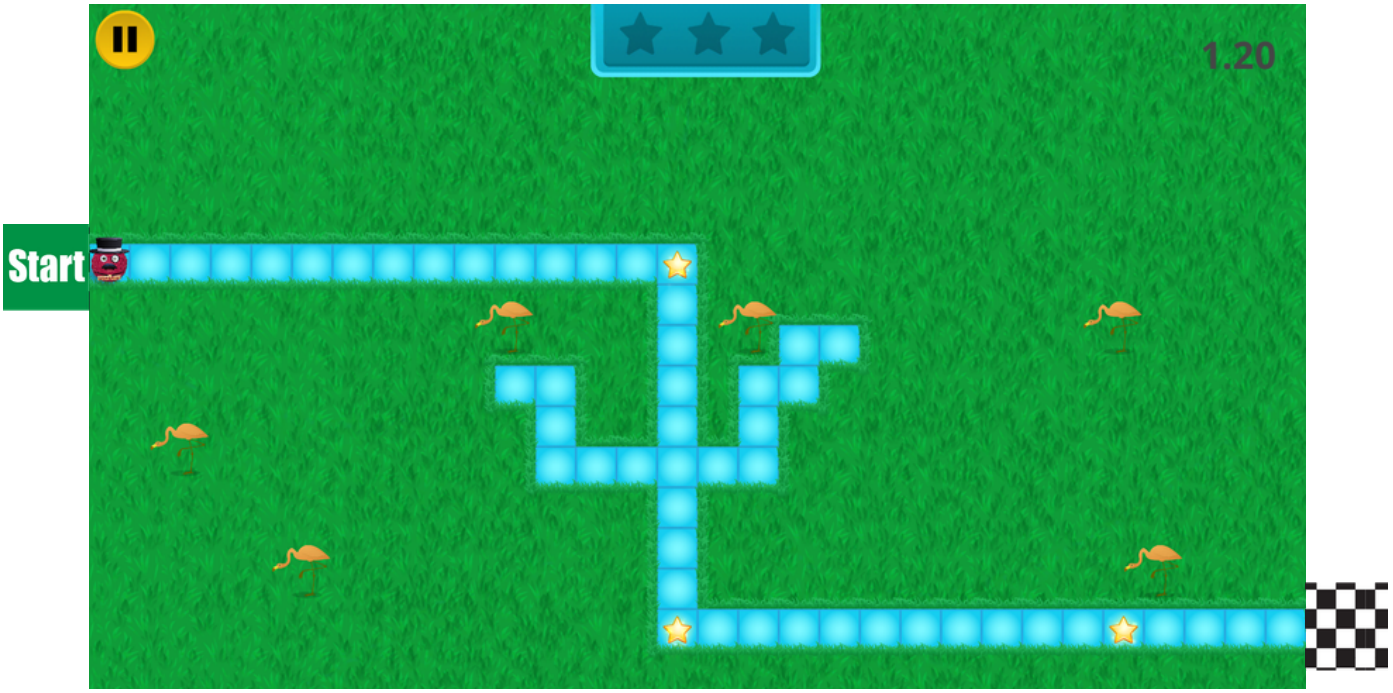
Name: _____ **Date:** _____



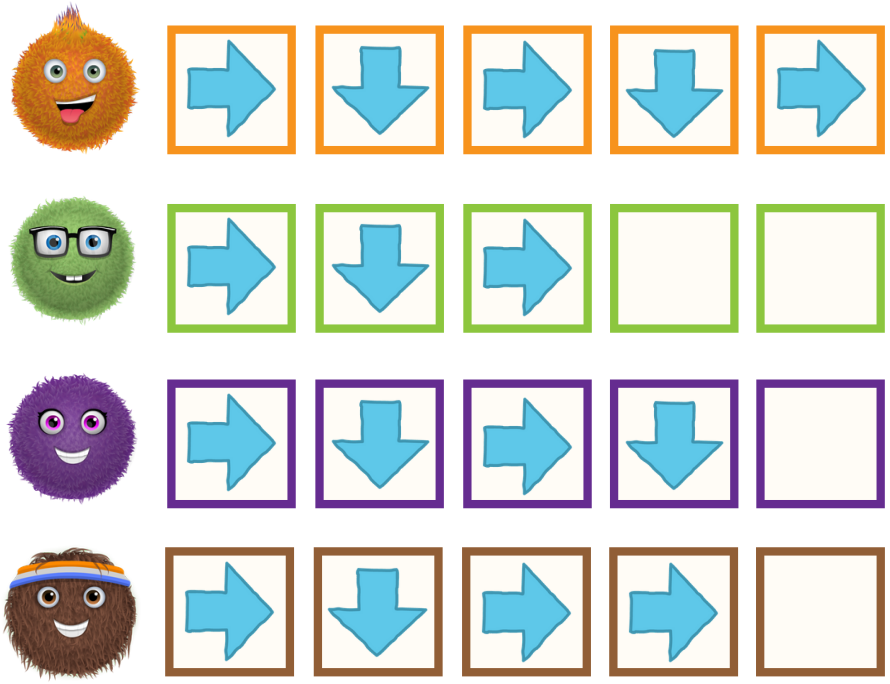
Circle the fuzz with the correct code. Put an "X" through any incorrect commands.



Name: _____ **Date:** _____



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



Name: _____ Date: _____

What if...

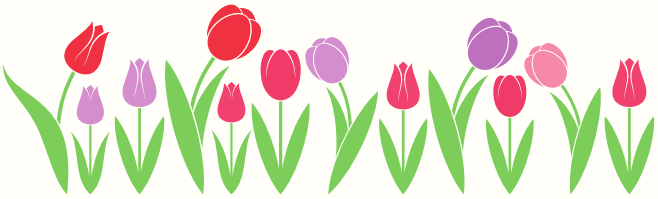
Directions:

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...**

_____

Name: _____ Date: _____

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)

Name: _____ Date: _____

Rules Apply

Directions:

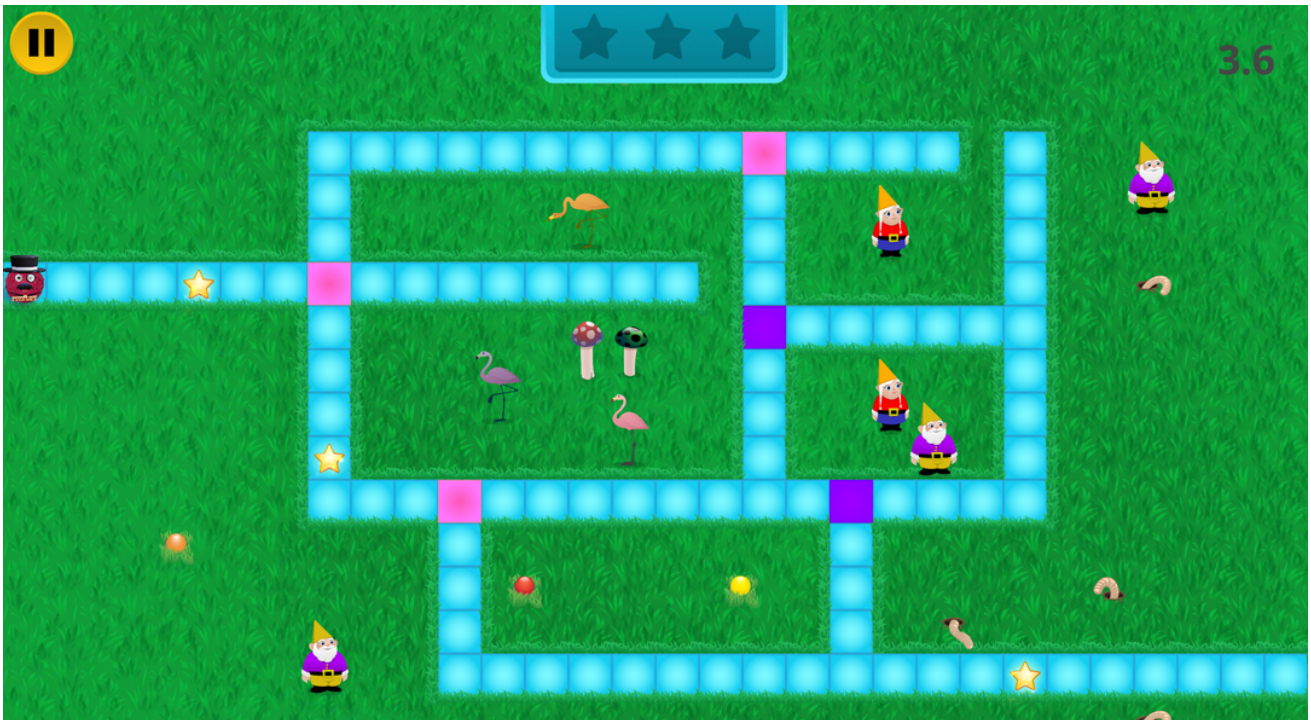
1. Circle the **rules**
2. Put a rectangle around the **conditions**

Helpful Tips:

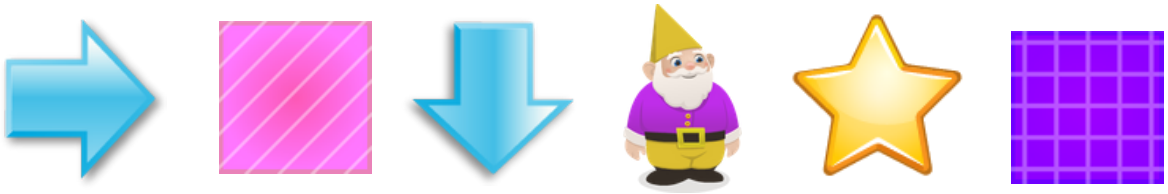
A **rule** is something that tells your program the direction to run.

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

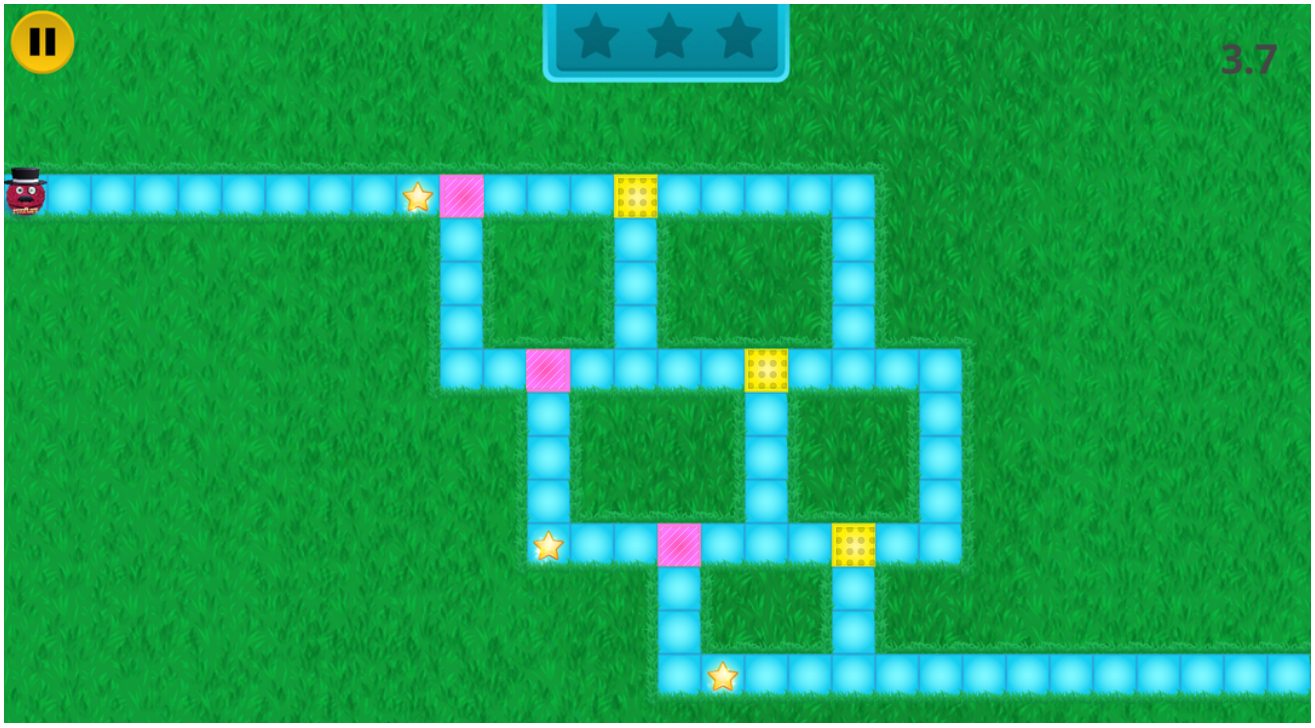
Now You Try!



Circle the rules. Rectangle the conditions:



Name: _____ **Date:** _____



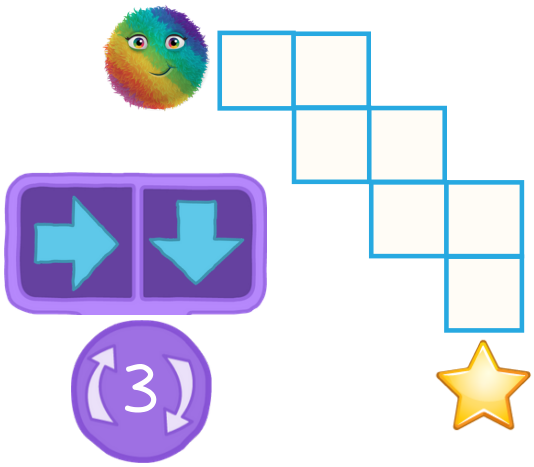
Circle the rules. Rectangle the conditions:

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

Name: _____ Date: _____

How Many Loops?

Example:

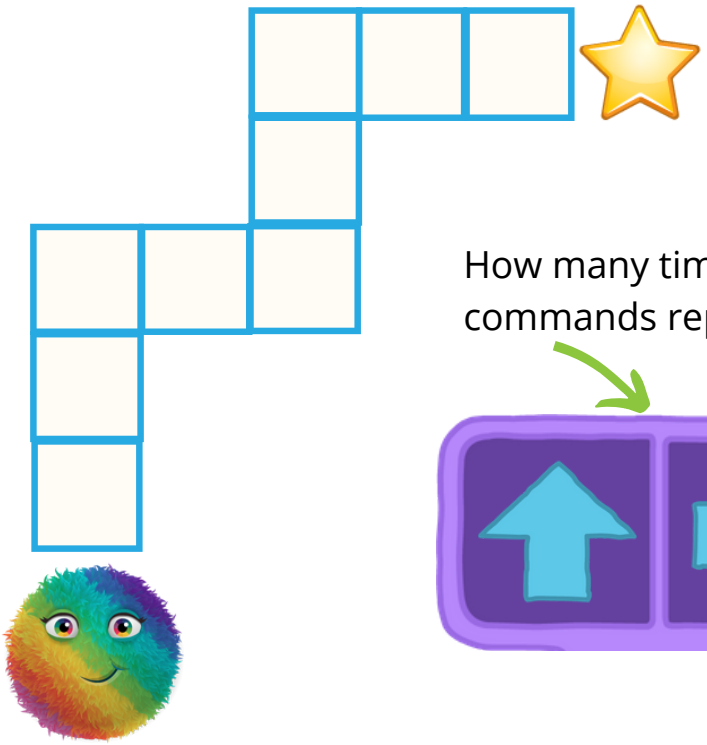


Directions:

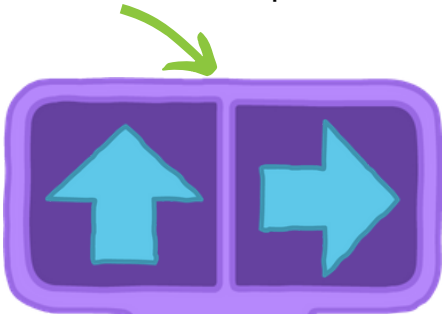
Help the fuzz reach the star!

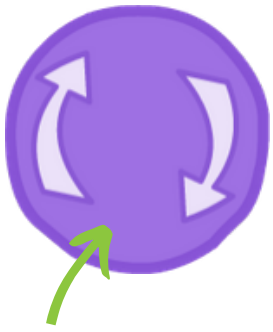
Write the number of times the fuzz needs to loop (repeat) the two commands.

Now You Try!



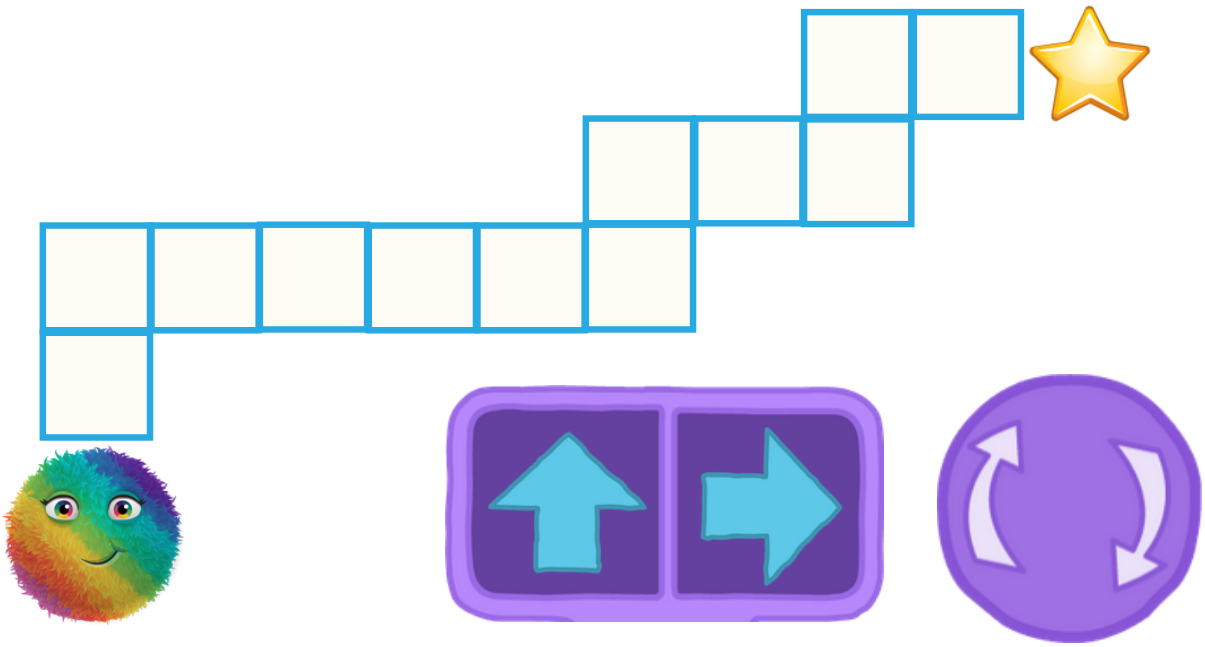
How many times are these commands repeated?

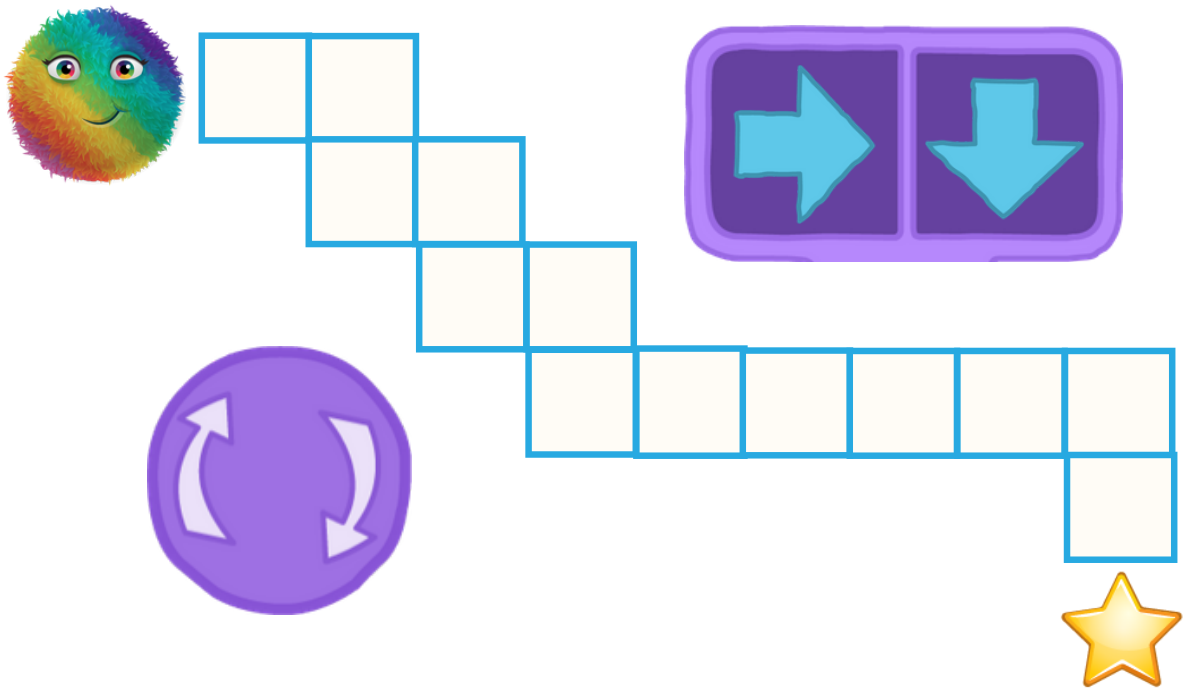




Write the number of loops here

Name: _____ **Date:** _____

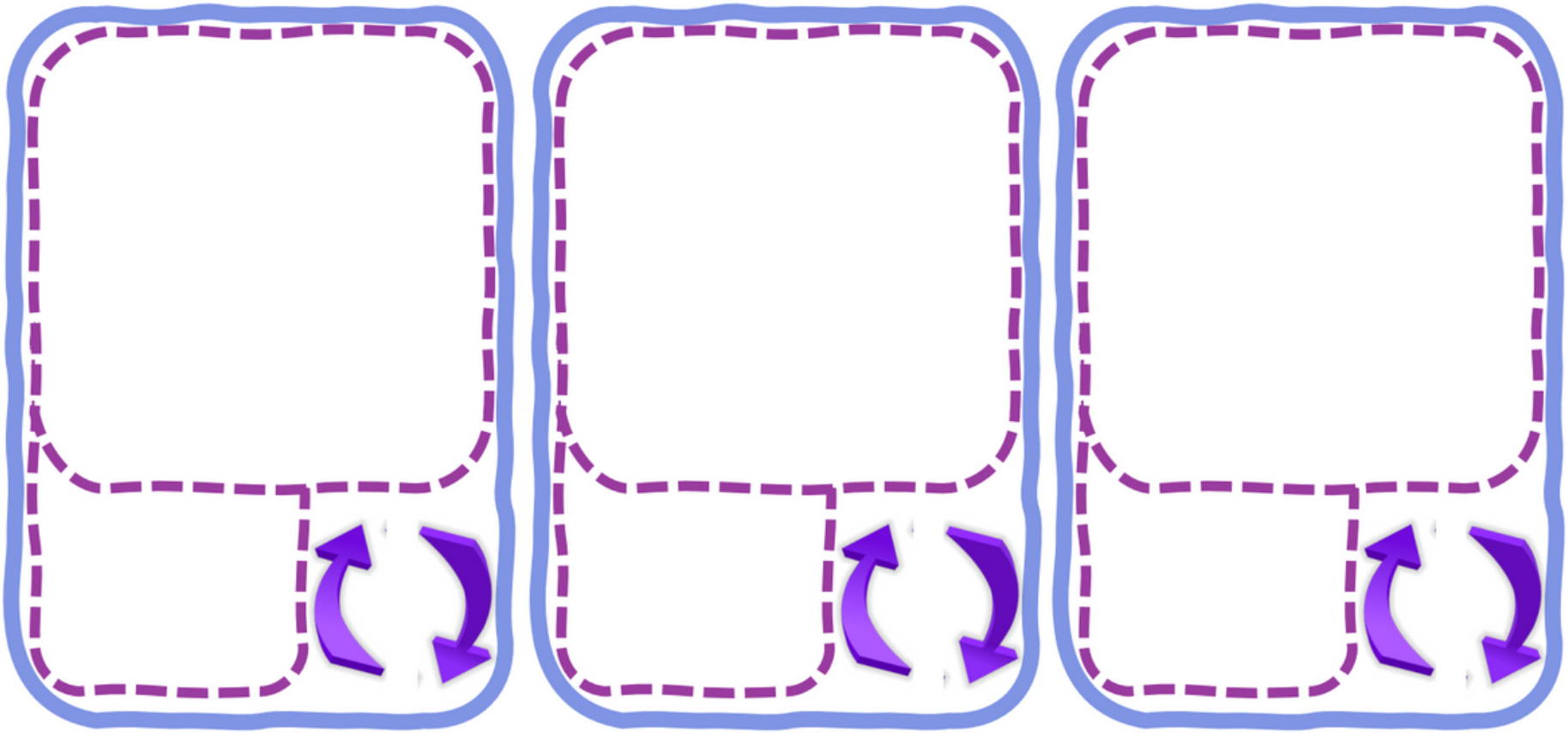




_____'s Fuzzy Flex Program

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.

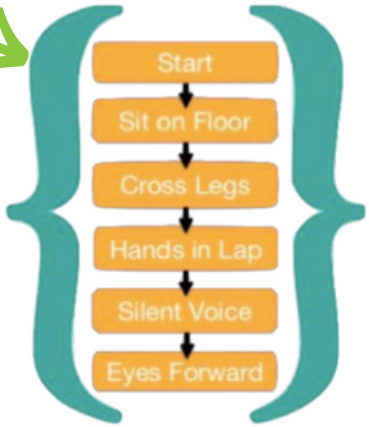
Kodable

Name: _____ Date: _____

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.

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 ----------

}
```

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!

Strings:

Integers:

Name: _____ Date: _____

Math with Integers

Directions:

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

Example:

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!

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

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

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

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

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

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

Sum: addition

Diff: subtraction

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 = ________
```

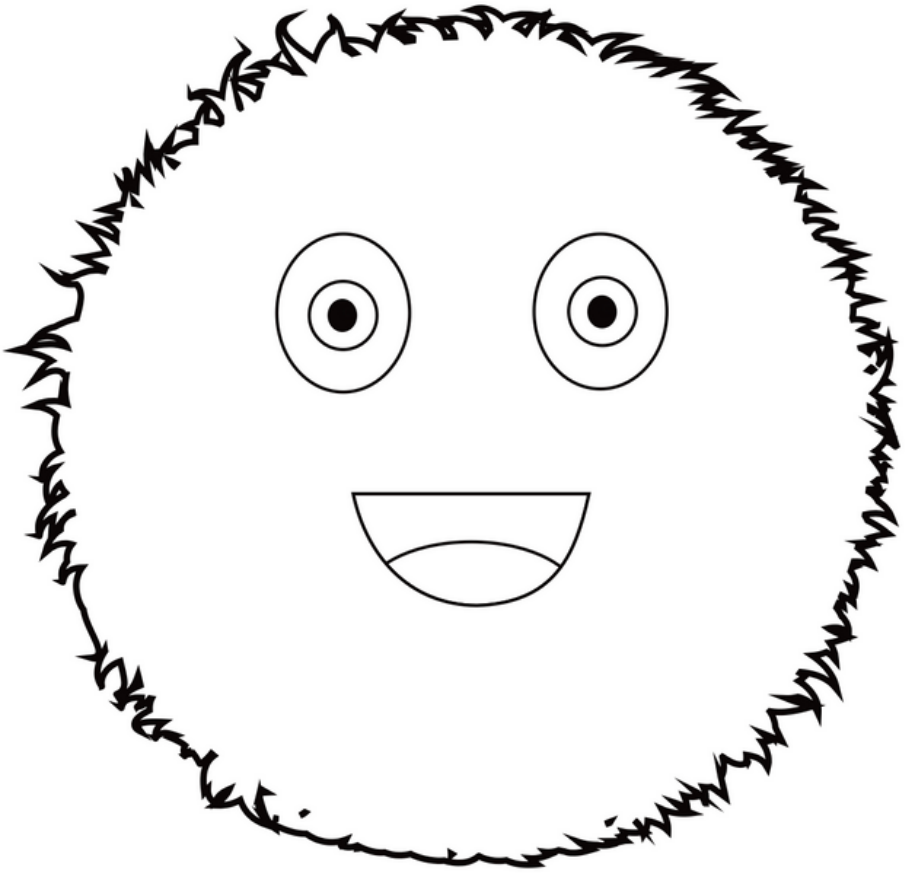
Name: _____

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 = __________________
```