# Lesson 1 | Warmup

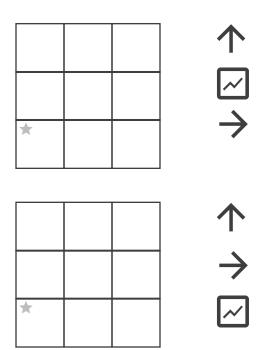
This is a Pixel Bots exercise. In Pixel Bots we will program bots to paint pictures using Code Elements.

#### **Code Elements**



## Problem 1

Pixel Bot Read Code: You are a pixel bot. Read the code and paint the picture.



# **{}**

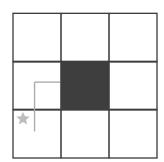
## Lesson 1 | Worksheet 1

This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

#### **Code Elements**

$$\downarrow$$
  $\leftarrow$   $\uparrow$   $\boxtimes$ 

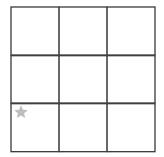
## Example



## **Problems**

You are a pixel bot. Read the code and paint the picture.

*	





## Lesson 1 | Worksheet 1 (cont'd)

*	

1 2 3 4	<ul><li>→</li><li>←</li><li>□</li></ul>	
	_	

*	

*	

# Lesson 2

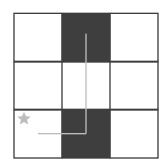
## Lesson 2 | Warmup

This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

#### **Code Elements**



## Example



### **Problems**

You are a pixel bot. Read the code and paint the picture.

*	

1	<b>1</b>	
2	$\rightarrow$	
3	~	
4	<b>1</b>	
5	$\rightarrow$	
6	~	
7	$\downarrow$	
8	$\downarrow$	
9	~	



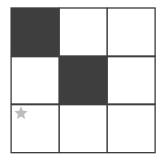
## Lesson 2 | Worksheet 1

This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

#### **Code Elements**



### Problem



1		
2		
2		
4		
4 5 6		
6		

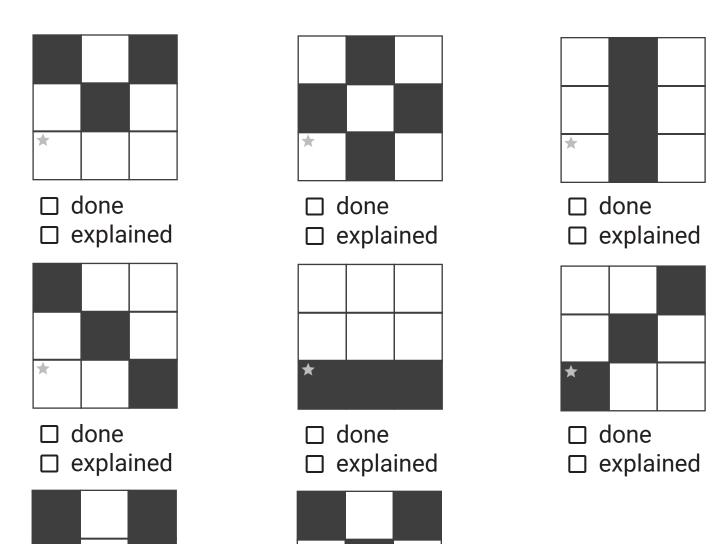
# {}

## Lesson 4 | Worksheet 1

This is an online Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

### **Problems**

You are a coder. Write code to command the pixel bot to paint the pictures.





done

□ explained

done



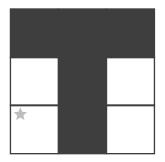
## Lesson 4 | Exit Ticket

This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

#### **Code Elements**

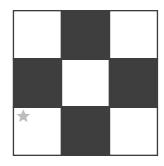


## **Problem**



1	
2 3	
3	
4	
5	
6	

7	
8	
9	
10	
11	
12	



1	
•	
2	
_	
2	
0	
4 5	
-	
5	
6	
9	

7	
8	
9	
10	
11	
12	



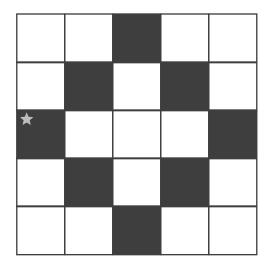
## Lesson 6 | Warmup

This is a Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

#### **Code Elements**



## **Problem**



1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	



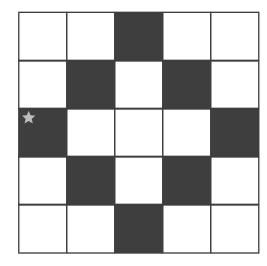
## Lesson 6 | Worksheet 1

This is a Pixel Bots JavaScript exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

#### **Code Elements**

```
up() down()
left() right()
paint()
```

### Problem



1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

16 17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	



# Lesson 6 | Worksheet 2

This is a Dance Bot exercise. In Dance Bot we program bots to dance.

#### **Code Elements**

```
up() down()
left() right()
spinLeft() spinRight()
wait()
```

## **Problem**

You are a coder. Write code to command to your bot to perform the same dance your teacher is doing.

1	16	
2	17	
3	18	
4	19	
5	20	
6	21	
7	22	
8	23	
9	24	
10	25	
11	26	
12	27	
13	28	
14	29	
15	30	

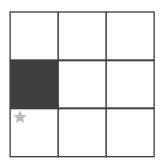
getCoding.

# {}

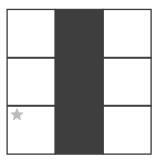
## Lesson 7 | Worksheet 1

This is an online Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

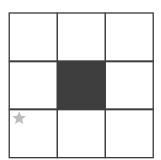
### **Problems**



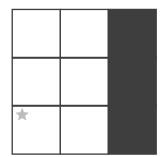
- □ done
- □ explained



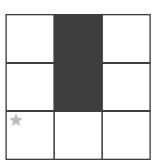
- □ done
- □ explained



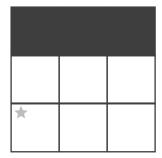
- ☐ done
- □ explained



- □ done
- $\square$  explained



- □ done
- □ explained



- □ done
- □ explained

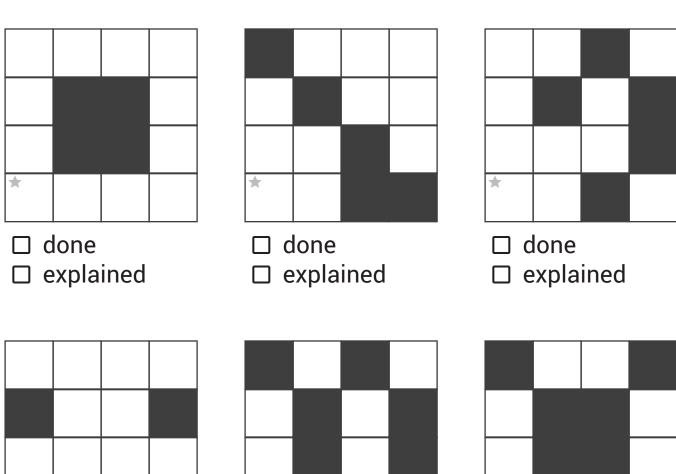




## Lesson 7 | Worksheet 2

This is an online Pixel Bots exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

### **Problems**



- done
- □ explained
- - □ done
- □ explained
- - ☐ done
- □ explained

# **{}**

## Lesson 7 | Exit Ticket

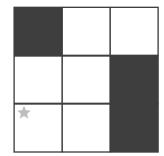
This is a Pixel Bots JavaScript exercise. In Pixel Bots we program bots to paint pictures using Code Elements.

#### **Code Elements**

```
up() down()
left() right()
paint()
```

### **Problems**

- 1) Which of the following has a syntax error:
  - a. up()
  - b. down()
  - c. right)
  - d. left()
- 2) You are a coder. Write code to command the pixel bot to paint the picture.



1	
1	
2	
3	
4	
5	
6	
7	
8	
9	

# Coding Paper

1	
2 3 4 5 6 7 8 9	
4	
5	
6	
7	
8	
9	
10	

11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

1	
2	
3	
4	
2 3 4 5 6	
6	
7	
8	
9	
10	

11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

# Coding Paper

1	
2 3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	

1	
2	
3 4 5	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

```
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
```

31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			

getCoding

# Coding Paper

1	
1	
2	
3	
4	
5	
6 7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	

61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	



## Small Pixel Grids





## Medium Pixel Grids



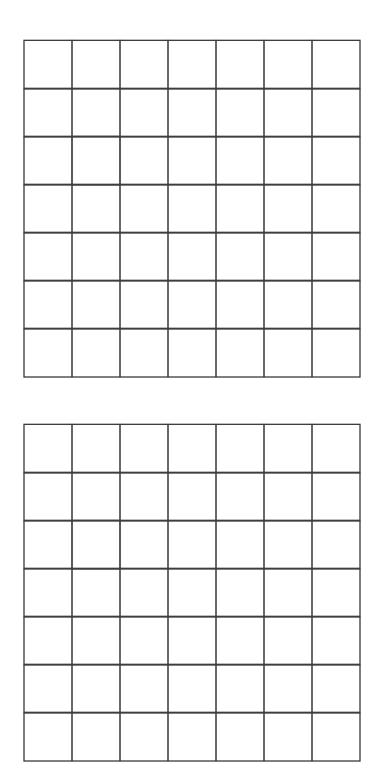








## Large Pixel Grid







## Challenge Problems - 1









## Challenge Problems - 2

