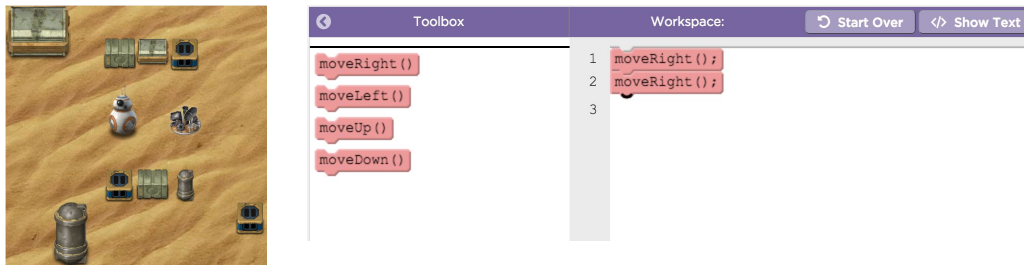




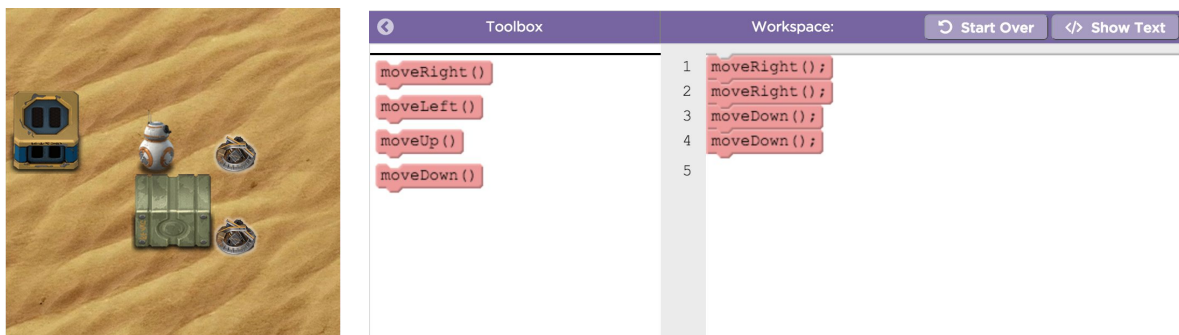
# Answer Sheet & Teacher Tips

## Level 1:



Solution: **Move right (X2)**

## Level 2:



For more information, visit <http://code.org/hourofcode/star-wars>

Solution: Move right (X2), Move left (X2)

## Level 3:



Solution: Move right, Move up, Move down, Move right

Toolbox	Workspace:	Start Over	Show Blocks
<div>moveRight()</div> <div>moveLeft()</div> <div>moveUp()</div> <div>moveDown()</div>	<pre> 1 moveRight(); 2 moveUp(); 3 moveDown(); 4 moveRight(); </pre>		

Toolbox	Workspace:	Start Over	Show Text
<div>moveRight()</div> <div>moveLeft()</div> <div>moveUp()</div> <div>moveDown()</div>	<pre> 1 moveRight(); 2 moveUp(); 3 moveDown(); 4 moveRight(); 5 </pre>		

## Level 4



Solution: Move down, Move left (X2), Move down (X2), Move left

Toolbox	Workspace:	Start Over	Show Blocks
<div>moveRight()</div> <div>moveLeft()</div> <div>moveUp()</div> <div>moveDown()</div>	<pre> 1 moveDown(); 2 moveLeft(); 3 moveLeft(); 4 moveDown(); 5 moveDown(); 6 moveLeft(); </pre>		

Toolbox		Workspace:	
<code>moveRight ()</code>		1	<code>moveDown ();</code>
<code>moveLeft ()</code>		2	<code>moveLeft ();</code>
<code>moveUp ()</code>		3	<code>moveLeft ();</code>
<code>moveDown ()</code>		4	<code>moveDown ();</code>
		5	<code>moveDown ();</code>
		6	<code>moveLeft ();</code>
		7	

## Level 5



Solution:

Toolbox	Workspace:
<div>moveRight()</div> <div>moveLeft()</div> <div>moveUp()</div> <div>moveDown()</div>	<div>1 moveRight();</div> <div>2 moveRight();</div> <div>3 moveDown();</div> <div>4 moveDown();</div> <div>5 moveDown();</div> <div>6 moveLeft();</div> <div>7</div>

Toolbox	Workspace:
<div>moveRight()</div> <div>moveLeft()</div> <div>moveUp()</div> <div>moveDown()</div>	<div>1 moveRight();</div> <div>2 moveRight();</div> <div>3 moveDown();</div> <div>4 moveDown();</div> <div>5 moveDown();</div> <div>6 moveLeft();</div> <div>7</div>

## Level 6



For more information, visit <http://code.org/hourofcode/star-wars>

**Solution:**

The top screenshot shows the Scratch workspace with the 'moveRight()' block being added to the script area. The script area contains a sequence of blocks: 'moveDown()', 'moveDown()', 'moveUp()', 'moveRight()', 'moveRight()', 'moveUp()', 'moveDown()', and 'moveRight()'. The 'moveRight()' block is being added to the end of the sequence.

The bottom screenshot shows the same workspace, but the 'moveRight()' block is now part of the script area. The script area contains the same sequence of blocks as the top screenshot, but the 'moveRight()' block is now a permanent part of the script.

## Level 7

For more information, visit <http://code.org/hourofcode/star-wars>



Solution:

Toolbox	Workspace:
<div> <div>goUp()</div> <div>goDown()</div> <div>function whenUp() {}</div> <div>function whenDown() {}</div> </div>	<div> <div>Start Over</div> <div>Show Text</div> </div> <pre> 1 function whenUp() { 2   goUp(); 3 } 4 function whenDown() { 5   goDown(); 6 } </pre>
<div> <div>goUp()</div> <div>goDown()</div> <div>function whenUp() {}</div> <div>function whenDown() {}</div> </div>	<div> <div>Start Over</div> <div>Show Blocks</div> </div> <pre> 1 function whenUp() { 2   goUp(); 3 } 4 function whenDown() { 5   goDown(); 6 } 7 </pre>

## Level 8

For more information, visit <http://code.org/hourofcode/star-wars>





**Solution:**

The top screenshot shows the Scratch IDE with a script in the workspace. The script consists of a sequence of blocks: four movement blocks (goRight, goLeft, goUp, goDown) and four conditional execution blocks (whenLeft, whenRight, whenUp, whenDown). The workspace shows the script being converted to text. The text is as follows:

```
1 function whenUp ( ) {  
2   goUp();  
3 }  
4 function whenDown ( ) {  
5   goDown();  
6 }  
7 function whenLeft ( ) {  
8   goLeft();  
9 }  
10 function whenRight ( ) {  
11   goRight();  
12 }
```

The bottom screenshot shows the same Scratch IDE with the same script in the workspace. The workspace now shows the text-based script with line numbers, and the 'Show Blocks' button is visible in the top right corner of the workspace area.

```
1 function whenUp() {  
2   goUp();  
3 }  
4 function whenDown() {  
5   goDown();  
6 }  
7 function whenLeft() {  
8   goLeft();  
9 }  
10 function whenRight() {  
11   goRight();  
12 }  
13 |
```

For more information, visit <http://code.org/hourofcode/star-wars>



## Level 9



Solution:

NOTE: just adding 100 points is not enough so must either add 100 points three times or change point amount

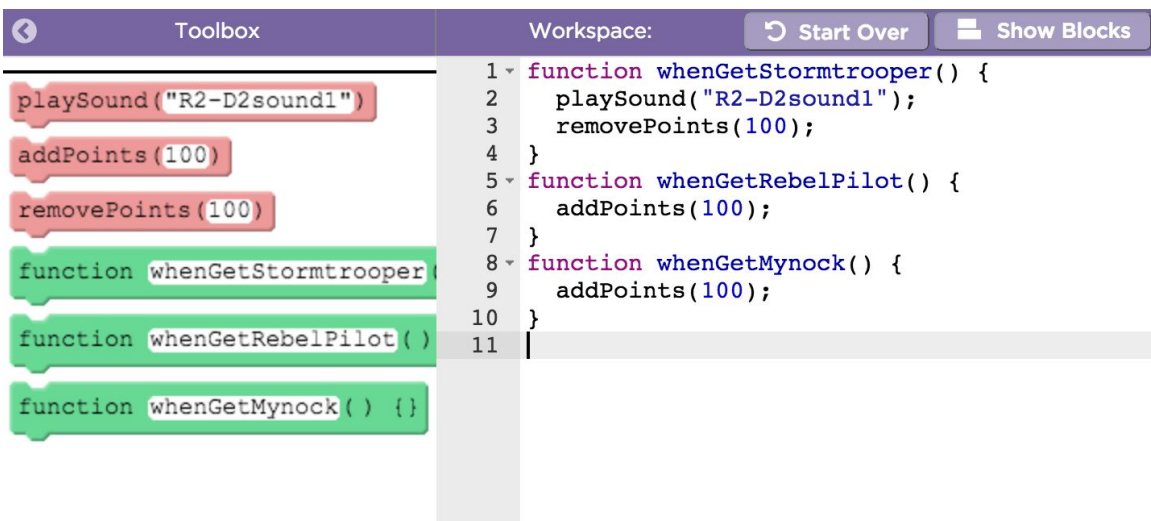
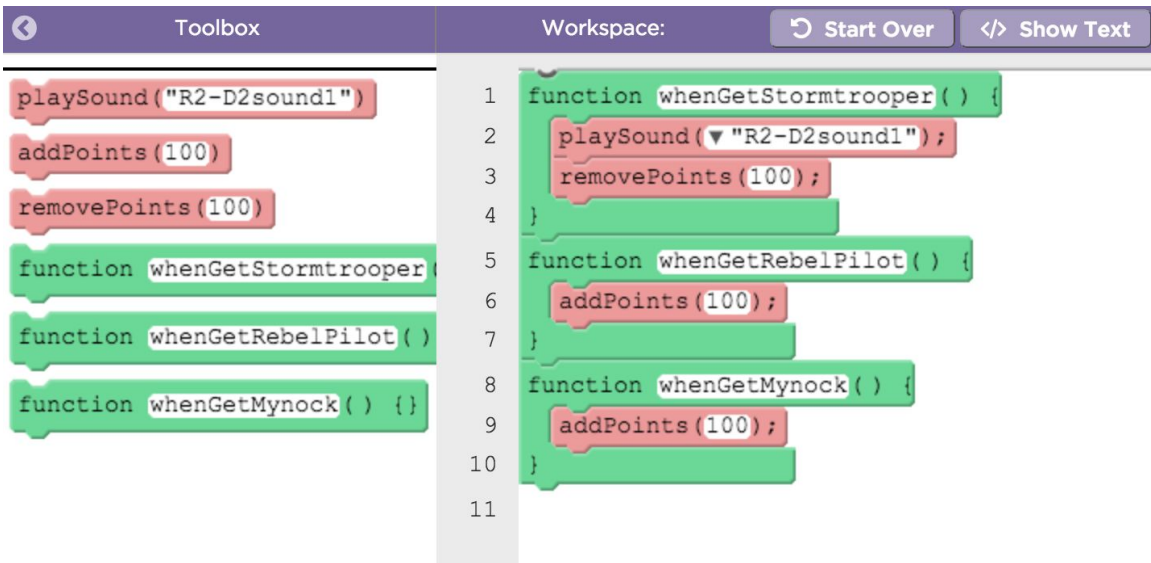
Examples below:

Toolbox	Workspace:
<pre>playSound("R2-D2sound1")</pre>	<pre>1 function whenGetRebelPilot() {</pre>
<pre>addPoints(100)</pre>	<pre>2   playSound("R2-D2sound1");</pre>
<pre>function whenGetRebelPilot()</pre>	<pre>3   addPoints(500);</pre>
	<pre>4 }</pre>

Toolbox	Workspace:
<div>playSound("R2-D2sound1")</div> <div>addPoints(100)</div> <div>function whenGetRebelPilot()</div>	<div>1 function whenGetRebelPilot() {</div> <div>2     playSound("R2-D2sound1");</div> <div>3     addPoints(500);</div> <div>4 }</div> <div>5  </div>

## Level 10:





**Notes:** This is a free play level. While suggestions of point value are given via Leia, one can determine to add or remove points and of any value, one can also choose any noise for each action. If students are having trouble with this one, have them add 1000+ points when they get the Rebel Pilots or Mynock.

For more information, visit <http://code.org/hourofcode/star-wars>

## Level 11:

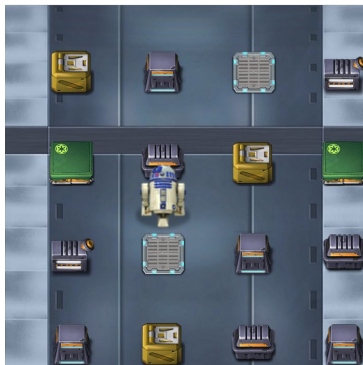


Toolbox	Workspace:
<div> <div>playSound("R2-D2sound1")</div> <div>addPoints(1000)</div> <div>removePoints(1000)</div> <div>addCharacter("PufferPig")</div> <div>function whenGetPufferPig( )</div> </div>	<div> <div>Start Over</div> <div>Show Blocks</div> </div> <pre> 1  playSound("R2-D2sound1"); 2  addCharacter("PufferPig"); 3  addCharacter("PufferPig"); 4  addCharacter("PufferPig"); 5 6  function whenGetPufferPig() { 7    playSound("PufferPigSound1"); 8    addPoints(1000); 9  } 10 </pre>
<div> <div>playSound("R2-D2sound1")</div> <div>addPoints(1000)</div> <div>removePoints(1000)</div> <div>addCharacter("PufferPig")</div> <div>function whenGetPufferPig( )</div> </div>	<div> <div>Start Over</div> <div>Show Text</div> </div> <pre> 1  playSound(▼ "R2-D2sound1"); 2  addCharacter(▼ "PufferPig"); 3  addCharacter(▼ "PufferPig"); 4  addCharacter(▼ "PufferPig"); 5 6  function whenGetPufferPig( ) { 7    playSound(▼ "PufferPigSound1"); 8    addPoints(1000); 9  } </pre>

Notes: same free form re: points, sound. Must add at least 3 puffer pigs

For more information, visit <http://code.org/hourofcode/star-wars>

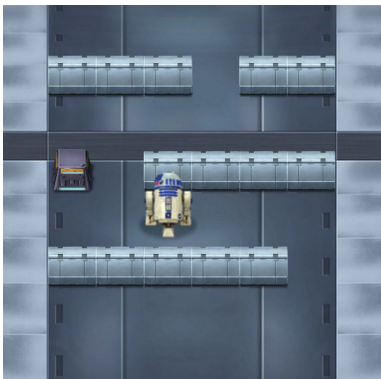
### Level 12:

[illegible]

For more information, visit <http://code.org/hourofcode/star-wars>

Notes: can add any number of mouse droids or any number of points to change pace of level.

## Level 13:





The image shows the Scratch IDE interface. On the left is the **Toolbox** with the following blocks: `playSound("R2-D2sound1")`, `addPoints(100)`, `removePoints(100)`, `addCharacter("MouseDroid")`, and three empty function blocks: `function whenGetMynock() {}`, `function whenGetMouseDroid()`, and `function whenGetTauntaun()`. On the right is the **Workspace** showing the assembled code:

```
1 addCharacter(▼ "Tauntaun");
2 addCharacter(▼ "Tauntaun");
3 function whenGetTauntaun() {
4   playSound(▼ "TauntaunSound4");
5   addPoints(50);
6   addCharacter(▼ "Mynock");
7   addCharacter(▼ "Mynock");
8 }
9 function whenGetMouseDroid() {
10  playSound(▼ "MouseDroidSound2");
11  addPoints(100);
12 }
13 function whenGetMynock() {
14  addCharacter(▼ "MouseDroid");
15  addCharacter(▼ "MouseDroid");
16 }
```

The screenshot shows the Scratch workspace with the following script:

```
1 addCharacter("Tauntaun");
2 addCharacter("Tauntaun");
3 function whenGetTauntaun() {
4   playSound("TauntaunSound4");
5   addPoints(50);
6   addCharacter("Mynock");
7   addCharacter("Mynock");
8 }
9 function whenGetMouseDroid() {
10  playSound("MouseDroidSound2");
11  addPoints(100);
12 }
13 function whenGetMynock() {
14   addCharacter("MouseDroid");
15   addCharacter("MouseDroid");
16 }
17
```

**Notes:** One can change sounds, functions, points, number of Mynocks/ droids/ Tauntauns that appear etc. → more free form

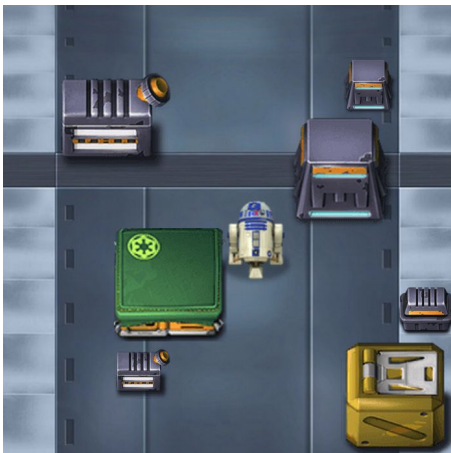
For more information, visit <http://code.org/hourofcode/star-wars>



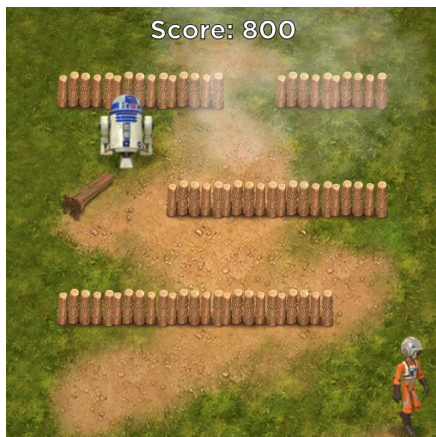
## Level 14:

Note: This is a free play level. You can do whatever you like. The only goal is to get rebel pilots.

Two examples:



For more information, visit <http://code.org/hourofcode/star-wars>



Toolbox	Workspace:
<div>setDroid("R2-D2")</div> <div>setDroidSpeed("fast")</div> <div>setBackground("Hoth")</div> <div>setMap("blank")</div> <div>playSound("R2-D2sound1")</div> <div>addPoints(100)</div> <div>removePoints(100)</div> <div>addCharacter("PufferPig")</div> <div>function whenGetRebelPilot( )</div>	<div>1 addCharacter (▼ "RebelPilot");</div> <div>2 addCharacter (▼ "RebelPilot");</div> <div>3 addCharacter (▼ "RebelPilot");</div> <div>4 playSound (▼ "R2-D2sound4");</div> <div>5 setDroid (▼ "R2-D2");</div> <div>6 setMap (▼ "horizontal");</div> <div>7 setDroidSpeed (▼ "fast");</div> <div>8</div> <div>9 function whenGetRebelPilot ( ) {</div> <div>10     addPoints (400);</div> <div>11     setBackground (▼ "random");</div> <div>12 }</div> <div>13</div> <div>14</div>

The screenshot shows the Scratch workspace with the 'when green flag clicked' event selected. The 'say' block is set to 'say Hello! for 2 secs'. The 'when green flag clicked' event is selected. The 'when green flag clicked' event is selected.

For more information, visit <http://code.org/hourofcode/star-wars>