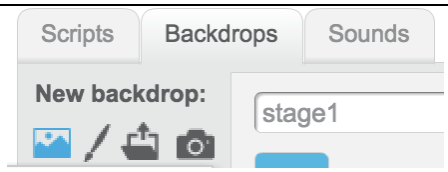
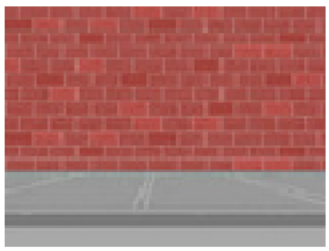
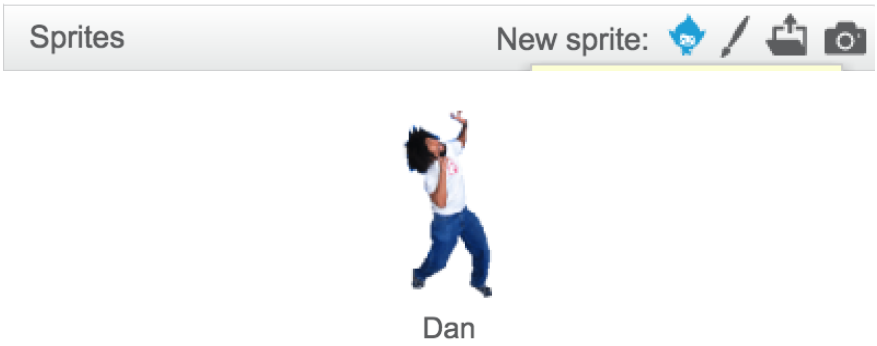
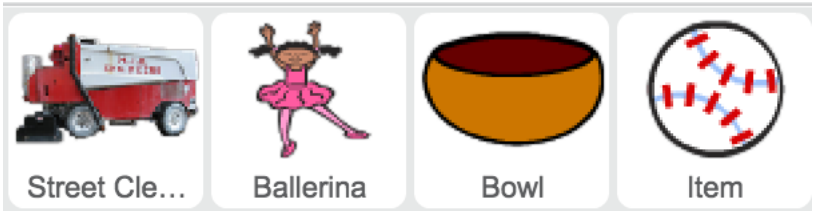
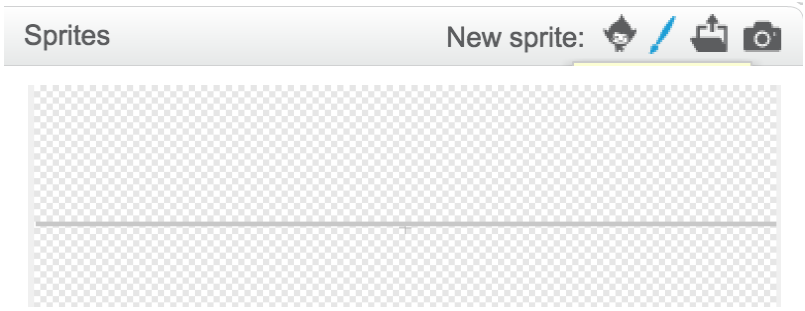
Skill Level: Intermediate

Throw Dan Throw

1	Start a new project and delete the Cat sprite	
2	Click the **Stage** icon beside the **Sprites** bar. Click the **Backdrops** tab. Select the **Choose Backdrop** icon from the **New Backdrop** bar.	
3	Select **brick wall1**	
4	Click the **Choose New Sprite** icon from the **Sprites** bar. Select **Dan**	
5	Repeat step 4, selecting the **Street Cleaner, Ballerina, Bowl,** and **Baseball.** Rename the **Baseball** sprite to *Item*	
6	Click the **Paint New Sprite** icon from the **Sprites** bar. Draw a wide thin grey bar that is the length of the stage. Name this sprite *Ground*	

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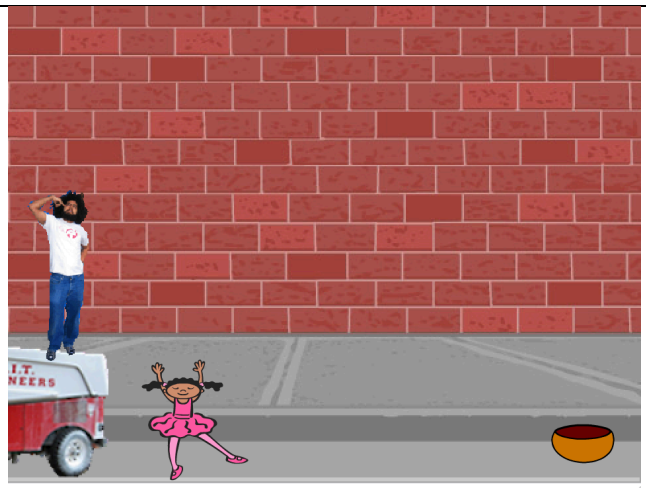
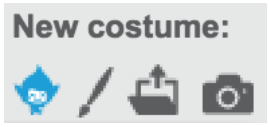
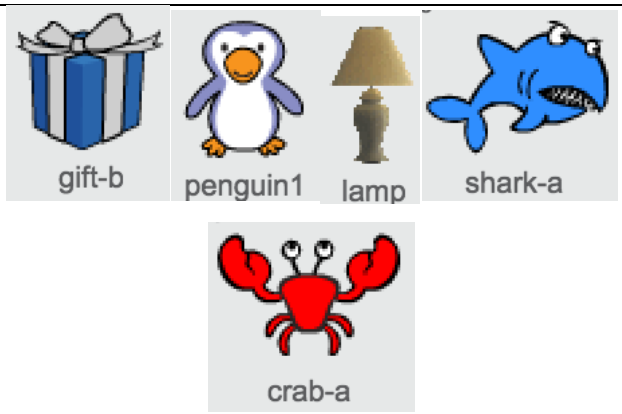
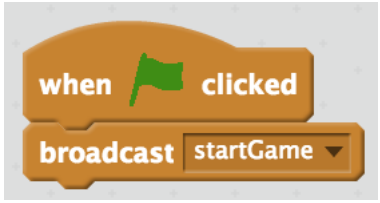
7	Position the sprites on the stage like this	
8	Click the *Costumes* tab on the **Item** sprite. Click the **Choose costume from library**  Select these costumes	
9	Click the **Paint New Sprite** icon from the **Sprites** bar. Name this sprite *GameLoop* Place the following script block (You will need to create a new variable). This will the start the entire game.	
10	Place the following script block on the *Street Cleaner.* This will make the sprite stay in the same position every time the game starts	

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https://scratch.mit.edu/projects/187400593/
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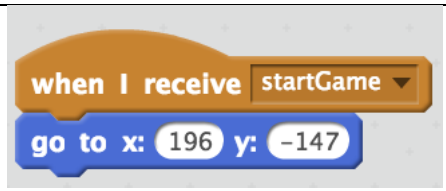
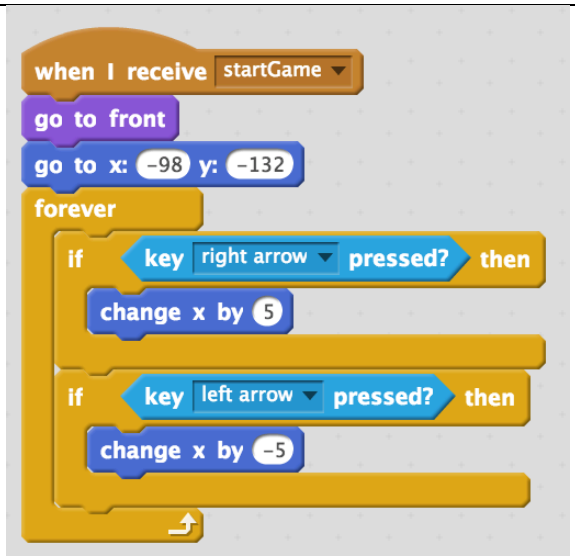
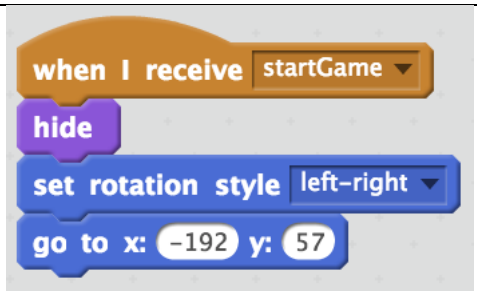
11	Place the following script block on the *Bowl*. This will make the sprite stay in the same position every time the game starts	
12	Place the following script block on the *Ballerina*. This will make the sprite move left and right and to always be the front-most sprite	
13	Place the following script block on *Dan*. This script block does the following: • Go to the same position and switch to the starting problem. • Set the variable that controls the package throwing (1=ready 0=not ready) and wait • Forever; ○ Wait until we're ready to throw ○ Switch to throwing costume and broadcast we're throwing a package ○ Switch to our ready costume	
14	Place the following script block on *Item.* This will set the starting conditions for the sprite; the rotation style, to hide it, and what position to start in	

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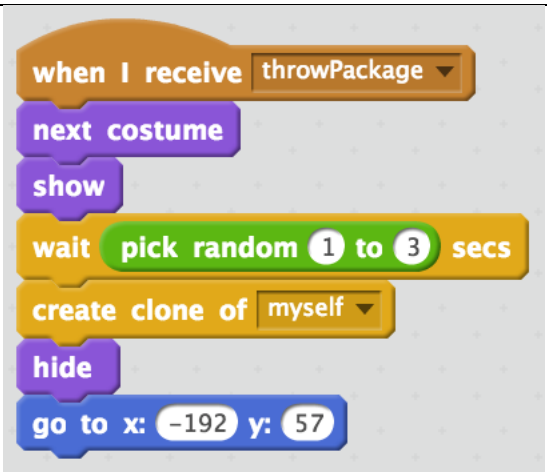
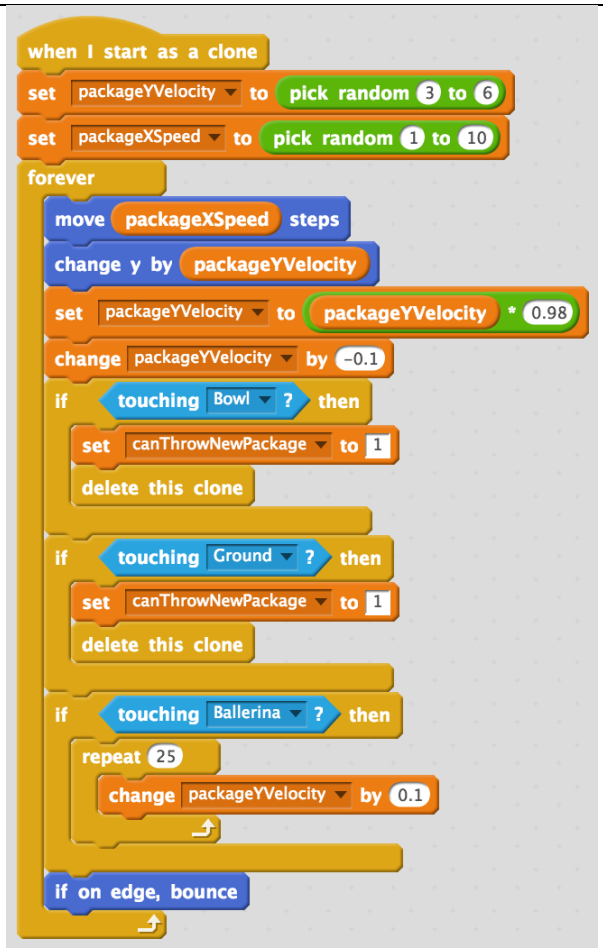
15	Place the following script block on *Item.* This will set the sprite to get ready for being "thrown"; • This will change the package costume and show • Wait between 1 and 3 seconds • Create a clone of this sprite • Hide and move to the start position	
16	Place the following script block on *Item*. You will need to create two variables <u>for this sprite only</u> (**packageXSpeed** & **packageYVelocity**). This will: • Set the speed of the thrown item • Move the thrown item up and down • If it touches the *Bowl*, set Dan ready to throw another package and delete clone • If it touches the *Ground*, set Dan ready to throw another package and delete clone • If it touches the *Ballerina*, bounce the item into the air • If it touches the edge, bounce the item	

17	So what now?
	• Create a score mechanic.
	  ○ Gain a point when the item reaches the bowl.
	  ○ Lose a point when the item touches the ground.
	• Any cool ideas you can think of!	

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