Attack of the Snowmen

1	Start a new project	and delete the Cat sprite
2	Click the Stage and select the Backdrops tab	Scripts Backdrops Sounds
3	Select the winter-lights background	winter-lights
4	Click the paintbrush icon next to the word New	
	sprite:	Sprites New sprite: 🍖 / 亡 💿
4	We aren't going to do anything with this sprite	
	except rename to GameLoop	
	Click the paintbrush icon next to the word New	
	sprite:	
	Draw a black circle and use the fill with colour	
5	tool to fill the shape white.	
	(Tip: when drawing a circle, hold shift to make it	
	perfectly proportional!)	
	Rename this sprite to Snowball	
	Duplicate your <i>Snowball</i> sprite and rename to	Scripts Costumes Sounds
	Snowman and go to the Costumes tab.	
	Snowman and go to the Costumes tab.	

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		,
6	Now get your drawing skills ready as we're going to draw lots of snowman costumes! 1. Duplicate the first costume (the one we used for the Snowball) 2. Use the Select and Duplicate tool to make a copy of the Snowball. Make it a little smaller and put it roughly on top of the other snowball	
8	Duplicate the previous costume for a third costume. This time click the Add button and select <i>scarf1</i> . Place this scarf on the Snowman.	
9	Duplicate the previous costume and add a ball for a head.	
	Continue duplicating every time you make a new feature for your snowman. Eventually you will have around 11 costumes	costume1 costume2 costume3 costume4 5 6 7 8 costume5 costume6 costume7 costume8 9 10 11 costume9 costume10 costume11

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Time to code! Select your GameLoop sprite and place when clicked when I receive gameOver the following code blocks. This will 11 broadcast startGame wait 1 secs control when our game starts and what stop all ▼ happens at the end. Select the Snowball sprite and place the following code blocks. This will: when I receive startGame > Place our snowball in a starting go to x: 0 y: -170 position and hide when the game hide starts forever Listen for the space key to be 12 key space ▼ pressed? then pressed, and make a clone when create clone of myself it is not key space ▼ pressed? wait until < We're using clones for our snowballs to make many snowballs without needing many snowball sprites. Still on the Snowball sprite, place the following code blocks. This will make our clone: Appear! when I start as a clone Point towards the where the show point towards mouse-pointer mouse is pointing 13 repeat until **touching** edge ▼ ? or touching Snowman ▼ Move until it either hits the edge move 10 steps or a Snowman sprite delete this clone Delete itself It is important to delete clones when you're finished with them. Too many

clones makes a slow game!

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Select the *Snowman* sprite. Place the following code blocks. This will make the *Snowman*:

- Hide when the game starts
- Pick a random place on the stage
- Create a clone of the Snowman
- Wait between 2-4 seconds before looping again

```
when I receive startGame whide
forever

go to x: pick random 240 to -240 y: pick random 50 to -160

create clone of myself wait pick random 2 to 4 secs
```

Still on *Snowman*, we need to code the snowman clone's behaviour. Place the following code blocks. This is a complicated block so let's break it down:

- When the snowman starts as a clone, push him back
 999 layers. This means that the snowman will start
 "behind" any snowman already on the stage
- We set the size of the clone to 40% (depending on the size of your size, it may need different value)
- Appear!
- Change to his "full" costume (fully drawn snowman –
 in my case costume11)

 Repeat until he reaches just the snowball costume (in my case costume1)

- Keep moving down the screen and getting bigger
- If the Snowman sprite is touching the Snowball sprite,
 then we go back one costume (to a little bit less of the snowman), we also move back and stay the same size
- If the Snowman is a certain size (I picked 185 but you may pick a different number) then say something and tell the other sprites (the GameLoop) that the game is over.
- If we have reached the costume with just the snowball, wait half second and then delete this clone

```
go back 999 layers
set size to 40 %
show
switch costume to costume11
repeat until (costume # = 1
  change y by -0.5
  change size by 0.5
      touching Snowball ▼ ? then
     switch costume to costume # - 1
    change y by 2
    change size by -2
       size = 185 then
    say | I got you!
    broadcast gameOver
wait 0.5 secs
delete this clone
```