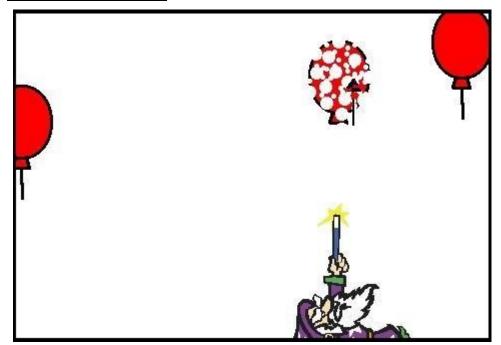
BALLOON POP



- 1. Start Scratch
- 2. Save your work as "Balloon Pop"
- 3. First we must create and name the Following Sprites:

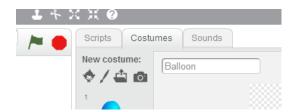
Balloon

"Wizard"

"Arrow"

Name and Create the Balloon Scripts:

4. Name your balloon "Balloon."



5. In the Scripts section of the Balloon Sprite, drag a "repeat until" block into the area.

- 6. Put a blue "change y by 10" into the "repeat until."
- 7. Change the y to "-5" (We want the balloon to fall down).
- 8. Put a "wait 0.2" seconds block into the "repeat until."

```
change y by -5
wait 0.2 secs
```

- 9. Put a "<" operator block into the hexagon of the "repeat until."
- 10. Put a "y position" and a -175 into the "<".

```
repeat until (y position) < -175

change y by -5

wait (0.2) secs
```

- 11. Double Click "repeat until" and test. The Balloon should move to the bottom of the screen.
- 12. We want to make the Balloon "hide" and then go to the top of the screen. Add a "hide" beneath the "repeat until."
- 13. Put a "wait" block on top of the "repeat until."
- 14. Put a "pick random 1 to 3 seconds" inside the "wait" block.

```
wait pick random 1 to 3 secs

repeat until y position < -175

change y by -5

wait 0.2 secs
```

- 15. Put a blue "go to x: y: " block beneath the "wait."
- 16. Put a "pick random -240 to 240" in the x value.

17. Put "141" value in the y.

```
wait pick random 1 to 3 secs

go to x: pick random -240 to 240 y: 141

repeat until y position < -175

change y by -5

wait 0.2 secs
```

- 18. Put a "switch to costume" block beneath the "go to x: y:"
- 19. Put a "show" block beneath the "switch to costume."
- 20. Put a "forever" around the entire Balloon Scripts.
- 21. Connect a "When Green Flag Clicked" to the top and test by clicking on the Green Flag. The Balloon should move slowly down the screen, disappear at the bottom, and reappear at a random position at the top.

```
when clicked

forever

wait pick random 1 to 3 secs

go to x: pick random -240 to 240 y: 141

switch costume to Balloon v

show

repeat until y position < -175

change y by -5

wait 0.2 secs
```

Name and Create the Arrow Scripts

22. Create a new Sprite by clicking the paint new Sprite (paintbrush) icon. Draw an arrow pointing upwards then click on the Arrow Sprite in the Sprite window (bottom left) and name it "Arrow."



23. The Arrow Scripts are very much like the Balloon, except the Arrow y value changes in the positive direction because the Arrow moves up. Put the following scripts in the Arrow (Be aware, you must have created your wizard Sprite otherwise you will not be able to connect the arrow to him)

24. We want the Arrow to move when Space Key is pressed - so add a "when space key pressed" to the top of the arrow script.

```
when space v key pressed

show

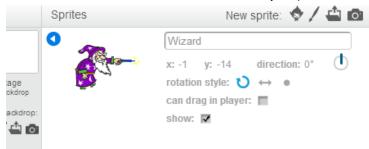
go to Wizard v

repeat until (y position > 175)

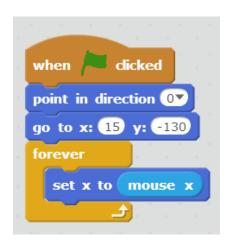
change y by 10
```

Name and Create the Wizard Scripts:

25. The Wizard moves side to side (x axis) with the Mouse. Firstly we must turn him so that his wand is pointing upwards. This is done by clicking the 'i' above the wizard Sprite and changing the point in direction to 0 (Move the blue line around the circle until it says 0).



26. Then add the following scripts to follow the mouse x:



Make the Balloon React to the Arrow:

- 27. Until now, the Balloon has no idea the Arrow exists. We have to tell the Balloon to watch for the arrow. Add a "touching Arrow" block beneath the Balloon Scripts.
- 28. Put a green "or" block beneath the Balloon Scripts.
- 29. Put the "touching Arrow" in the first space in the "or" block and the "y position<-175" in the second block.



30. Put that "or" block back into the "repeat until."

```
when clicked

forever

wait pick random 1 to 3 secs

go to x: pick random -240 to 240 y: 141

switch costume to Balloon

show

repeat until touching Arrow 2 or y position < 5175

change y by -5

wait 0.2 secs
```

- 31. Add an "if" block beneath the "repeat until."
- 32. Put a "touching Arrow" inside the "if"

```
when clicked

forever

wait pick random 1 to 3 secs

go to x: pick random -240 to 240 y: 141

switch costume to Balloon 
show

repeat until touching Arrow ? or y position < -175

change y by -5

wait 0.2 secs

if touching Arrow ? then

hide
```

33. Create different costumes for your balloon. (To simulate it popping)



34. Add the following scripts inside the "if" statement.

```
when / clicked

forever

wait pick random 1 to 3 secs

go to x: pick random -240 to 240 y: 141

switch costume to Balloon show

repeat until touching Arrow ? or y position < -175

change y by -5

wait 0.2 secs

if touching Arrow ? then

switch costume to balloon2

wait 0.2 secs

switch costume to balloon3

wait 0.2 secs
```

Test and Make more balloons:

- 35. Click the Green flag and test. Correct any issues and make more balloons. Copy the original balloon script into these balloons.
- 36. Save your work!

