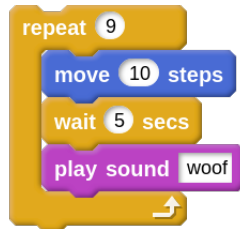Do not write your name below this line.

Loops

Scratch Username: _____

....
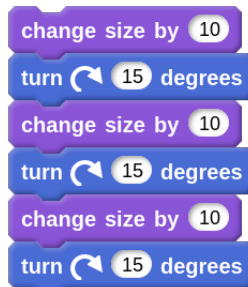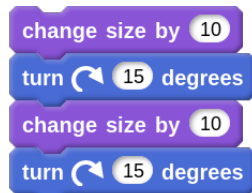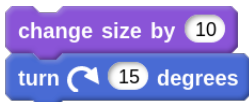
```
repeat 9
    move 10 steps
    wait 5 secs
    play sound woof
```

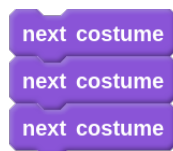1. How many times will the blocks in the loop repeat? [   ]

....

```
repeat 4
    change size by 10
    turn ↻ 15 degrees
```

2. **Circle** the script that makes the sprite do the same thing as the loop above:

```
change size by 10
turn ↻ 15 degrees
```

```
change size by 10
turn ↻ 15 degrees
change size by 10
turn ↻ 15 degrees
```

```
change size by 10
turn ↻ 15 degrees
change size by 10
turn ↻ 15 degrees
change size by 10
turn ↻ 15 degrees
```

```
change size by 10
turn ↻ 15 degrees
change size by 10
turn ↻ 15 degrees
change size by 10
turn ↻ 15 degrees
```

....

3. **Circle __ALL__** the scripts that make the sprite change costumes **exactly** 3 times.

```
next costume
```

```
next costume
next costume
next costume
```

```
repeat 3
    next costume
```

```
repeat 3
    next costume
    next costume
    next costume
```

....

```
next costume
repeat 6
    play sound baa
    wait 5 secs
move 25 steps
```
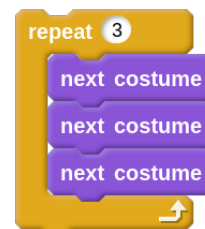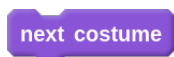
4a. **Circle ALL** the blocks that run <u>6 times</u> in the script above.

```
move 25 steps        play sound baa        next costume        wait 5 secs
```

4b. **Circle ALL** the blocks that run <u>before</u> the repeat loop in the script above.

```
move 25 steps        play sound baa        next costume        wait 5 secs
```

4c. **Circle ALL** the blocks that run <u>after</u> the repeat loop in the script above.

```
move 25 steps        play sound baa        next costume        wait 5 secs
```

....

<u>Cat's Code</u>   <u>Dog's Code</u>

```
when  clicked                 when  clicked              when  clicked
repeat 7                      repeat 7                   repeat 4
    say meow for 5 secs           say woof for 5 secs        next costume
    wait 1 secs                   wait 1 secs                wait 1 secs
repeat 4
    next costume
    wait 1 secs
```
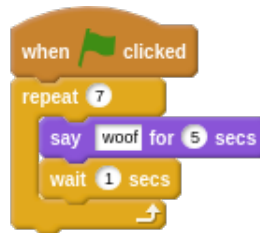
5a. **Circle**: When the green flag is clicked, what will Cat do?

   A. Cat says "meow" 7 times **then** changes costumes 4 times.

   B. Cat says "meow" and changes costumes **at the same time**.

5b. **Circle**: When the green flag is clicked, what will Dog do?

   A. Dog says "woof" 7 times **then** changes costumes 4 times.

   B. Dog says "woof" and changes costumes **at the same time**.

6. Explain what this script will make the sprite do.

Each time the loop runs:

First _____.

Next, _____.

Last, _____.

It does this all _____ times.

....

7. How do you know that you should use a loop?

_____

_____

_____

....

Extra Challenge: How many times will "quack" sound play?