Creative Coding with Scratch
Animate Your Name

TWINKL

Getting Started

Select **Blue Sky 2** backdrop.

Choose the required **Letters** from the sprite library to spell out your name.

Reduce the size of the **Letters** sprites so your name fits on the **Stage**.

Challenge 1

Can you make a **Letter** sprite spin?

Challenge 2

Can you make a **Letter** sprite look like it is jumping up and down?

Challenge 3

Can you make a **Letter** sprite flash by changing its brightness?

Challenge 4

Can you continuously change the colour of a **Letter** sprite?

I can:

select a backdrop and add sprites; ☐
change the size of sprites; ☐
make a sprite spin; ☐
make a sprite move up and down; ☐
change the brightness of a sprite; ☐
change the colour of a sprite. ☐

Helpful Hints
Animate Your Name

Use these hints to help you complete the challenges. They will not give you the complete solution to the algorithm but should help you on your way.

> The following code belongs on one of the **Letter** sprites:
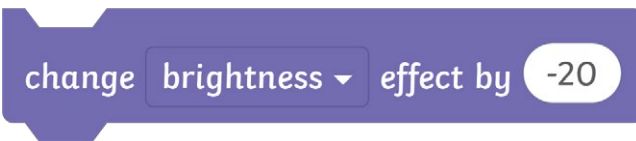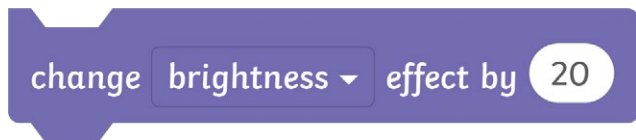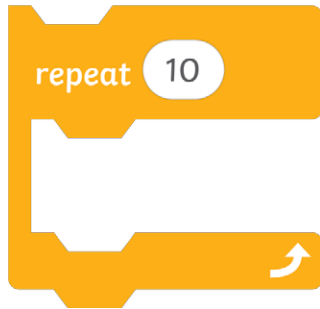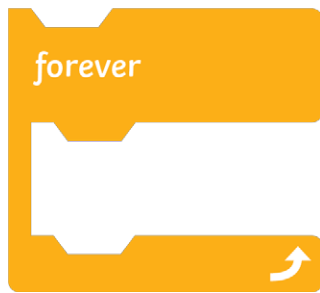
To make a **Letter** spin:

```
turn ↻ 36 degrees

when 🏳 clicked

forever
    ↻
```

To make a **Letter** jump up and down:

```
repeat 10
    ↻

change y by 20

change y by -20

forever
    ↻

when 🏳 clicked
```

Top Tip

Depending on the starting position of your sprite, the values in the **change y by** will differ from the example code.

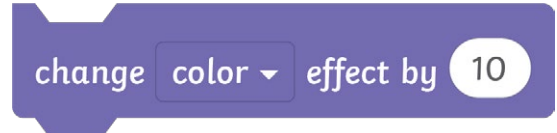To make a **Letter** flash by changing its brightness:

forever

repeat 10

change brightness ▼ effect by 20

change brightness ▼ effect by -20

when 🏴 clicked

Top Tip

You can change the brightness of the flash by altering the number in the **change brightness effect by** block.

To make a **Letter** continuously change its colour:

forever

change color ▼ effect by 10

when 🏴 clicked

Top Tip

You can change the speed of the colour changes by altering the number in the **change color effect by** block.
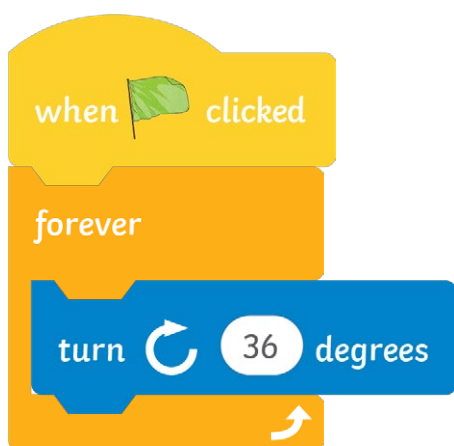
Creative Coding with Scratch
Animate Your Name **Answers**

Each Creative Coding Challenge is an open-ended task, which can be approached in many different ways. Pupils should be encouraged to have a go and tackle these tasks independently. The helpful hints are not intended to provide complete solutions but may serve as useful cues for supporting less-confident coders.

The following algorithms are just one possible solution to each challenge.

Challenge 1

The following code belongs on a **Letter** sprite:

```
when [flag] clicked
forever
    turn ↻ 36 degrees
```

Challenge 2

The following code belongs on a **Letter** sprite:

```
when [flag] clicked
forever
    repeat 10
        change y by 20
    repeat 10
        change y by -20
```

Challenge 3

The following code belongs on a **Letter** sprite:

```
when [flag] clicked
forever
    repeat 10
        change [brightness ▾] effect by (20)
    repeat 10
        change [brightness ▾] effect by (-20)
```

Challenge 4

The following code belongs on a **Letter** sprite:

```
when [flag] clicked
forever
    change [color ▾] effect by (10)
```