

**Joyfulmathswithruth**

**FREE**  
all ages  
interactive  
Maths lesson

**Maths In Motion**

**ART**

**Curves  
and Circles**

To join please bring:  
White paper or card,  
some other paper - if  
possible, in lots of  
colours or decorated, a  
stapler

## Something to think about:

How many circles can you draw inside this space without overlapping?



Space to answer, note your thoughts, or just have a doodle!



# Artist: Suzan Shutan

Tar Roofing Paper series

What do you notice?  
What do you like?



# Artist: Rachel Evans

Spirograph art

What do you notice?  
What do you like?



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# Distance around the Coast Line



What is the distance around the coastline of the UK?



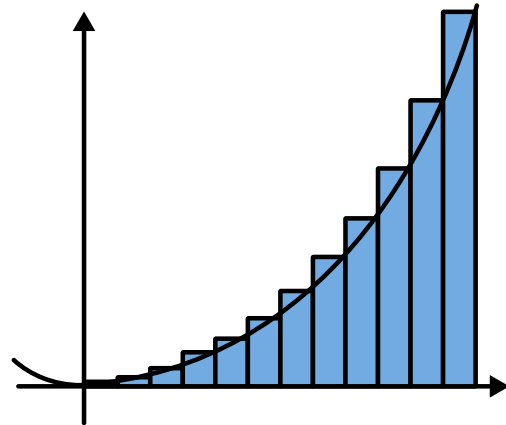
What happens if you zoom in?



What if you zoom in even more?

# Distance around the Coast Line

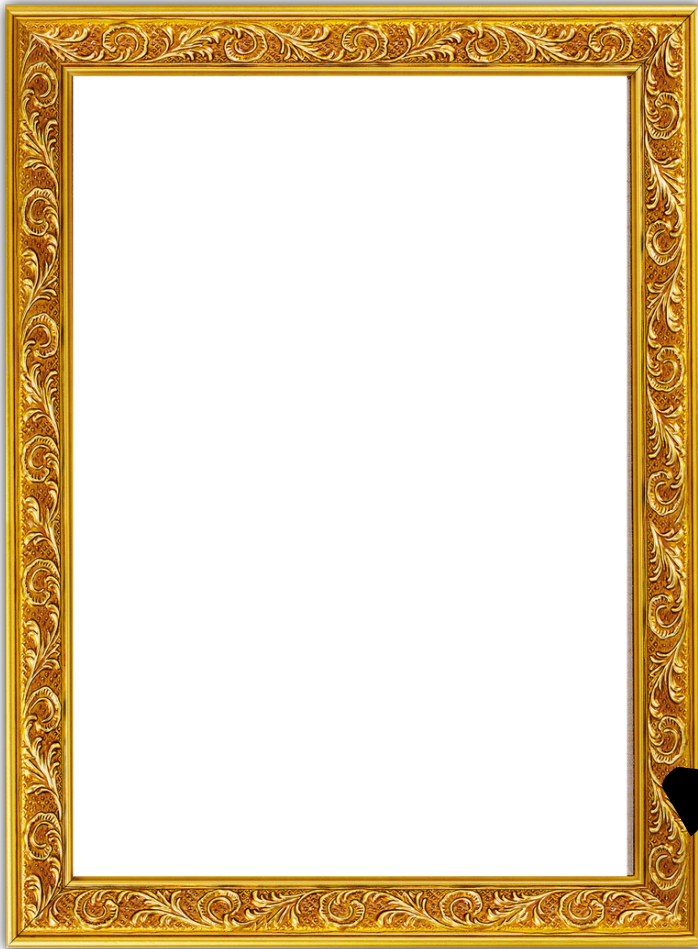
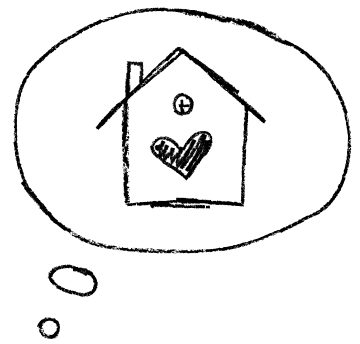
Mathematicians want to be able to find the area under a curve



You can use ..... or  
..... to find approximations

To get closer to a curve you need to draw more/less rectangles

# Explore at home:



**Artist to explore:**  
Suzan Shuta

<http://www.suzanshuta.com/tar-roofing-paper>

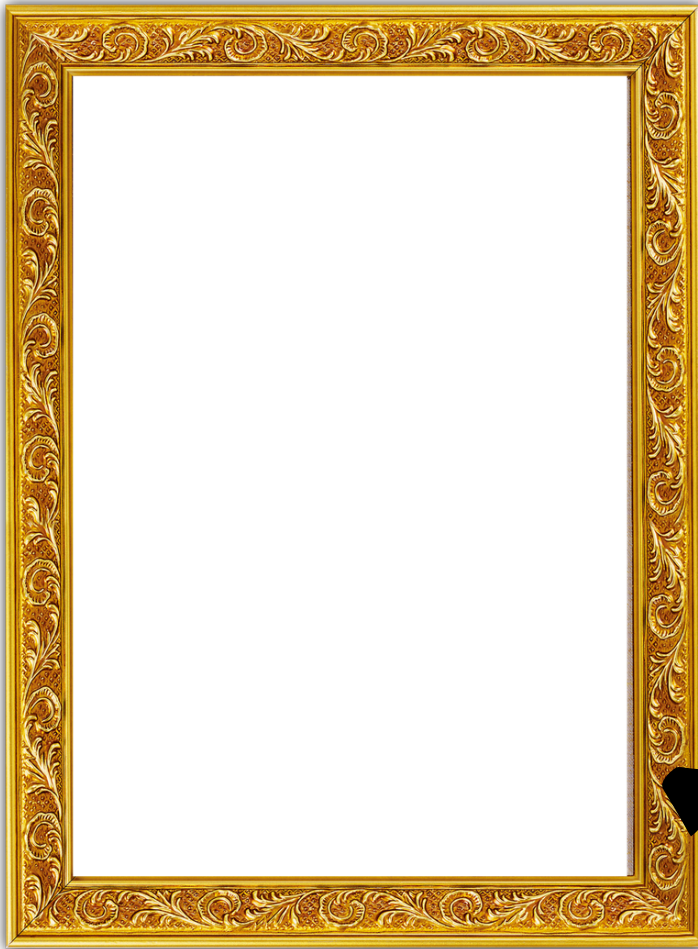
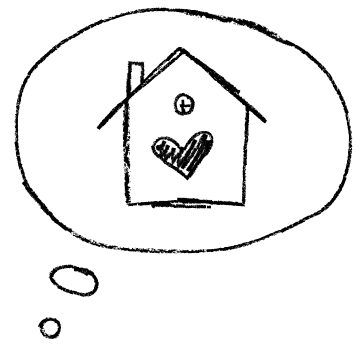
A picture of her or  
some of her work



Space for your notes, drawings or a collage



# Explore at home:



**Artist to explore:**  
Rachel Evans

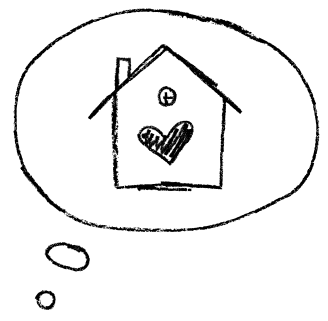
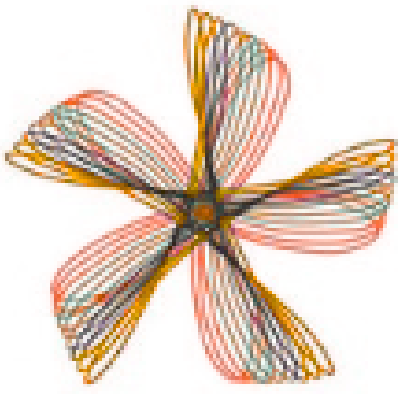
<https://www.spirographgirl.com/home>

A picture of her or  
some of her work



Space for your notes, drawings or a collage





## Explore at home:

### **Create your own spirograph art!**

Be inspired by Rachel Evan's with her videos:

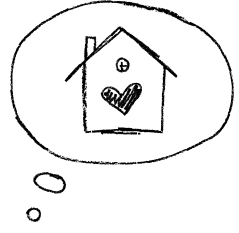
[https://www.spirographgirl.com/process\\_portfolio](https://www.spirographgirl.com/process_portfolio)

### **Create your own spirograph.**

[https://www.pinkstripeysocks.com/2019/02/diy-homemade-spirograph.html#google\\_vignette](https://www.pinkstripeysocks.com/2019/02/diy-homemade-spirograph.html#google_vignette)

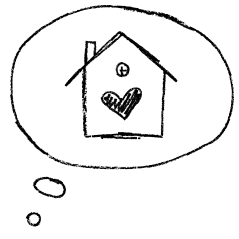
There is space for your creativity on the next pages.

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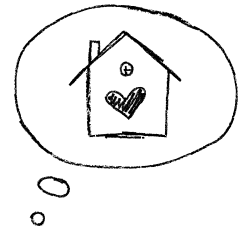
# Explore at home:

Space for your Spiograph art



# Explore at home:

Space for your Spiograph art



## Explore at home:

Create your own parabolic curve using only straight lines

Using a ruler, connect dot 1, to dot 1, then dot 2, to dot 2 and so on until you can connected all the dots

1 ●

2 ●

3 ●

4 ●

5 ●

6 ●

7 ●

8 ●

9 ●

●

●

●

●

●

●

●

●

●

1

2

3

4

5

6

7

8

9