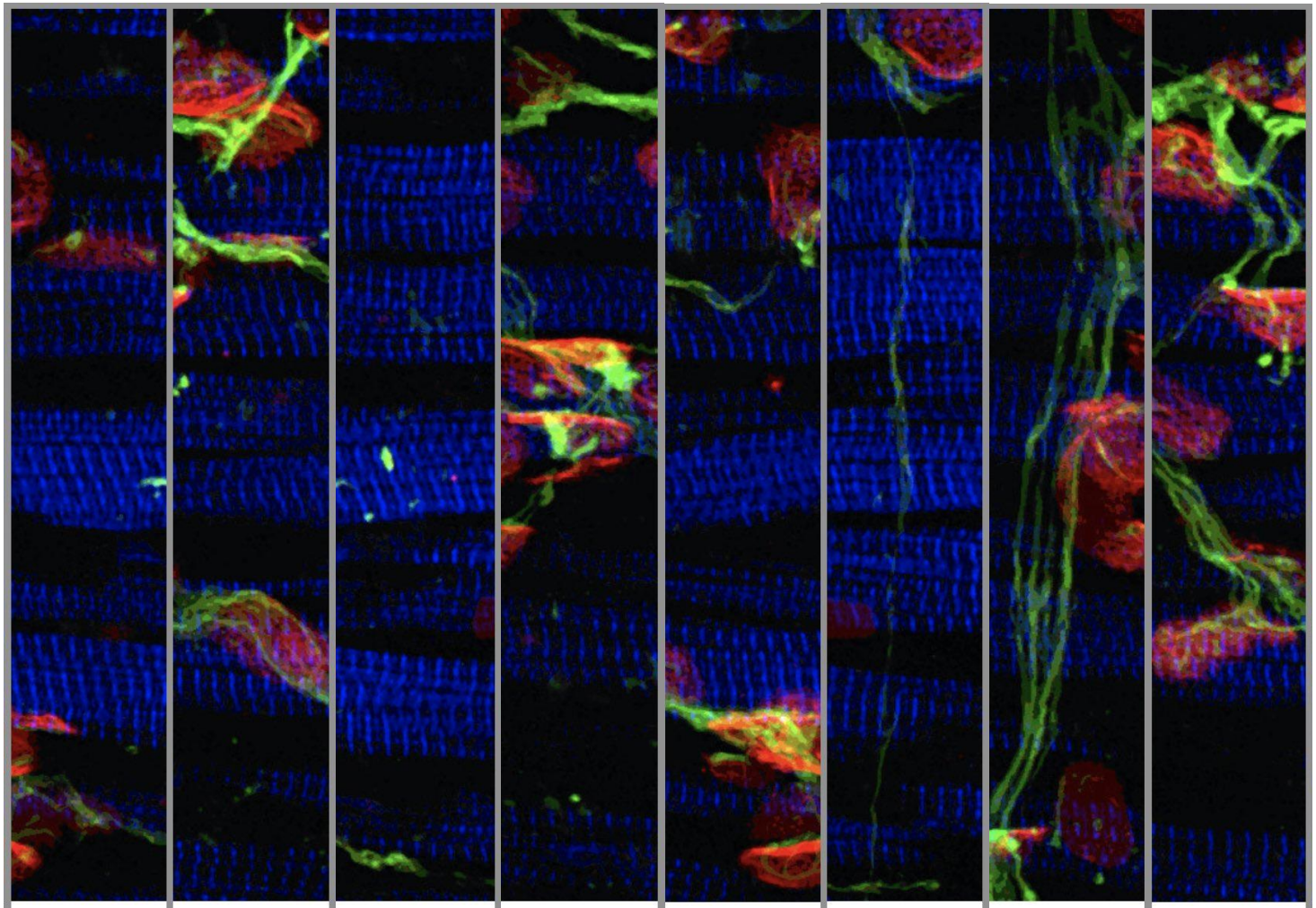


3	2	3.7	1	2.7	4	0.7	1.7
1,000	100	5,000	10	500	10,000	5	50
30	20	35	10	25	40	5	15

SCIENCE SATURDAY

Microscopy Strip Puzzle Image #1

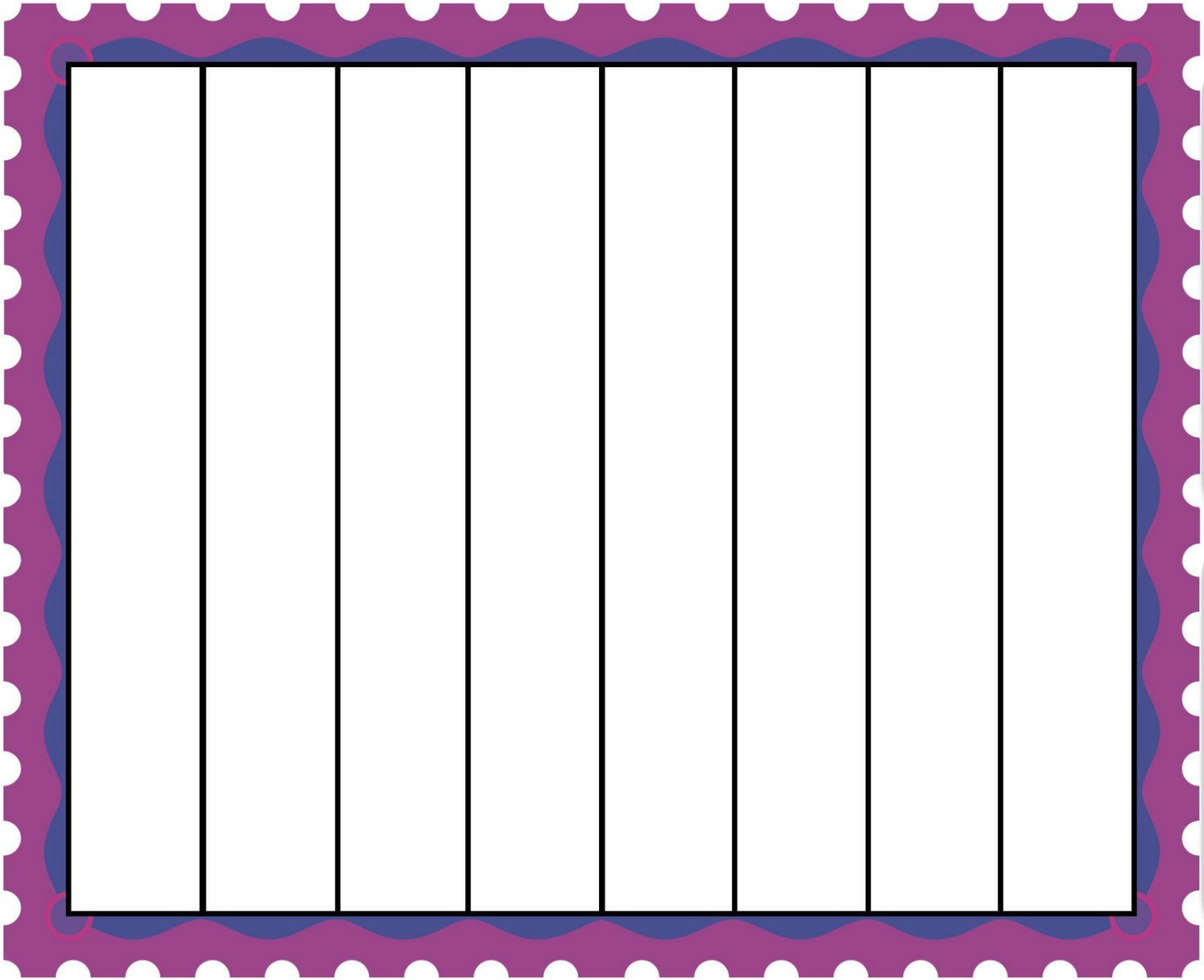
Cut out the image along all of the grey lines (making 8 strips).

Kids can order the strips based on the numbers at the bottom getting *larger* to reassemble the final image.

(Level up: Cut off any rows of numbers that may be easier than the kids are ready for)

Paste them into the template on the next page to make your own scientific art gallery.

Enjoy!



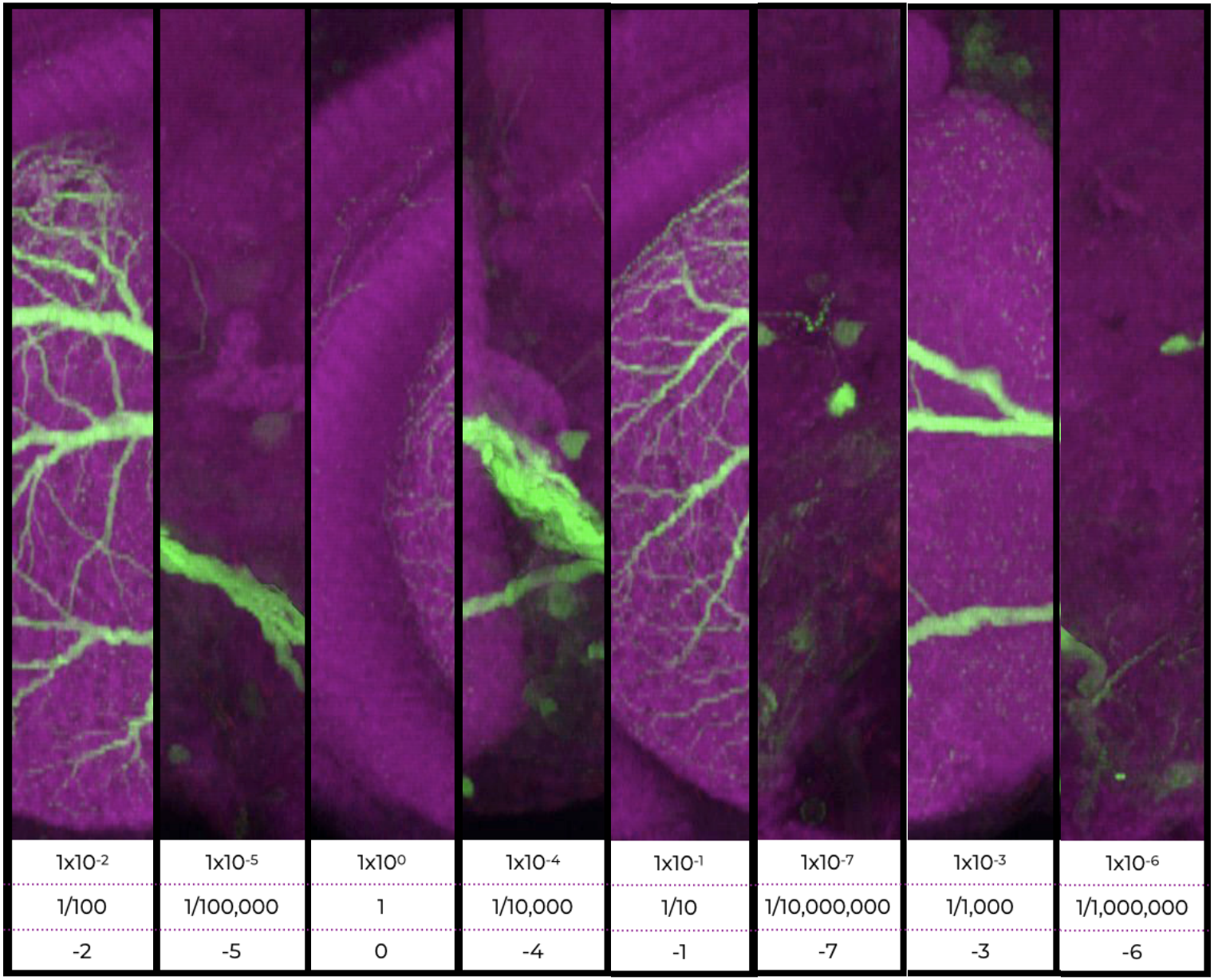
Muscle Fibers

Pseudocolored Image
Blue = muscle fibers
Green = neuron fibers (like wires)
Red = chemical receptor on neurons

Light/fluorescent Microscope

Darnell Lab
Rockefeller University

These scales represent growth by linear or logarithmic scales. The top row is the logarithmic scale of the middle row and can be useful for scientists who want to measure and compare things over many scales (like muscle cells, fibers, and whole muscle in your body).



$1x10^{-2}$	$1x10^{-5}$	$1x10^{0}$	$1x10^{-4}$	$1x10^{-1}$	$1x10^{-7}$	$1x10^{-3}$	$1x10^{-6}$
1/100	1/100,000	1	1/10,000	1/10	1/10,000,000	1/1,000	1/1,000,000
-2	-5	0	-4	-1	-7	-3	-6

SCIENCE SATURDAY

Microscopy Strip Puzzle Image #2

Cut out the image along all of the black lines (making 8 strips).

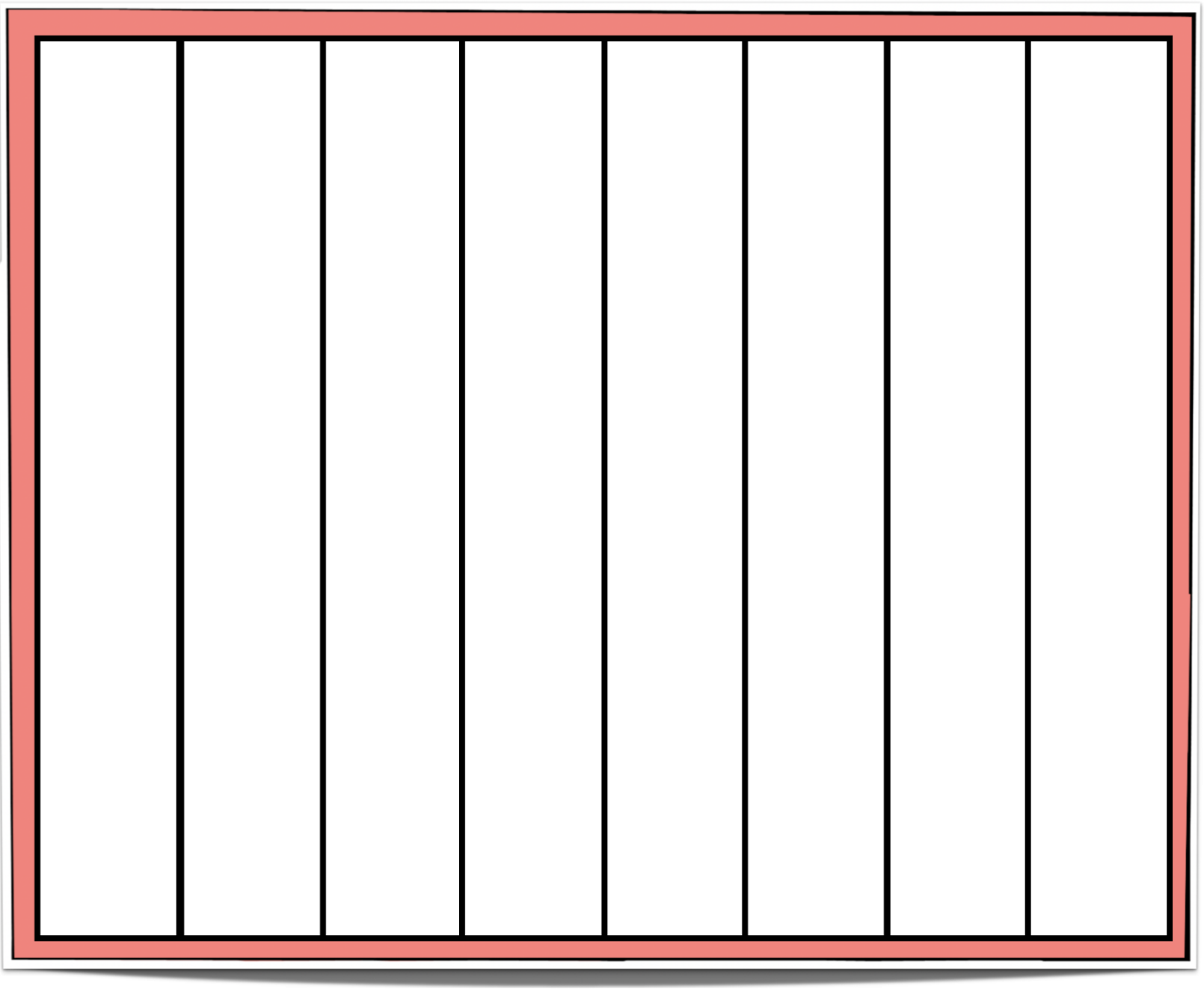
Kids can order the strips based on the numbers at the bottom getting *smaller* to reassemble the final image.

(Level up: Cut off any rows of numbers that may be easier than the kids are ready for)

Paste them into the template on the next page to make your own scientific art gallery.

Enjoy!

Visit rockedu.rockefeller.edu/resource/microscopes



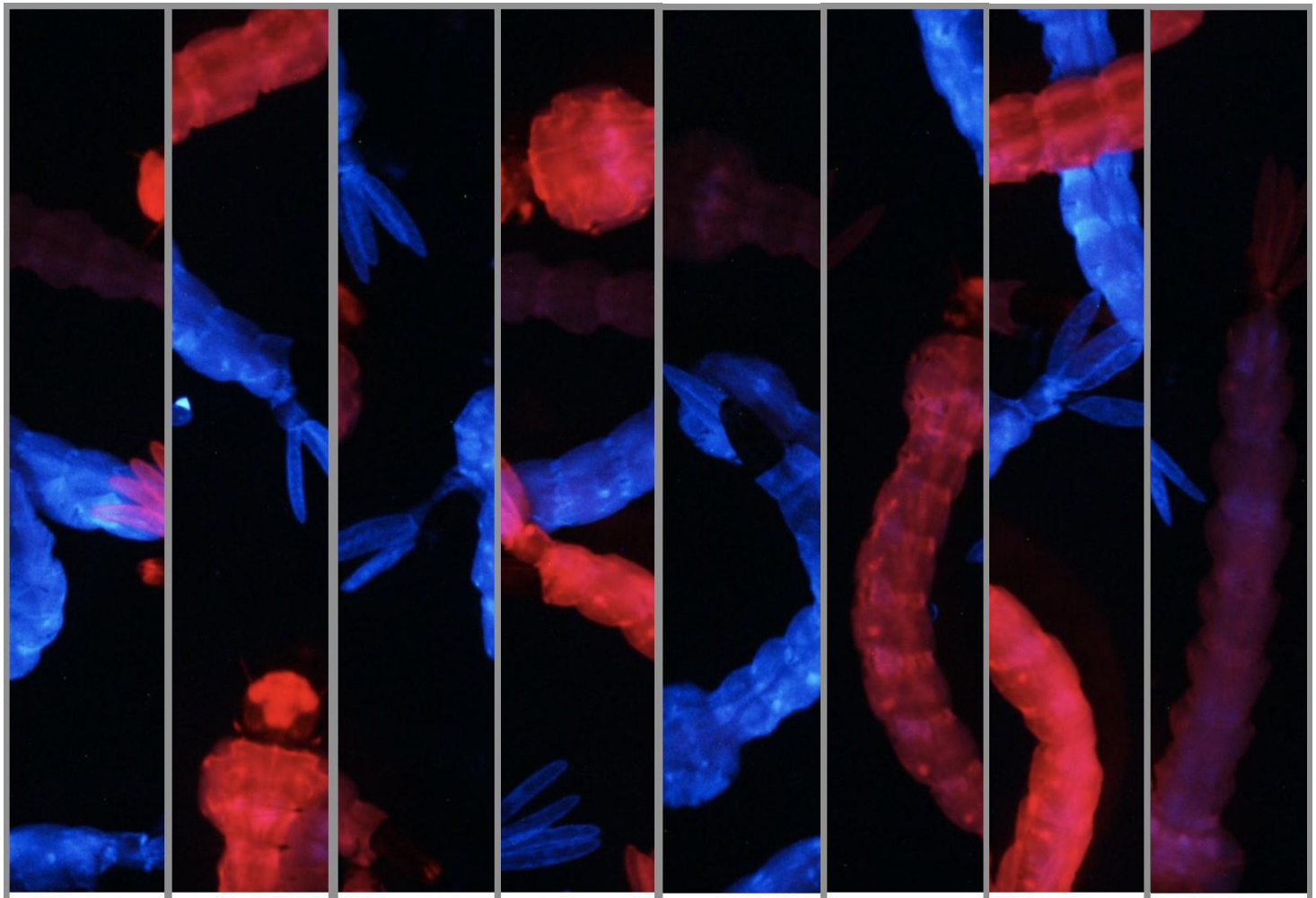
Neurons in a Fly's Brain

Pseudocolor Image
Purple = fly brain
Green = neurons (like wires) that send information about what the fly can see

Fluorescent Microscope

Maimon Lab
Rockefeller University

This scale represents some ways scientists represent smaller and smaller numbers. The top format is called "scientific notation" and the middle format is fraction notation. The bottom row is negative numbers (can you find where there are negative numbers in the top row?)



2^2	2^5	2^8	2^3	2^1	2^7	2^4	2^6
4	32	256	8	2	128	16	64
4	10	16	6	2	14	8	12

SCIENCE SATURDAY

Microscopy Strip Puzzle Image #3

Cut out the image along all of the grey lines (making 8 strips).

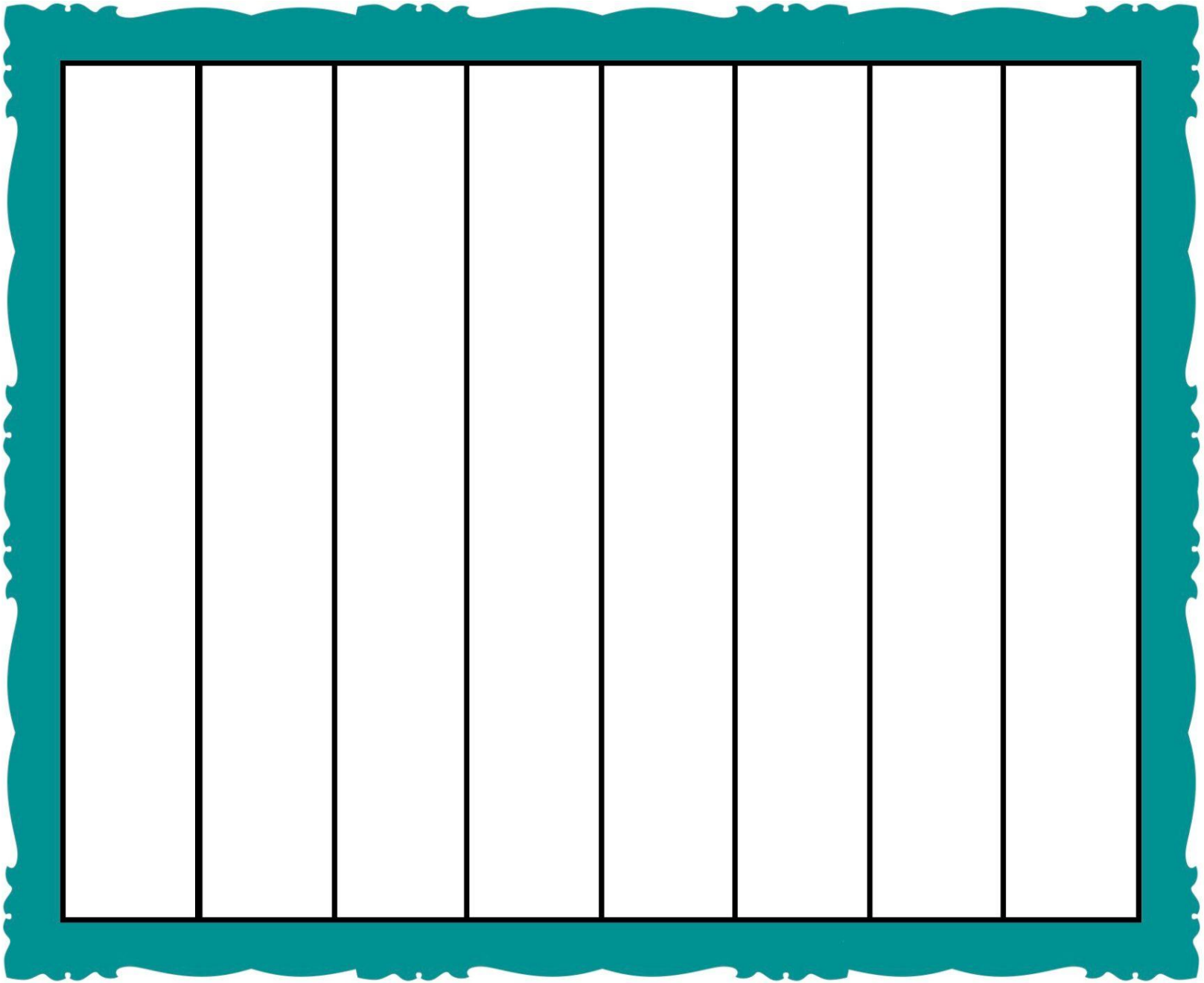
Kids can order the strips based on the numbers at the bottom getting *larger* to reassemble the final image.

(Level up: Cut off any rows of numbers that may be easier than the kids are ready for)

Paste them into the template on the next page to make your own scientific art gallery.

Enjoy!

Visit rockedu.rockefeller.edu/resource/microscopes



Mosquito Larvae

Fluorescent mosquito larvae produced by the CRISPR-Cas9 gene editing technology

Fluorescent Microscope

Voshall Lab
Rockefeller University

These scales represent different ways numerical patterns can grow. The bottom row is linear growth, increasing by 2 each time. The middle and top rows show exponential growth, doubling each time.