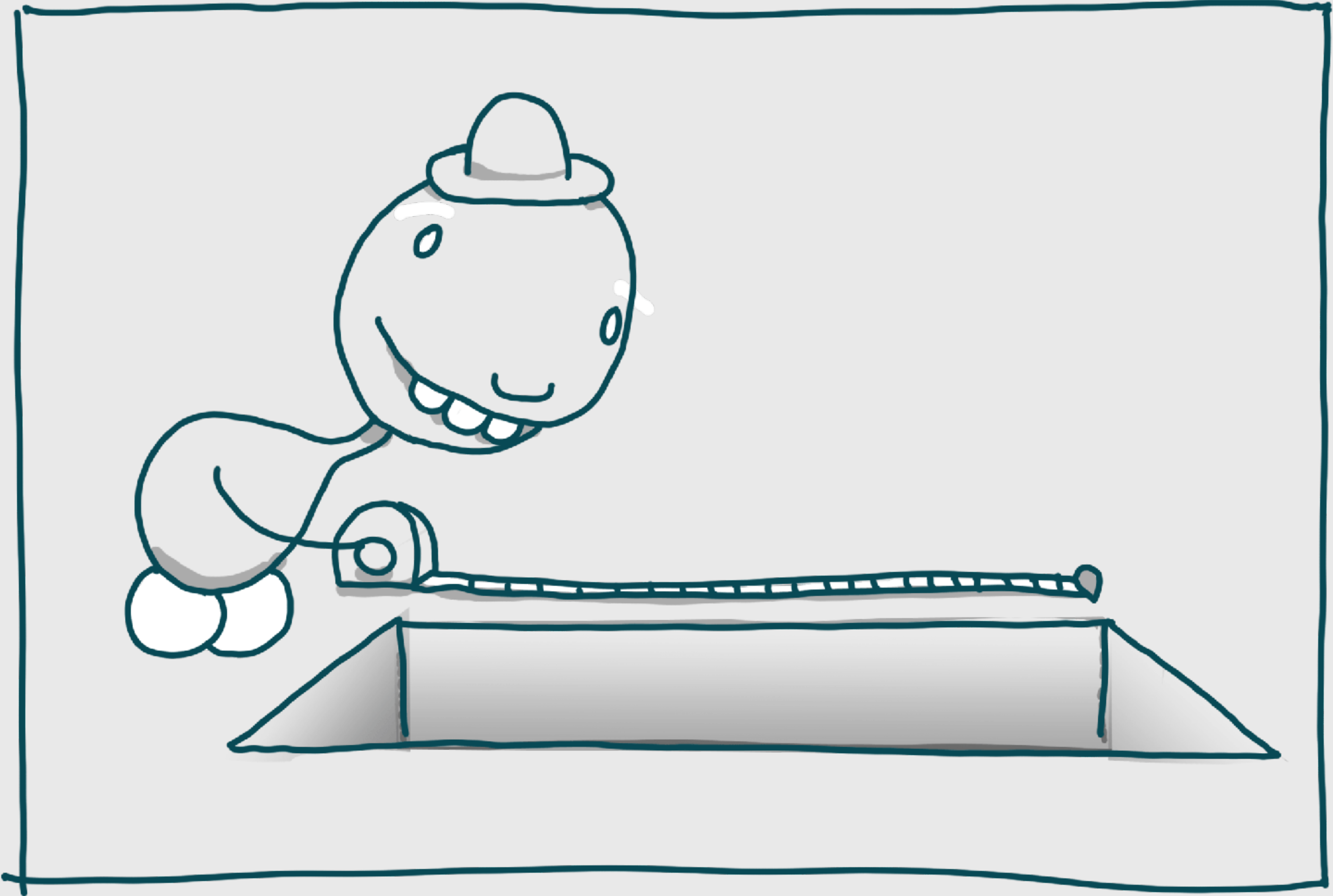
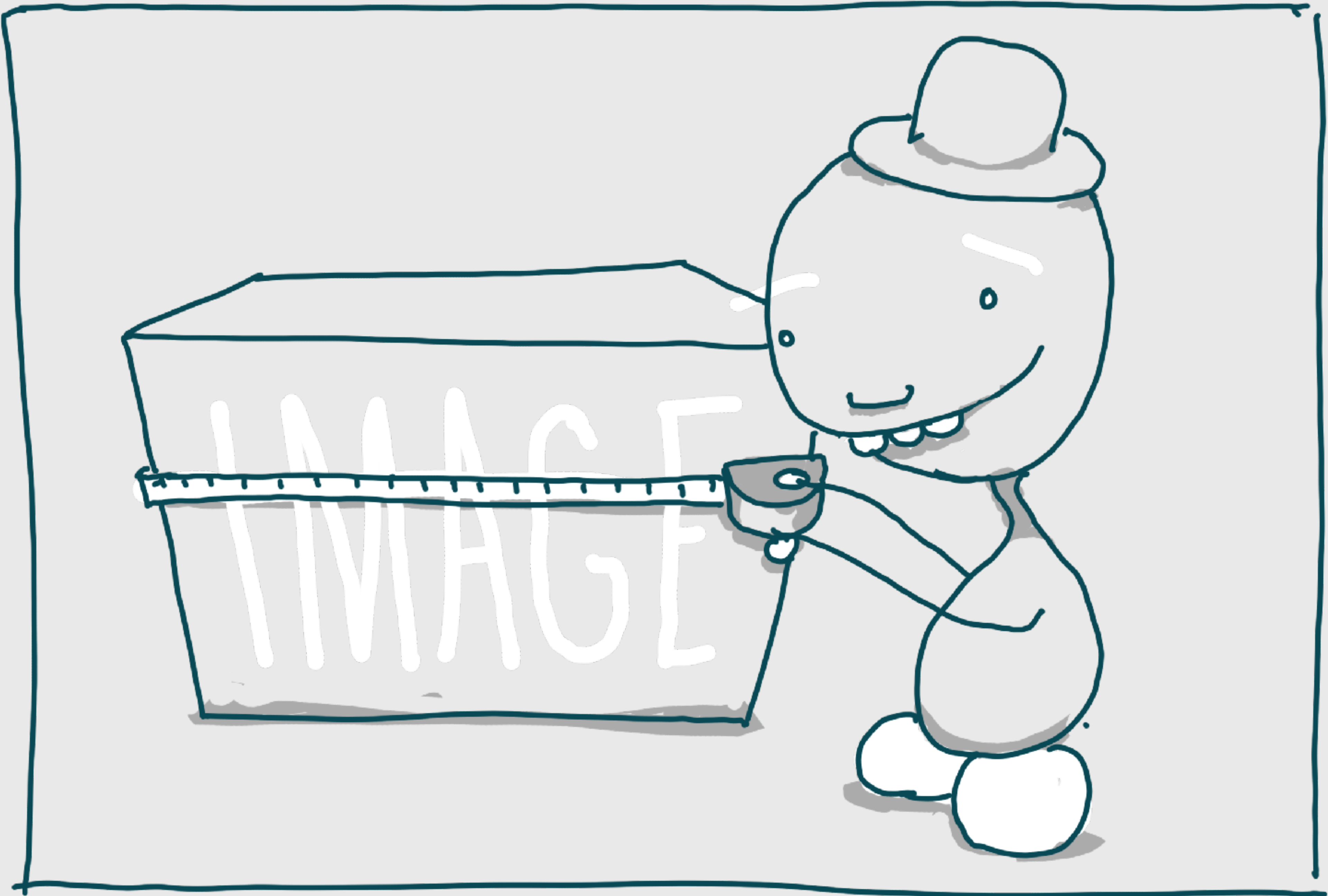
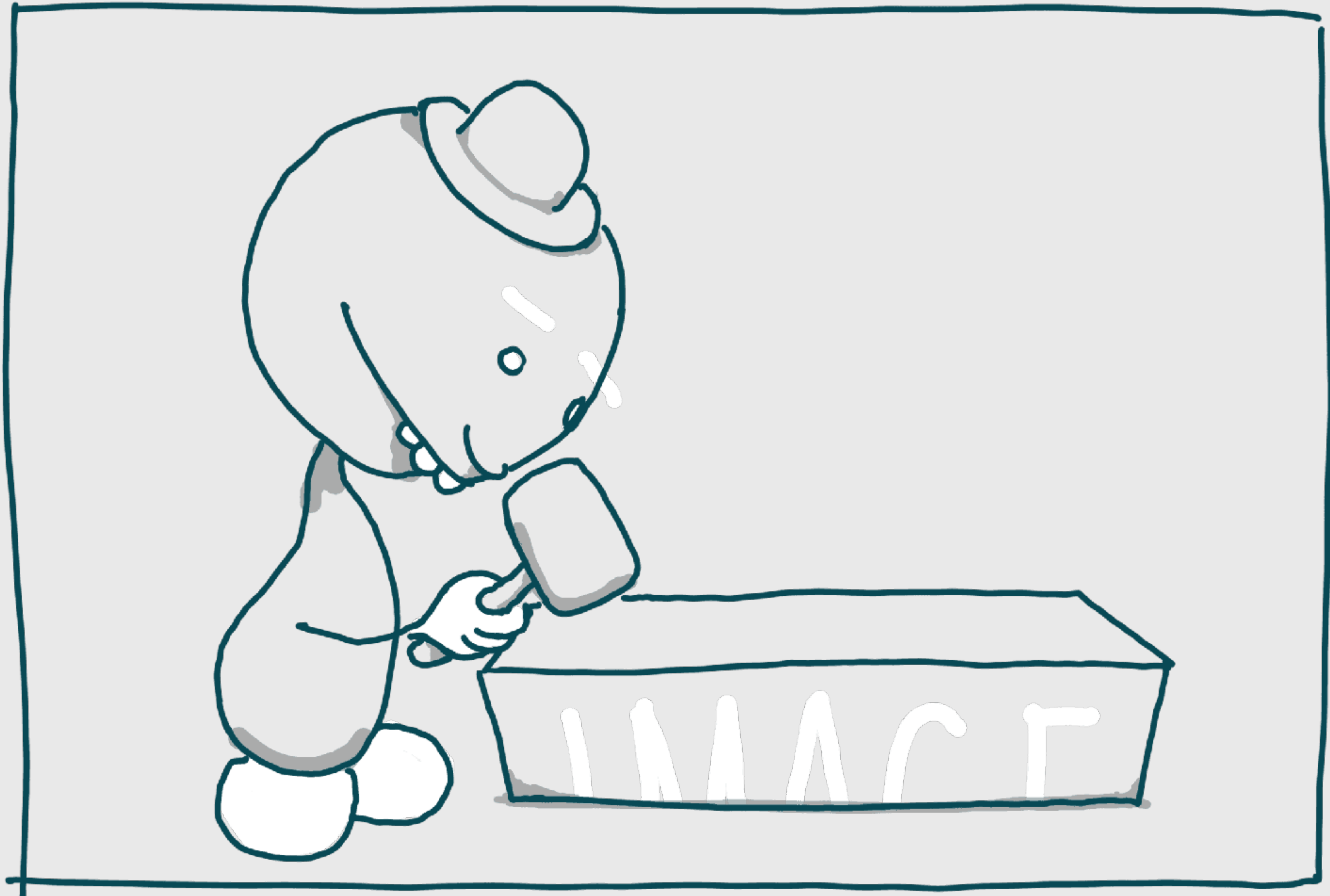


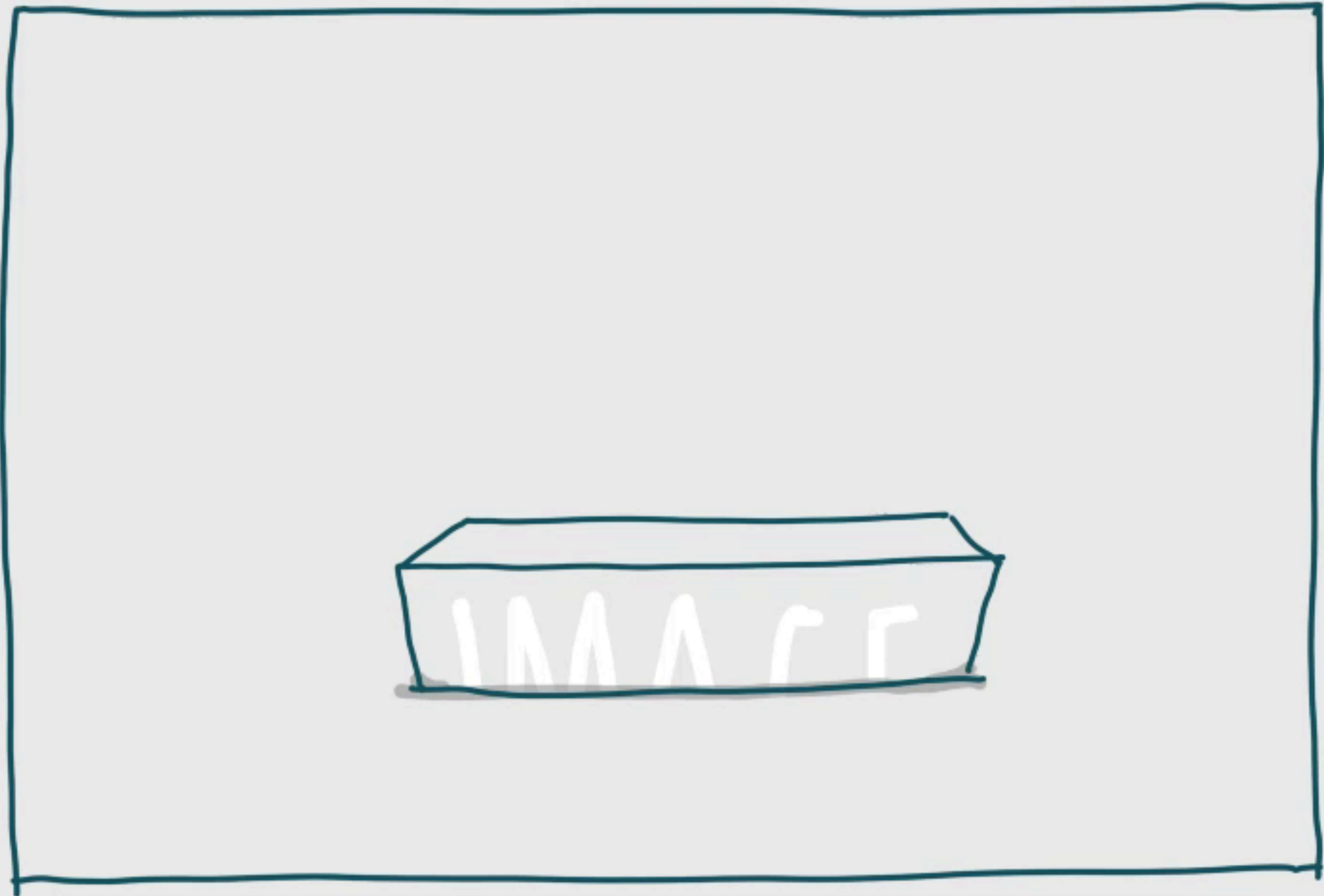
```

```









How can we give the
browser the right
image size?

```

```

fallback for browsers
that don't get srcset

widths of the
image sources

image URLs

browser picks best
source from set,
including retina!



400 x 602
Actual size in page



800 x 1204
73K



2000 x 3010
250K



400 x 602

Actual size in page



600 x 903

42K



800 x 1204

73K



2000 x 3010

250K



400 x 602

Actual size in page



450 x 678

27K



500 x 753

31K



600 x 903

42K



800 x 1204

73K

standard image
size array

```

```

How can we tell the
browser what size our
image will display?

width of window

width of image
when condition matches

```

```

default width
when no
condition
matches

browser uses first
condition that matches

1. At this screen size,

2. I will be displayed at roughly this size.

```

```

3. You can choose from any of these images...

4. ...which are this wide

5. So please pick the best image for right now.

What if we want
different image crops
per breakpoint?



CARS

Aston Martin and Zagato debut a Vanquish Speedster and a Vanquish Shooting Brake

Wait...a Zagato Vanquish Shooting Brake!?!

Staff · a day ago


```
<picture>
```

```
<!-- square aspect ratio -->
```

```
<source media="(max-width: 380px)"
```

```
  sizes="380px"
```

```
  srcset="ferrari-380.jpg 380w,  
         ferrari-760.jpg 760w">
```

```
<!-- 16:9 aspect ratio -->
```

```

```

```
</picture>
```

if this query matches

picture
contains
sources

use these
sources

...else these
sources

What if we want to
support new
image filetypes?

```
<picture>
```

```
<source type="image/webp"
  sizes="(min-width: 1023px) 780px,
        (min-width: 675px) 620px,
        100vw"
  srcset="ferrari-320.webp 320w, ferrari-640.webp 640w,
         ferrari-960.webp 960w, ferrari-1280.webp 1280w,
         ferrari-1920.webp 1920w, ferrari-2560.webp 2560w">
```

if this type is supported

use these
sources

```

```

...else these
sources

```
</picture>
```

What about
browser support?

Srcset and sizes attributes - LS

Usage
Global

% of all users
88.01% + 0.24% = 88.25%

The `srcset` and `sizes` attributes on `img` (or `source`) elements allow authors to define various image resources and "hints" that assist a user agent to determine the most appropriate image source to display (e.g. high-resolution displays, small monitors, etc).

Current aligned Usage relative Date relative Show all

IE	Edge *	Firefox	Chrome	Safari	iOS Safari *	Opera Mini *	Chrome for Android	UC Browser for Android	Samsung Internet
			49						
			63						
			67		10.3				
		61	68		11.2				4
11	17	62	69	11.1	11.4	all	67	11.8	7.2
	18	63	70	12	12				
		64	71	TP					
			72						

Learn More

- `srcset` and `sizes` by Eric Portis:
ericportis.com/posts/2014/srcset-sizes
- Responsive Images 101 by Jason Grigsby:
cloudfour.com/thinks/responsive-images-101-definitions
- The Anatomy of Responsive Images by Jake Archibald:
jakearchibald.com/2015/anatomy-of-responsive-images