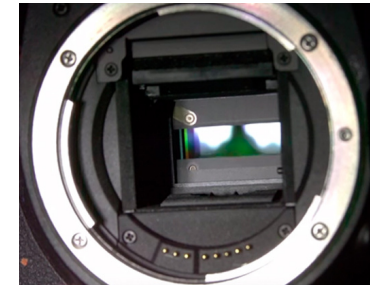


Exposure time (a.k.a. shutter speed):

The time the shutter is open



detecter.com

Dancing pig, all at ISO 100. Light overcast.



0.5 sec at f / 32



1/4 sec at f / 32



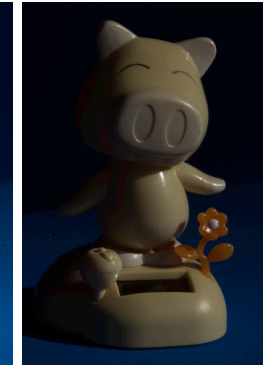
1/8 sec at f / 32



1/15 sec at f / 32



1/25 sec at f / 32



1/50 sec at f / 32

T. Riseman

Bulb or timer	15s 10s	5s 1s	1/25s 1/50s	1/100 1/250	1/500s 1/1000s	1/2000s 1/8000s
	Night		Outdoors			Sports
Light painting	Blurry shots		Family shots			Action shots
Star streaks	Low light		Sunny days			Wildlife
Lighter						Darker

Tip: Hand shake! Start with exposure time

1/n s equal to zoom n mm

Ray tracing with spaghetti.

Same aperture. Pretend exposure times of $1/100$ s and $1/50$ s; 1 stop apart. (Really 0.00000000043 s and 0.00000000085 s!) The longer spaghetti/exposure time will make twice as bright a photo.



Ordinary photo. $1/80$ s at $f/5.6$, ISO 3200

T. Riseman

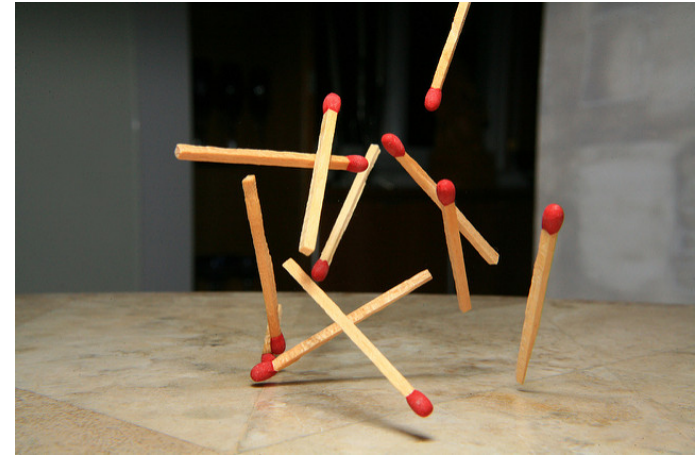
Motion blur from long time



Nevit Dilmen

$1/500$ s, $1/30$ s, and $1/4$ s.

Short time: Freeze motion



Laszlo Ilyes

$1/200$ s at $f/25$, ISO 1000, TTL Flash
28-105mm lens, with +4 diopter filter

Star Trails, Fireworks and Light Painting: Adjusting time changes length of streaks not local brightness!



T. Riseman

1 s at $f/11$, ISO 200