

Here are some sample accelerations.

<http://physics.info/acceleration/>

Acceleration of selected events (smallest to largest)	
$a$ (m/s <sup>2</sup> )	event
$5 \times 10^{-14}$	smallest acceleration in a scientific experiment
$2 \times 10^{-10}$	galactic acceleration at the sun
$9 \times 10^{-10}$	anomalous acceleration of pioneer spacecraft
<u>0.5</u>	elevator, hydraulic
<u>0.6</u>	free fall acceleration on pluto
<u>1</u>	elevator, cable
<u>1.6</u>	free fall acceleration on the moon
<u>8.8</u>	International Space Station
<u>3.7</u>	free fall acceleration on mars
9.8	free fall acceleration on earth
<u>10–40</u>	manned rocket at launch
<u>20</u>	space shuttle, peak
<u>24.8</u>	free fall acceleration on jupiter
<u>20–50</u>	roller coaster
80	limit of sustained human tolerance
<u>0–150</u>	human training centrifuge
100–200	ejection seat
<u>270</u>	free fall acceleration on the sun
<u>600</u>	airbags automatically deploy
$10^4$ – $10^6$	medical centrifuge
<u>10<sup>6</sup></u>	bullet in the barrel of a gun
<u>10<sup>6</sup></u>	free fall acceleration on a white dwarf star
<u>10<sup>12</sup></u>	free fall acceleration on a neutron star

### Automotive acceleration (g) (δηλ. οι πιο κάτω τιμές πολλαπλασιάζονται με g)

event	typical car	sports car	F-1 race car	large truck
starting	0.3–0.5	0.5–0.9	1.7	< 0.2
braking	0.8–1.0	1.0–1.3	2	~ 0.6
cornering	0.7–0.9	0.9–1.0	3	??

### Acceleration and the Human Body

<b><i>a</i> (g)</b>	<b>event</b>
2.9	sneeze
3.5	cough
3.6	crowd jostle
4.1	slap on back
8.1	hop off step
10.1	plop down in chair
60	chest acceleration during car crash at 48 km/h with airbag, design limit
70–100	crash that killed Diana, Princess of Wales, 1997
150–200	head acceleration limit during bicycle crash with helmet