

Prize Winner

Science Writing Year R-2

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Low Gravity Olympics? By Felix Anderson

You have probably heard of gravity, the invisible force that keeps things on the ground. Compared to Earth, the gravitational attraction on the Moon is lower because it is less dense than Earth. This means that everything weighs less on the Moon.

Consider this: low gravity, on the Moon, the year 2042, featuring the Moon Olympics! What will that be like? Would the javelin go into orbit? Could swimming even be possible? Wouldn't weightlifting be the easiest event?

A person can jump 6 times higher on the Moon than on Earth because on the Moon there is lower gravity. This would mean the men's high jump would have to be won with a jump of over 14 meters high. Whoa!

Since the Earth Olympics takes 17 days to complete, the Moon Olympics could be done in half a Moon day because a Moon day is 29.5 Earth days and it could even be mighty hot - as hot as 126.6 degrees! Whew!

Each competitor would don their suit and doff it at the end, no coloured space suits here because white spacesuits reflect the sun's light, keeping the hot temperatures away. I'd like to see a special Moon Olympics event. Crater Hurdles? Can't do that on Earth! Time to get training! Off to the Sonny Carter Training Facility I go!



Moon jumping. Source: <u>www.artstation.com/artwork/eVx6P</u>

References:

Websites:

 $\underline{https://earthobservatory.nasa.gov/features/GRACE/page2.php\#:\sim:text=Not\%20only\%20is\%20the\%20Moon,weights\%20less\%20on\%20the\%20Moon.}$

 $\frac{\text{https://www.nasa.gov/audience/foreducators/spacesuits/facts/index.html\#:} \sim : text = A\%20 spacesuit\%20 weighs\%20 approximately\%20280, that\%20 help\%20 keep\%20 astronauts\%20 cool.}$

https://www.nasa.gov/centers/johnson/news/releases/1996_1998/j97-18.html

https://worldathletics.org/records/by-discipline/jumps/high-jump/outdoor/men

https://starlust.org/how-do-astronauts-train-for-zero-gravity-environments/

Book:

The moon: Discover the mysteries of Earth's closest neighbour. Written by Dr Sanlyn Buxrner, Dr Pamela Gay and Dr Georgiana Kramer.