

A mole is an animal that burrows in the ground,
Or a spot on your chin that you gotta shave around.
But there's another kind of mole of interest to me,
That's the kind of mole they use in chemistry.

Chorus: A mole is a unit, or have you heard,
 Containing six times ten to the twenty-third,
 That's a six with twenty-three zeros at the end,
 Much too big a number to comprehend.

Say you had a mole of pennies to distribute 'round the world,
Give to each of the six billion grown-ups, boys and girls,
There wouldn't be a single soul down and out of luck,
Cause everybody in the world would get a trillion bucks.

Or say you had a mole of paper and stacked it toward the sky,
Paper's awful thin, but that pile would get so high,
It'd reach up into outer space, in fact I think you'd find,
It'd go up to the moon and back, eighty billion times.

Chorus

Suppose a mole of marshmallows fell upon the planet,
Over each square inch of land and sea, think that you could stand it?
The layer would be twelve miles high and of course block out the sun,
We're talking close to five million trillion tons.

Well, maybe we could save ourselves if we all started eatin',
One marshmallow each second, not two cause that'd be cheatin'.
With six billion people munching, how long do you think it'd take?
Forty million years –and that's without a bathroom break.

Chorus

But say you had a mole of atoms, would the pile be immense,
Should I say the answer now, or leave you in suspense?
Well, atoms are so very, very small, you understand,
You could hold a mole of atoms in the palm of your hand.

So shake a little sugar in the middle of your palm,
Now you don't want to spill it, so try and stay calm.
You hardly can imagine and barely realize,
There're more atoms in that sugar than stars up in the sky.

Chorus