

## Answer on Question #68399 - Chemistry – General Chemistry

### Question:

How many moles are in 12 grams of lithium?

### Solution:

Lithium (3<sup>rd</sup> element in the Periodic Table) has standard atomic weight  $A_r = 6.94$ . This means that 1 mole of Li weighs 6.94 grams. Then  $x$  moles of Li weighs  $x A_r = m$ , which is 12 grams. By rearranging the identity, we'll get that number of moles:

$$x = \frac{m}{A_r} = \frac{12}{6.94} = 1.729$$

### Answer:

There are 1.729 moles in 12 grams of lithium.

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