

In learning math we are constantly bombarded with numerous definitions for mathematical objects, and you might wonder how a mathematician would come up with such objects. Believe it or not, but many mathematical objects are created in response to physical phenomenon. Sequences and series are no exception; you encounter these objects on a daily basis. I would like you to become a math explorer and hunt down an infinite sequence of numbers you have recently encountered in your life and respond to the following:

1. Write down six terms of your sequence and describe where these numbers came from. Talk about whether you think this sequence converges or diverges.
2. Use these six terms in a series and compute the first six partial sums. Talk about whether you think this new sequence of partial sums converges or diverges.