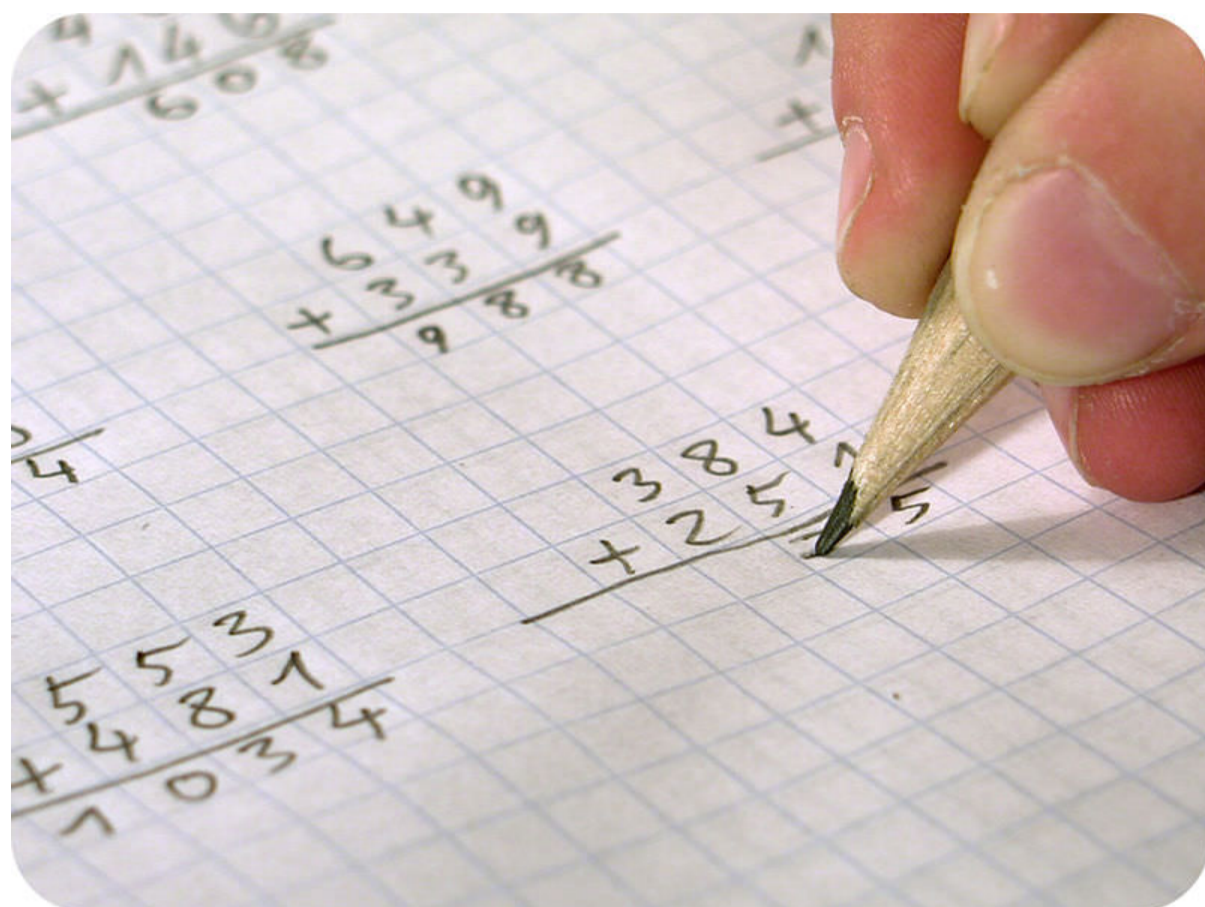


Replication in Science

<https://www.ck12.org/chemistry/replication-in-science/lesson/Replication-in-Science-MS-PS>



Did a math teacher ever tell you to check your work? If you're adding numbers, that means repeating the calculation to see if you get the same answer the second time. If you get the same result twice, then the answer is probably correct. But if you get a different answer the second time, at least one of the results must be incorrect. Then you have to add the numbers a third time and hope that the third answer will agree with one of the other two.

Replication

Scientists also have to “check their work.” The results of an investigation are not likely to be well accepted unless the investigation is repeated—usually many times—and the same result is always obtained. Getting the same result when an experiment is repeated is called **replication**. Similarly, getting the same result when a data analysis is repeated is also called replication.

If research results, including data analyses, can be replicated, it means they are more likely to be correct.