**Counting Major Impacts**

**Data gathering**
1. Where is the best place to count major impact craters (Earth, the Moon)?
2. Maria were formed approximately 4 billion years ago. Why is this information needed to calculate frequency?
3. How big is a “major” impact crater?
4. Record the number of major impact craters you found.

**Data processing**
5. What is the class average of craters counted in the maria?
6. Multiply the average number of craters counted in the maria by 4 because maria represent approximately one-fourth of the Moon’s surface. How many major impacts hit the entire Moon during those 4 billion years?

**Conclusion**
7. How many major impacts hit Earth in that same period of time (4 billion years)? Hint: The surface of Earth is approximately 16 times larger than the surface of the Moon.
8. On average, how many years are there between major impacts on Earth?
9. What effect do you think a major impact would have on Earth today?