

Reading Guide for November 3

from Gribbin and Gribbin, *From Here to Infinity*

Introduction. A Brief History of Astronomy

pp. 2–3. This unveils some of the “big picture” ideas uncovered by astronomy.

Stop for a moment to consider what it means that astronomers have actually found out how we got here, and how. For what it’s worth, these were all learned in the past century, many in only the last few decades. The ball really began to roll with...

pp. 3-6. *The Birth of Astronomy*. Of course Galileo did not single-handedly create the science of astronomy, but he did give it a really big boost.

- How did Galileo convince people that the heavens were not perfect?
- How did Galileo prove that Venus orbits the Sun?
- What other facts about the heavens did Galileo first discover?

pp. 6–10. *Beyond the Solar System*. This describes some crucial facts about space, but even more importantly explains key aspects about the scientific process. This isn’t the first time the book mentions it, but stop to consider it now: What is the difference between a **hypothesis** and a scientific **theory**?

- What role does technology play in the advance of science?

The next topic, **triangulation**, is not given its own section, but it ought to be. The technique is explained on pp. 8–9. It is a surveying technique to determine an unknown distance from an angle and a known distance. We will go over it in some detail in class, but try to get an idea of how it works from the text.