

Schooled by Robert Boyle

Read the following passage from Robert Boyle's essay, "Of the Usefulness of Experimental Philosophy,"¹ then answer the reflection questions.

The two chief advantages, which a real acquaintance with nature brings to our minds, are, first, by instructing our understandings and gratifying our curiosities; and next, by exciting and cherishing our devotion... And therefore I cannot much wonder, that the famous Archimedes lighting in a bath upon an [answer] to resolve a perplexing difficulty in natural philosophy, should leap out of the bath, and run unclothed like a madman, crying nothing but "Eureka, Eureka, I have found it, I have found it..."

How boundless a power, or rather what an almightiness is eminently displayed in God's making out of nothing all things, and without materials or instruments constructing this immense fabric of the world... I say, this globe of earth and water seems to us so vast, astronomers teach us, that it is but a point in comparison of the immensity of heaven... And therefore upon such considerations, and because the most modest computation allows the firmament² to be great enough to make the earth but a point in comparison to it; it will be safe enough, as well as just, to conclude with the Psalmist, *Great is the Lord, and greatly to be praised; and his greatness is unsearchable...*

And though the omnipotent³ Creator be able to make swimming creatures of such prodigious bigness, that the ocean itself may seem to be but a proportionate pond for such fishes, yet is the same omniscient⁴ [Creator] as able to make a swimming engine more slender than a cheese-mite, and so little, that the small part of a grain may outweigh [many] of them... We trample upon many things, for which we should have cause to kneel, and offer God praises, if we knew all their qualities and uses.,,

So numberless a multitude, and so great a variety of birds, beasts, fishes, reptiles, herbs, shrubs, trees, stones, metals, minerals, stars, etc... which do all of them deserve that extensive exclamation of the Psalmist, *How manifold are thy works, O Lord; in wisdom hast thou made them all.* And therefore I shall content myself to observe in general, that, as highly as some naturalists are pleased to value their own knowledge, it can at best... understand and applaud, not emulate the productions of God... For the works of God are not like the tricks of jugglers, or the pageants, that entertain princes... the further we contemplate them, the more footsteps and impressions we discover of the perfections of their Creator; and our utmost science can but give us a more just veneration⁵ of his omniscience.

¹ Taken from: Robert Boyle. "Of the Usefulness of Experimental Philosophy, principally as it relates to the Mind of Man." Printed for A. Millar, London: 1744. Reprinted by Kessinger Publishing. pp. 423-462.

² Outer space

³ All-powerful

⁴ All-knowing

⁵ Respect



Reflection Questions

Name: _____

After reading the above passage from the pen of Robert Boyle, give detailed answers to the following questions. Please include a specific quote from the essay in each answer.

1. In the first paragraph, what does Boyle say are two major motivations for science?
2. Why does the madman run through the street naked? Can you relate?
3. In the second paragraph, what does Boyle conclude from huge objects we see?
4. In the third paragraph, what do the tiny creatures in nature inspire Boyle to do?
5. In the last paragraph, what does Boyle say is the best thing that science can give us?
6. Do you agree with anything Boyle said in this essay? Why or why not?

