Questions:

1. Just referring to your personal knowledge, how similar or different do you think the invention process is today to that in Watt’s time?

2. Do you think that Watt’s situation was unique to circumstance? Is all invention unique to circumstance?

3. Do you think that if Watt had never entered the instrument making business that progress would have happened in a similar fashion?

4. The first two laws of thermodynamics can be considered as a direct result of the invention of the steam engine (Briefly- Law 1: Energy cannot be created or destroyed- it is conserved and must be accounted for. Law 2: Entropy always increases: you cannot make a cool thing hot without adding energy). These laws have had a significant impact on science. Given that, there are two questions:

   a. How do you feel about these laws now that you know the impetus?
   b. Given Watt’s relationship to the Newcomen engine, what relationship would you consider Watt to have with the Thermodynamic laws? Do the laws piggy-back on Watt’s inventions? Did Watt just open a path to thinking about energy laws?

5. What do you think about the following statement: Single mindedness in the trade of instrument making signals commercial death?

6. What do you think about the importance of an apprenticeship with a mentor with many skills or with a few specialized skills?

7. Should you go away from your home town to excel in your profession? What will be the driving force for you if you decide to do so? Importance of place in terms of available resources? Mentors? Locale?

8. What is the importance of quality in the work you do? Start from the following concept “importance of the “degree of accuracy” in instrument making which is not needed for everyday use.” Think about the statement: “accuracy delivers reliability, security, and longevity.” Give a modern day example for this concept.

9. When can (will) you start dreaming your own business?

10. What do you think about the importance of connection in business?

11. Think about the following statement: “Certainties of Greenock vs. intellectual prospect of Glasgow”. What does it say? How would you apply it to your life?
Write-up Question for Friday, August 31 (About a page)

Do you relate to or resonate with James Watt? What aspect of Watt’s personality can you see reflected in yourself? Do you have any idea about the development/impact of the steam engine? Do you relate to the business of steam engine? Do you relate to Joseph Black’s position as a scientist? Do you see the book as a lesson in history or in engineering?