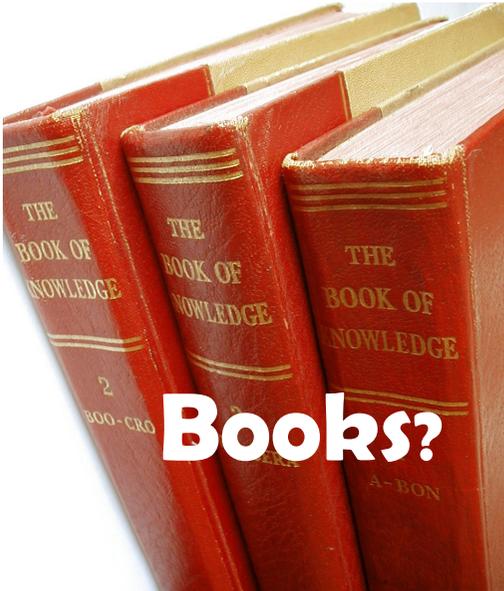
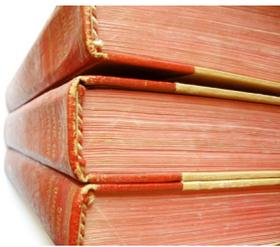
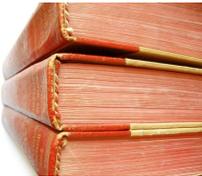


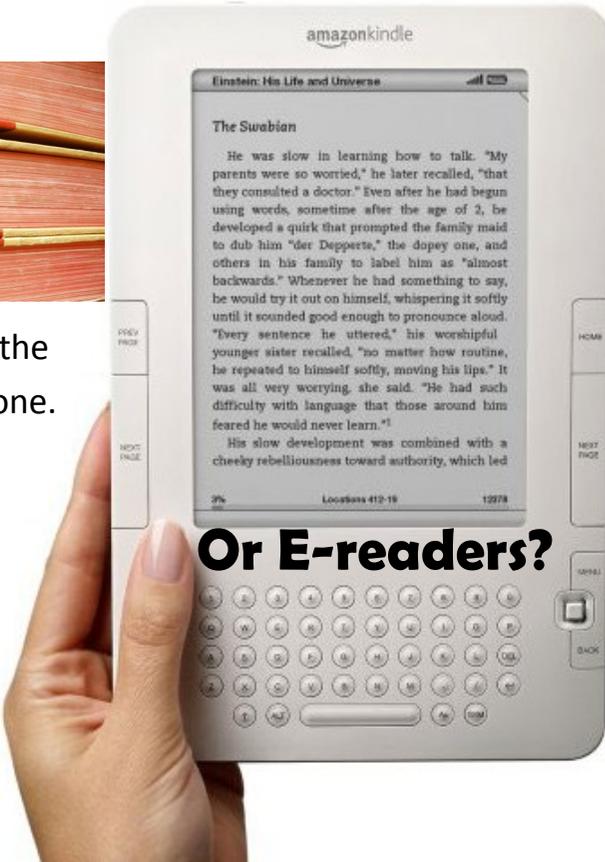
# Which is more sustainable ....



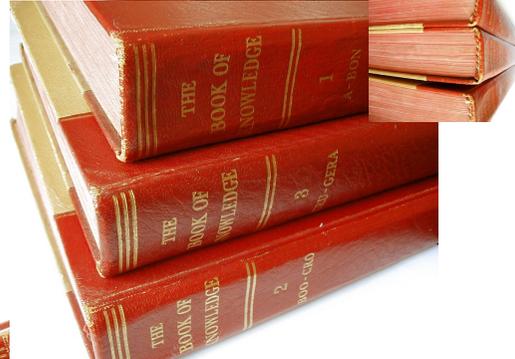
**Books?**



Publishing books added up to 16.5 billion pounds of greenhouse gas emissions in the year 2008 alone.



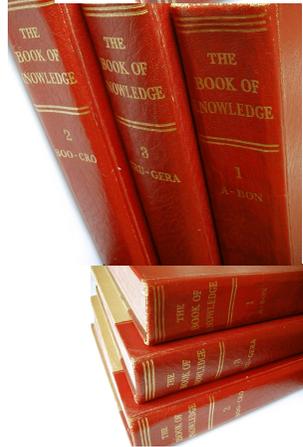
**Or E-readers?**



**Don't forget about your library!**

Borrowing books at your local library can reduce your carbon footprint by re-using already-existing books that are made without conflict minerals or plastic.

In 2009, the amount of CO<sub>2</sub>e (carbon dioxide equivalents) that e-readers produced was about equal to the amount that they prevented. It is projected that by 2012, however, that the amount of CO<sub>2</sub> emissions prevented by less production of physical books will more than double the CO<sub>2</sub> emissions by e-readers.



Information from: *Ritch, Emma. The Environmental Impact of Amazon's Kindle. 2009. Cleantech.com*

<http://www ereader-zone.com/kindle-videos/amazon-kindle-20-official-pictures/attachment/>

<http://www.freeimages.co.uk/>



# Let's Compare...

	Books	E-Readers
CO <sub>2</sub> e emitted per unit	8.85 pounds (Green Press Initiative) or 16.5 pounds (according to Cleantech)	<u>Kindle</u> = 370 pounds carbon dioxide equivalents in its lifetime. (That's the energy it takes to make 42 paper books)  <u>iPad</u> = 287 pounds during its lifecycle (estimated to offset 32.4 printed books)  ⇒ Some estimates of a 100 book offset
Other Environmental and Ethical Concerns	Water Pollution—publishing books and magazines produces 153 gallons of wastewater per year.  We can improve the production of books by increasing the amounts of recycled fibers used to produce them, by preventing overproduction, and by decreasing the amount of paper needed to produce a book.	<ul style="list-style-type: none"> <li>• <u>Mining</u>— some materials used to produce electronics, such as columbite and tantalite, are mined in warring regions of Africa</li> <li>• <u>Improper disposal of e-waste</u> ⇒ Companies with “recycling” programs sometimes ship the old product to third-world countries to be taken apart by children in unsafe conditions. The children remove the most valuable elements and the rest are thrown in landfills, releasing toxins in their environment.</li> <li>• Toxic parts— Goleman and Norris estimate the health impact of an e-reader to be 70 times that of a printed book</li> </ul>
Carbon Footprint Per Read depends on your reading habits	<ul style="list-style-type: none"> <li>• Re-using a book over and over from the LIBRARY or sharing with your friends reduces the book's carbon footprint per “read.”</li> <li>• 8.85 pounds / # of times read = carbon footprint per read.</li> <li>• If you read less than 22.5 books per year, and you re-use books more than you buy new, then books may be the better option. (Cleantech)</li> </ul>	<ul style="list-style-type: none"> <li>• E-readers with e-ink technology only require electricity to change the text on a page. This is a plus because it means that you do not use more energy if you are a slow reader.</li> <li>• The more e-books you read on one e-reader, the better. A kindle owner that reads 100 books in a year is 100x more eco-friendly than a kindle owner who reads one book (Green Press Initiative). If you read more than 22.5 books per year, and are planning on buying a new version of every book you read, then after one year an e-book could be the more environmentally friendly option.</li> </ul>
	Information from Green Press Initiative	

