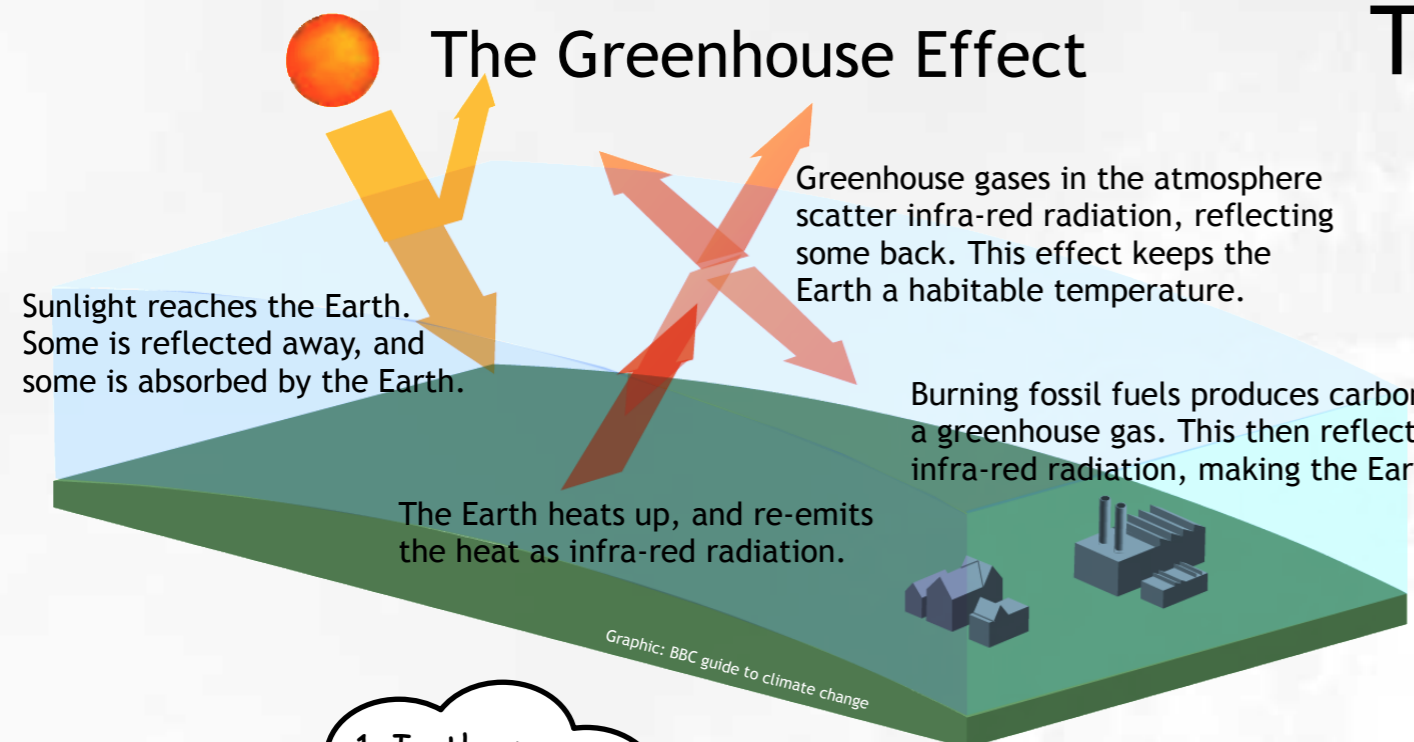
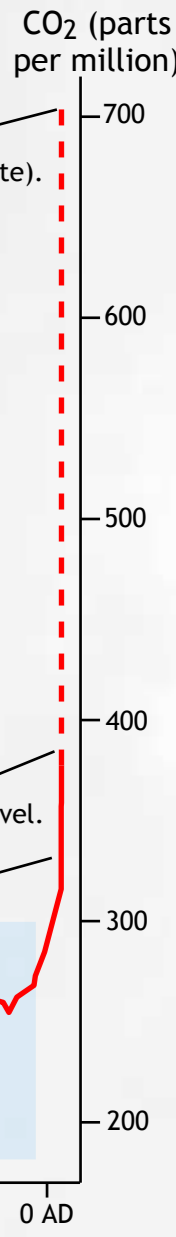
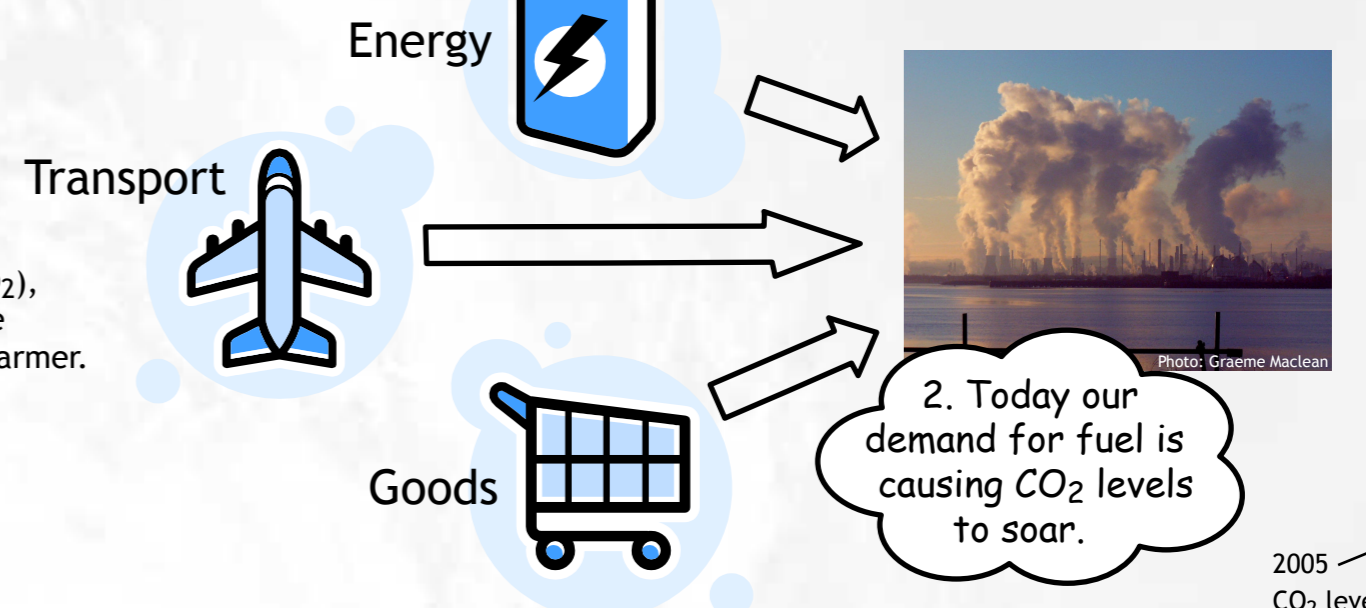


The Science Of Climate Change

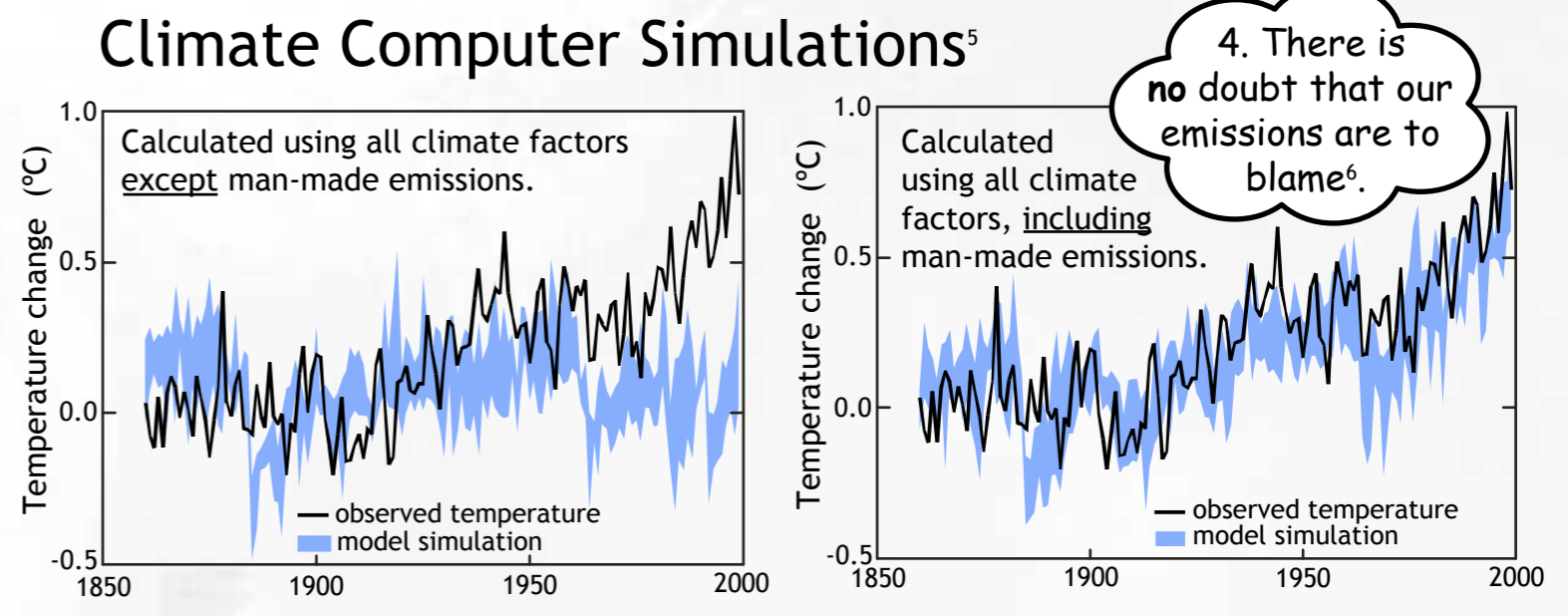
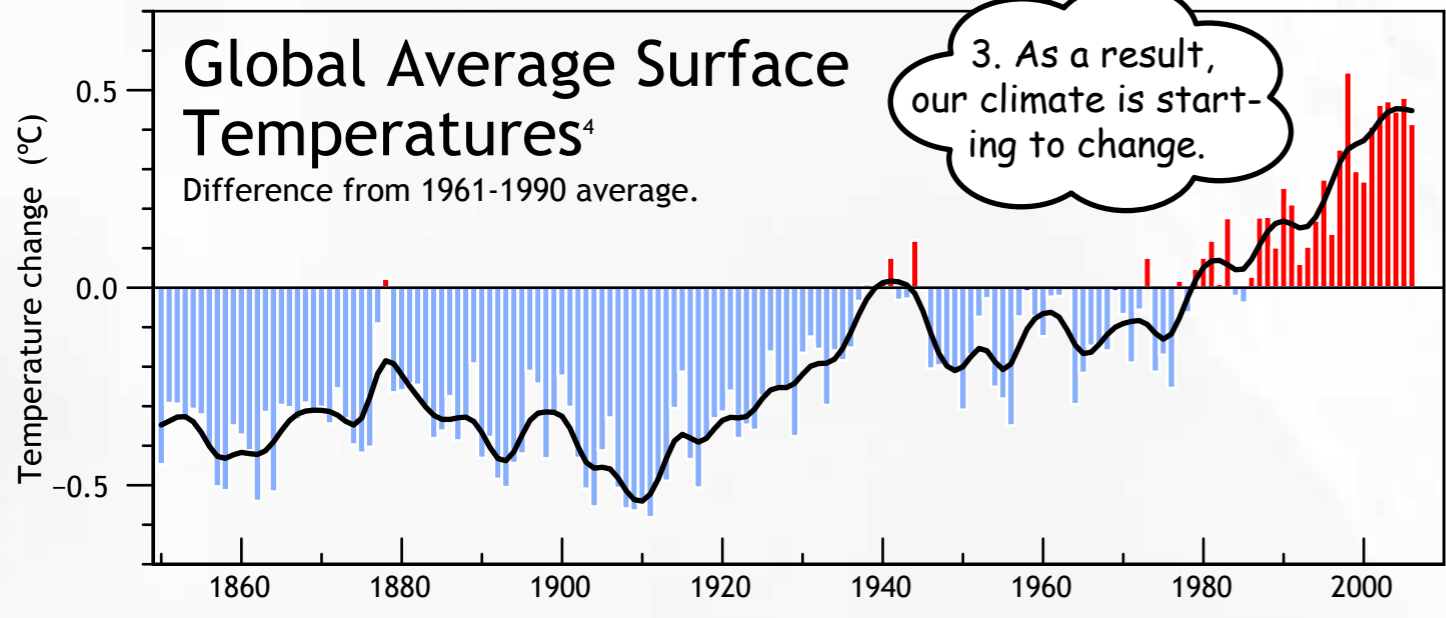
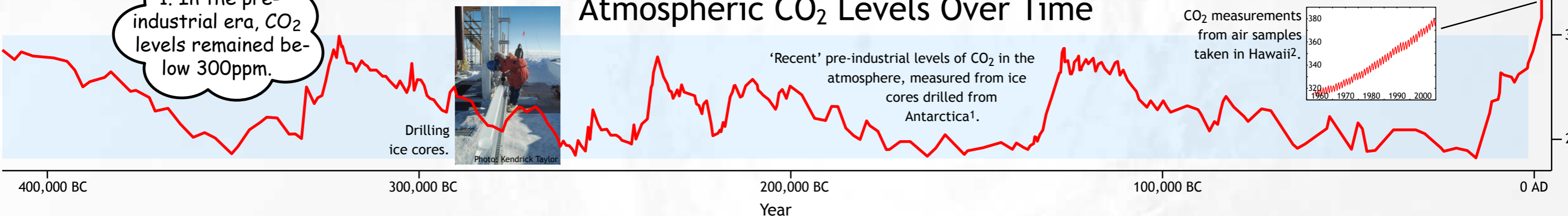
The Greenhouse Effect



The Basics



1. In the pre-industrial era, CO₂ levels remained below 300ppm.



1 - Vostok Ice Core dataset (<http://www.ncdc.noaa.gov/paleo/icecore/antarctica/vostok/>) from the U.S. National Climatic Data Centre, as described in: Petit, J.R., J. Jouzel, D. Raynaud, N.I. Barkov, J.-M. Barnola, I. Basile, M. Benders, J. Chappellaz, M. Davis, G. Delayque, M. Delmotte, V.M. Kotlyakov, M. Legrand, V.Y. Lipenkov, C. Lorius, L. Pépin, C. Ritz, E. Saltzman, and M. Stievenard. 1999. Climate and atmospheric history of the past 420,000 years from the Vostok ice core, Antarctica. *Nature* 399: 429-436.

2 - Mauna Loa Monthly Atmospheric CO₂ Concentrations (http://scrippsco2.ucsd.edu/data/monthly_co2_data.html) from U.S. Scripps Institute of Oceanography, as described in: C. D. Keeling, S. C. Piper, R. B. Bacastow, M. Wahlen, T. P. Whorf, M. Heimann, and H. A. Meijer, Atmospheric CO₂ and ¹³C₂O exchange with the terrestrial biosphere and oceans from 1978 to 2000: observations and carbon cycle implications, pages 83-113, in "A History of Atmospheric CO₂ and its effects on Plants, Animals, and Ecosystems", Springer Verlag, New York, 2005.

3 - International Panel on Climate Change's Climate Change 2001: Synthesis Report, Summary for Policymakers (http://www.grida.no/climate/ipcc_tar/vol4/english/pdf/spm.pdf), page 33.

4 - HadCRUT3 dataset (<http://www.cru.uea.ac.uk/cru/data/temperature/>) from the U.K. Met Office Hadley Centre, as described in: P. Brohan, J.J. Kennedy, I. Haris, S.F.B. Tett and P.D. Jones, Uncertainty estimates in regional and global observed temperature changes: a new dataset from 1850. *Journal of Geophysical Research*, Vol. 111, no. D12, June 2006.

5 - Graph from "Climate change and the greenhouse effect" (http://www.metoffice.gov.uk/research/hadleycentre/pubs/brochures/2005/climate_greenhouse.pdf), a briefing from the U.K. Met Office Hadley Centre, based on data from: Stott, P.A., S.F.B. Tett, G.S. Jones, M.R. Allen, J.F.B. Mitchell and G.J. Jenkins. External control of twentieth century temperature variations by natural and anthropogenic forcings. *Science*, 15, 2133-2137, 2000.

6 - N. Oreskes, Beyond The Ivory Tower: The Scientific Consensus on Climate Change. *Science*, 3 December 2004: Vol. 306. no. 5702, p. 1686.