1. What is meant by ‘overshoot’ in the 1972 report *The Limits to Growth?*

A situation where humanity is exceeding the physical, biological, and chemical limits of the planet, and in deficit.

1. What does current scientific evidence suggest about the extent to which humanity is ‘overshooting’?

Current scientific evidence shows that we are exceeding limits in many factors by a significant amount. Other limits, which have not been broken yet, show signs of breaking in the future (for example 2-degree climate change targets, ocean acidification, and freshwater withdrawals).

1. Give three examples of interdisciplinary fields across the sciences and social sciences.

These can be searched for online, but could include cliodynamics (historical macrosociology, economic history, and mathematical modelling of long-term social processes), quantum biology, behavioural economics, cognitive economics, and the examples from the chapter.

1. What is the Golden Rule? Does it help to make decisions regarding the transition to food sustainability? Why (not)?

This should be a discussion question and should include a good description of the golden rule and where it is easy/less easy to apply.

1. Is there much basis to be optimistic about imminent transitions to sustainable and equitable food systems?

This will come down to the students’ own research and interpretations of that research. Any answer should include reference to science or logical statements.