

## The Sustainable Village - Answers L2

1	<b>Any three of:</b> Planting seed; ploughing, harrowing and drilling; spraying crops; harvesting and drying; feeding grain to animals used in meat production; transport; packaging/production of plastics.
2	Oils, coal and gas made from the remains of living organisms over many millions of years.
3	When the world's supply of oil reserves cannot keep up with demand.
4	<b>Any two of:</b> Cost of diesel for farm machinery; heating greenhouses; transporting a) food for animals b) pesticides and other chemicals used on farms c) food to market
5	Distance travelled from production to shelf.
6	Through coal powered or nuclear powered power stations.
7	<b>Answers can include any of:</b> Wind power                                      Solar power                                      Hydro power Bio fuel boilers                                      Thermal energy                                      Plant based fuel alternatives
8	By producing electricity for heating, lighting and electrical equipment.
9	They can be used in place of fossil fuels.
10	1. How many vegetables will the family need to grow over a year. 144 onions, 360 carrots, 300 potatoes.  2. How much money will they save by growing these vegetables? 144/ 12 × £2.98 = £35. 76                                      360/15 × £3.90 = £93. 60                                      300/5 × £2.10 = £126. 00
11	Vegetable peelings                                      Grass cuttings                                      Plant prunings                                      Egg shell Cardboard                                      Left over vegetables                                      Straw                                      Manure
12	<b>Answers could include:</b> Ballpoint pens, DVDs, clothes, lipstick, luggage, motor oil, plastic bottles, shoe polish, shoes, sun glasses, surf boards, sweaters toothbrushes, toothpaste, toys. Plastic containers                                      Plastic bags                                      Plastic or moulded chairs                                      Mobile phones Computers                                      Petrol, diesel                                      Cooking materials
13	It is running out, releases carbon dioxide (a greenhouse gas) as a by-product, etc.
14	Use low energy light bulbs                                      Switch off lights – have timers Insulate the walls and roof                                      Lag all heating and hot water pipes Use double glazing                                      Boil the kettle for smaller amounts of water Reduce use of power showers                                      Use thick curtains across doors and windows Wear extra clothes to reduce heating                                      Turn heating down by 1 degree
15	Insulate the roof, walls                                      Double glazing Double thickness walls                                      Insulation between floors Insulation under carpets and floors
16	They contain air spaces which helps to form a gap between warm air spaces and cold air. It prevents easy transfer of heat.
17	Crops grown for conversion to bio-energy include traditional crops like oilseed rape and wheat, along with willow-coppice, hazel, and some forestry products.
18	4 tonnes for 6 months 667 kg for 1 month