

Homework 2- Genetic Engineering

1.

(a) Genetic engineering is used to produce growth hormone.

The growth hormone gene is identified and removed from a human chromosome. This gene is then used in the genetic engineering process which involves a number of stages.

The table below shows the stages but they are not in the correct order.

Complete the table, entering a number (2 to 5) in each remaining box, to show the correct order for each stage.

<i>Stages</i>	<i>Number</i>
bacterial plasmid cut open	
bacteria multiply and synthesise growth hormone	
growth hormone gene inserted into bacterial plasmid	
bacterial plasmid removed from bacterium	1
bacterial plasmid inserted into bacterium	

1

(b) Name another product of genetic engineering.

1

(c) State the effect of genetic engineering on the rate of production and the range of products.

Rate of production _____

Range of products _____

2