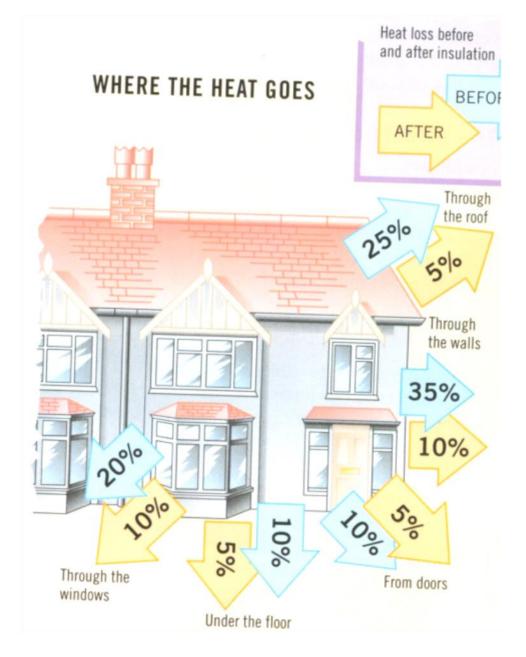
1. Using the information given in Figure 1 and ideas of your own, design and label your own energy-efficient house.

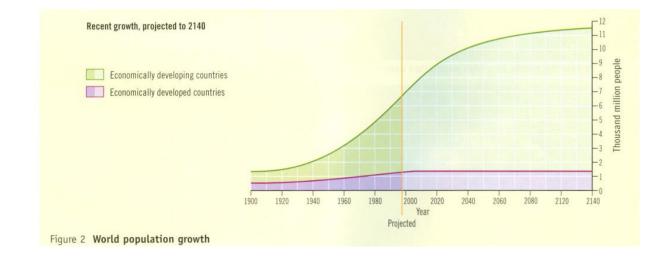


# 2. a

Describe the growth of the world's population (1) up to 1650, (2) from 1650 to 1900 and (3) from 1900 to 2012.

### 2. b

Using your knowledge of natural increase, birth rate and death rate, explain the changes in the growth rate.



3. "This house believes deforestration in the Amazon rainforest should be stopped."

For each of the following groups of people, prepare a short speech arguing for or against this motion:

## a. a native Indian

- **b.** a logger
- c. a rancher
- d. a United Nations environmental advisor

#### 4.

### Factsheet

#### The Three Gorges Dam Project

 The project will take up to 20 years to build and could cost US \$70 billion, possibly diverting funds from other developments.

Several large towns, including
 Wanxian (population 140 000) and
 Fuling (population 80 000) will be flooded.

It will provide electricity for Shanghai, one of the world's largest cities with a population of over 13 million, and Chongqing, population 3 million, an area earmarked for economic development.

The dam could protect up to 10 million people from flooding.

More than 1.2 million people will have to be resettled to make way for the dam and lake. Much of the land used for resettlement is over 800 m above sea level, where the climate is colder, the slopes steeper and the soil barely able to support farming.

■ The 90-metre rise in water level created by the dam will allow shipping above the Three Gorges and turn the rapids in the gorge into a lake.

The dam is likely to trap sediment behind it, eventually causing the reservoir to silt up. Areas downstream would be deprived of sediment.

■ The 18 000 megawatts of energy generated will enable China to reduce its dependency on coal and contribute to a reduction in the emission of greenhouse gases.

Landslides on the steep gorge sides could generate surge waves which would overtop the dam.

The dam will quickly pay for itself from the electricity generated.

There are concerns that the dam will interfere with aquatic life, including the already endangered Siberian crane. Reservoir floods agricultural land and wildlife habitats. People forced to move home

Sediment trapped behind

dam reduces volume of

reservoir. Silt and stones may damage the dam itself

Figure 4 The environmental

Reservoirs in tropical countries make waterborne

more common

diseases, such as malaria,

impact of large dams

Reduced sediment load increases erosion downstream and cuts off supply of fertile silt to farmers

1 Construct a two-column table like the one shown. Complete it by identifying the possible advantages and disadvantages of the Three Gorges Dam Scheme.

The Yangtze River Three Gorges Dam Project

 Advantages
 Disadvantages

 2
 Imagine you are one of the following people: a Chinese government official,

<sup>2</sup> Imagine you are one of the following people: a Chinese government official, an environmentalist, a peasant farmer or a resident of Wanxian. Write a speech stating whether you are for or against the Three Gorges scheme, and your reasons for your choice.