

Contents

1 Chapter 1

1.1 Biomes	5
1.2 Food security	8
1.3 Transforming technologies	10
1.4 Literacy review	12

2 Chapter 2

2.1 Ecosystems and food webs	13
2.2 Distribution of world biomes	15
2.3 The African savanna	18
2.4 Staples around the world	20
2.5 Case study: Flax	22
2.6 Case study: Fishing in West Africa	24
2.7 Literacy review	26

3 Chapter 3

3.1 Case study: Sisal, a natural fibre	27
3.2 The human cost of cheap clothes	30
3.3 Food waste	33
3.4 Case study: Food for the poor in India	35
3.5 Literacy review	37

4 Chapter 4

4.1 Formation of soil	38
4.2 Investigating soils	41
4.3 Soil erosion	43
4.4 Land clearance in Australia	45
4.5 Literacy review	47

5 Chapter 5

5.1 Issues in food security	48
5.2 Food security and climate change	50
5.3 Case study: Food security in Mali	53
5.4 Literacy review	57

6 Chapter 6

6.1 Population growth and food production	58
6.2 Food insecurity	61
6.3 Agricultural production	64
6.4 Literacy review	68

7 Chapter 7

7.1 Perception and use of places and spaces	69
7.2 Place making	71
7.3 Literacy review	74

8 Chapter 8

8.1 Transport connections	75
8.2 ICT connections	77
8.3 Trade connections	79
8.4 Literacy review	81

9 Chapter 9

9.1 Production and consumption of goods	82
9.2 Case study: Environmental impacts of clothes washing	85
9.3 Food products and biodiversity	88
9.4 Literacy review	92

10 Chapter 10

10.1 Global growth in tourism	93
10.2 Case study: The effects of tourism in Cambodia	95
10.3 Changing culture and places: Cycling to work	98
10.4 Changing culture and places: Entertainment	100
10.5 Literacy review	104

How to use this book

PEARSON geography 9 Activity Book

PEARSON geography 9 Activity Book is an integral part of the Australian Curriculum series PEARSON geography. It caters for a variety of learning styles and will reinforce, extend and enrich learning initiated through the Student Book. Clear references within the Student Book indicate when a worksheet is best completed.

PEARSON geography 9 Activity Book is designed for independent use by students and is suitable for in-class use or as a complete homework program.

Worksheet number and title

2.3

The African savanna

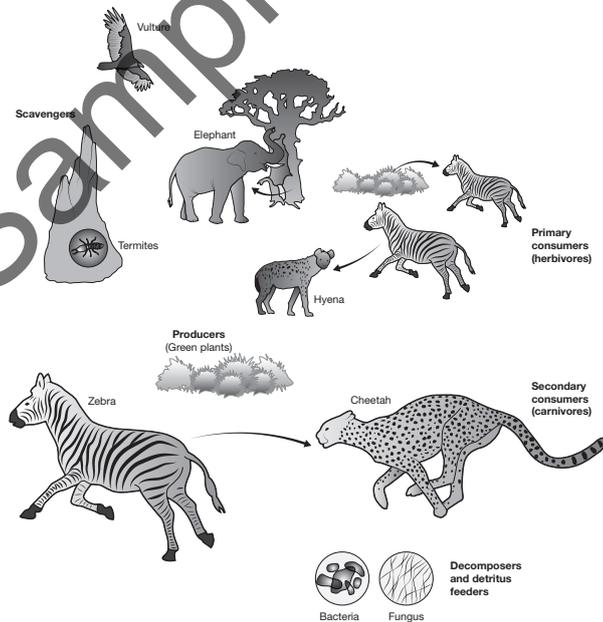
Indicates the curriculum strand or strands targeted by the worksheet

Knowledge and understanding • Geographical skills

MF logical-mathematical • visual-spatial

Indicates the learning style or styles the worksheet is focusing on

The savanna landscapes found in Africa are large areas with a complex interweaving of plants and animals. The savannas are highly protected and are a source of tourist revenue for east African countries such as Tanzania and Kenya. The beasts are much larger compared with those in a wetland, with patterns of interaction that are just as complex.



2.07 Savanna landscape

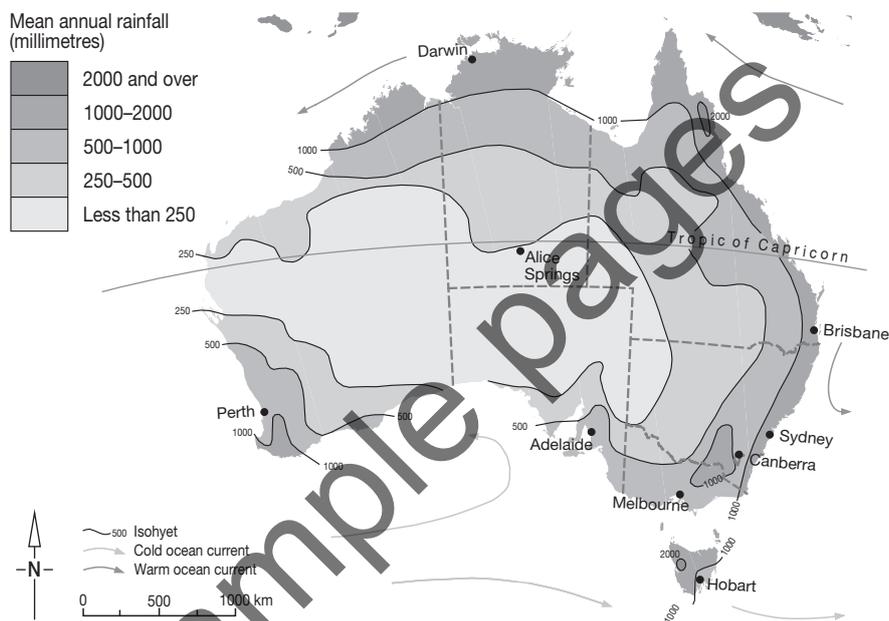
1 Identify and circle five levels within the food web that show the different groups of organisms.

Knowledge and understanding • Geographical skills

mi verbal–linguistic • visual–spatial • logical–mathematical

Choropleth maps

Choropleth maps use shading or colour to show the distribution of values related to a phenomenon such as rainfall or population. On most choropleth maps the depth or darkness of shading increases as the values shown on the map increases. Usually only one colour is used through a range of shades, such as red for population, ranging from light pink to deep red.



1.01 Australia's annual rainfall

Interpreting data from choropleth maps

Look at the map of rainfall distribution of Australia in Figure 1.01 then complete the questions that follow.

1 What is the data presented on this map?

2 Which state capitals have the lowest rainfall?

3 Describe the location of the two wettest areas.

a

b

- 4 Based on rainfall alone, why should Tasmania be able to support a much larger population than other areas of Australia?

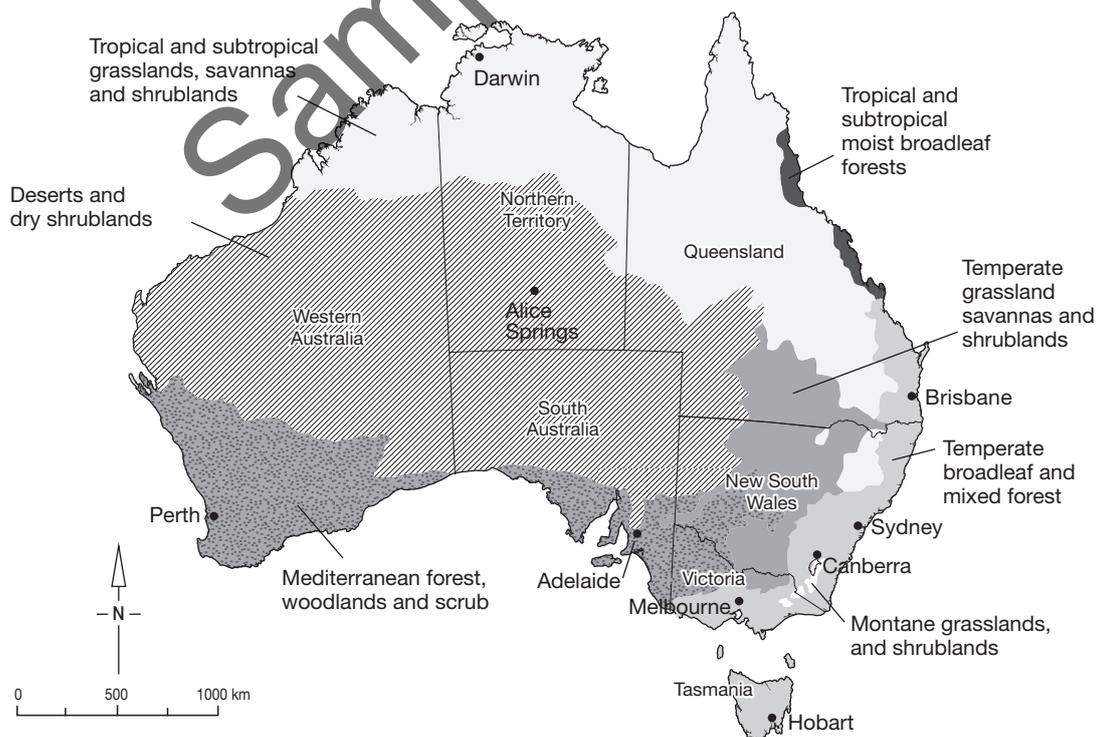
Describing patterns

Another way geographers interpret map data is to look for patterns related to distribution. The method for describing a pattern, PQE, can be summarised as follows:

- Pattern—identify the general arrangement of the data
 - Quantify—give values, evidence or examples
 - Exceptions—identify any significant exceptions or anomalies to the pattern
- 5 Use the PQE method to describe the distribution of Australia's rainfall.

Distribution of biomes

The distribution of the world's biomes is closely linked to world climatic patterns. Geographers analyse these relationships by looking at spatial association, that is the way in which distribution patterns are shared by different phenomena.



1.02 Australia's biomes

6 Study the map of biomes and use the PQE method to describe the pattern of biomes.

7 Study the distribution of Australia’s rainfall and compare it with the distribution of Australia’s biomes. Describe the spatial association you identify using the following terms:

- strong/weak—To what extent do the patterns match?
- positive/negative—Do both sets of values increase together or are they opposite?

8 How might the rainfall distribution in Australia influence the location of the following?

- a deserts: _____
- b tropical rainforests: _____
- c temperate forests: _____

9 a The majority of Australia’s capital cities are located in which type of biome?

b Adelaide and Perth are located in which type of biome?

c Why do you think that the majority of Australia’s cities are located in these two biomes?

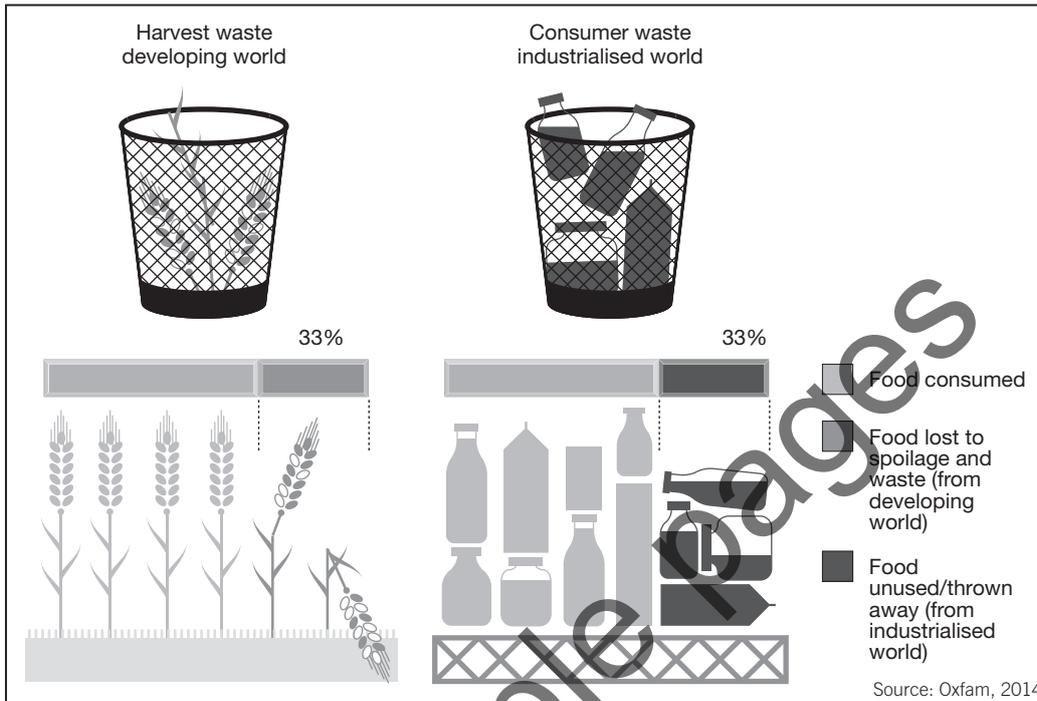
10 Using Figures 1.01 and 1.02, describe the mean annual rainfall in your local area and the type of biome.

1.2

Food security

Knowledge and understanding • Geographical skills

m verbal-linguistic • visual-spatial • logical-mathematical



1.03

Food waste

Study the graphics in Figure 1.03, which show that large amounts of food are lost through waste in both industrialised and developing regions for different reasons.

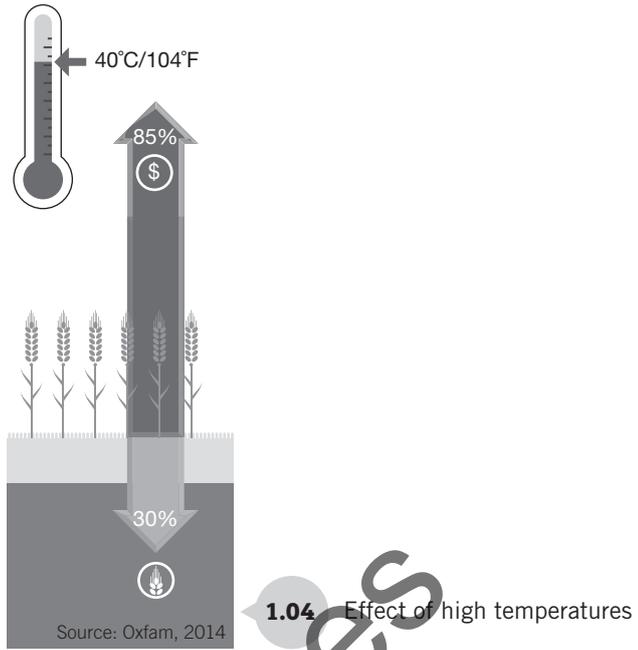
1 What is the main type of food waste in developing countries?

2 What would assist people in developing countries to reduce this waste?

3 What is the main cause of food waste in industrialised countries?

4 How might people in developed countries reduce this waste?

5 How could reduction of waste in industrialised countries help food security in developing countries?



6 Climate change has been predicted to affect food productions and the average price for staple foods could more than double by 2030. Explain what the graphic in Figure 1.04 suggests about the impact of increased temperatures on the following.

- a food production: _____
- b food prices: _____



7 Study Figure 1.05. Explain how an increase in the world's storms could cause a rise in food prices around the world.

Knowledge and understanding • Geographical skills
mi verbal–linguistic • visual–spatial

Mobile phone access reaches three-quarters of planet's population

Around three-quarters of the world's inhabitants now have access to a mobile phone and the mobile communications story is moving to a new level, which is not so much about the phone but how it is used, says a new report released today by the World Bank and *infoDev*, its technology entrepreneurship and innovation program. The number of mobile subscriptions in use worldwide, both pre-paid and post-paid, has grown from fewer than 1 billion in 2000 to over 6 billion now, of which nearly 5 billion are in developing countries. Ownership of multiple subscriptions is becoming increasingly common, suggesting that [the number of mobile phones] will soon exceed that of the human population.

According to *Information and Communications for Development 2012: Maximizing Mobile*, more than 30 billion mobile applications, or 'apps', were downloaded in 2011—software that extends the capabilities of phones, for instance to become mobile wallets, navigational aids or price comparison tools. In developing countries, citizens are increasingly using mobile phones to create new livelihoods and enhance their lifestyles, while governments are using them to improve service delivery and citizen feedback mechanisms.

'Mobile communications offer major opportunities to advance human and economic development—from providing basic access to health information to making cash payments, spurring job creation, and stimulating citizen involvement in democratic processes,' said World Bank Vice President for Sustainable Development Rachel Kyte. 'The challenge now is to enable people, businesses, and governments in developing countries to develop their own locally relevant mobile applications so they can take full advantage of these opportunities.'

This new report ... analyses the growth and evolution of mobile telephony, and the rise of data-based services, including apps, delivered to handheld devices. The report explores the consequences for development of the emerging 'app economy', especially in agriculture, health, financial services and government, and how it is changing approaches to entrepreneurship and employment.

'The mobile revolution is right at the start of its growth curve: mobile devices are becoming cheaper and more powerful, while networks are doubling in bandwidth roughly every 18 months and expanding into rural areas,' said one of the authors of the report.

The report emphasises the role of governments in enabling mobile application development. It also highlights how mobile innovation labs—shared spaces for training developers and incubating start-ups—can help bring new apps to market. For instance, *infoDev*, in collaboration with the Government of Finland and Nokia, has established five regional mobile innovation labs (mLabs) in Armenia, Kenya, Pakistan, South Africa and Vietnam. *infoDev* is also using mobile social networking to bring grassroots entrepreneurs together with other stakeholders in mobile hubs (mHubs).

'Most businesses based around mobile app technology are at an early stage of development, but may hold enormous employment and economic potential, similar to that of the software industry in the 1980s and 1990s. Supporting the networking and incubation of entrepreneurs is essential to ensure that such potential is tapped,' said Valerie D'Costa, Program Manager of *infoDev*.

...

Source: *infoDev*, World Bank, 2012

- 1 What percentage of the world's population has access to a mobile phone?

2 Why might people have multiple mobile phone subscriptions?

3 If world mobile phone ownership was 5 billion in 2011, what was the average number of apps per phone in that year? How does this compare with the number of apps on your mobile phone?

4 a How are apps defined in the article?

b Which category not mentioned do you think is the most popular app category?

5 a What opportunities might apps offer individuals in developing countries?

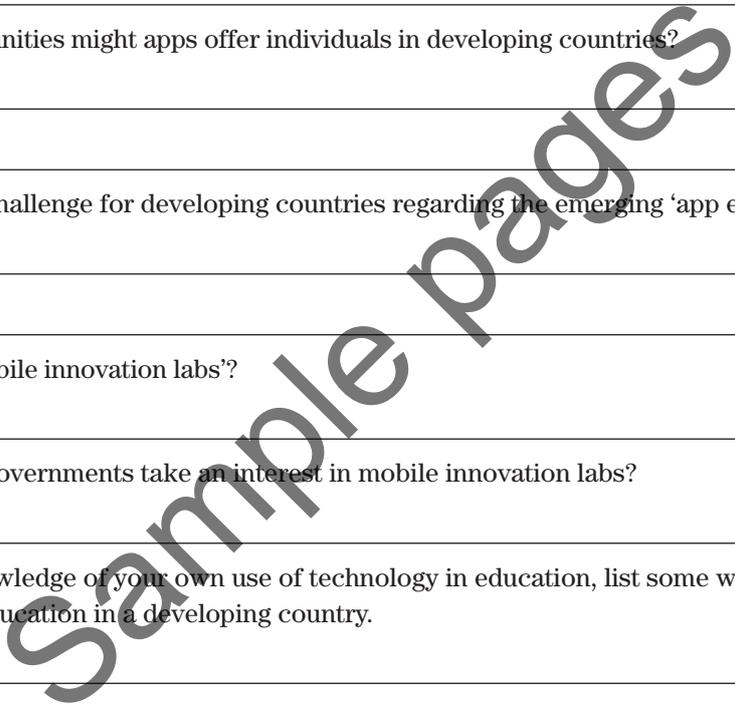
b What is the challenge for developing countries regarding the emerging 'app economy'?

6 a What are 'mobile innovation labs'?

b Why would governments take an interest in mobile innovation labs?

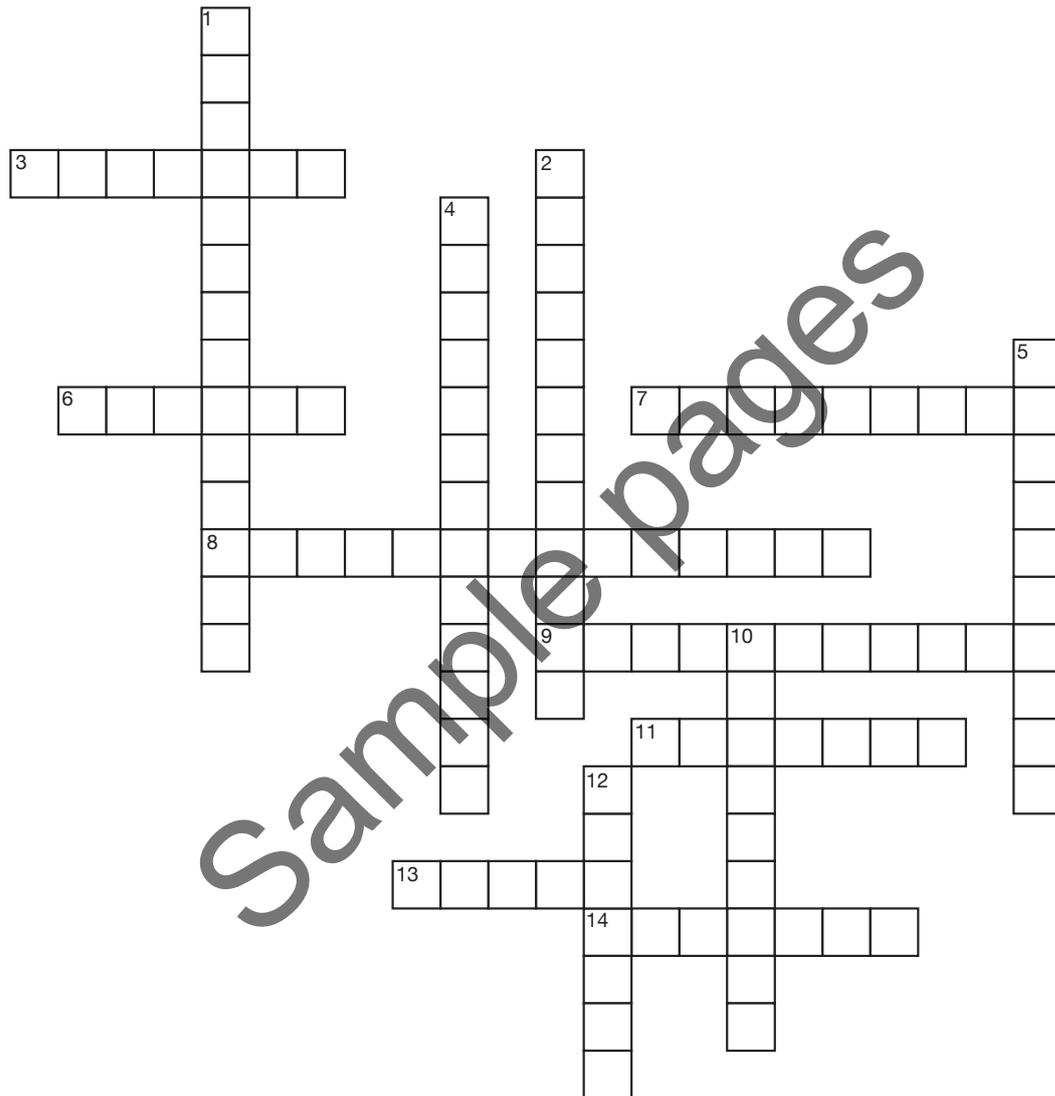
7 Drawing on knowledge of your own use of technology in education, list some ways apps could be used improve education in a developing country.

8 Imagine you work for a non-government organisation in a developing country. Write a proposal for children in a remote region to use mobile technology to improve their access to education.



Knowledge and understanding • Geographical skills
m i verbal–linguistic • visual–spatial

1 Complete the crossword below to demonstrate your understanding of the key terms.


Across

- 3 Found in a water-based environment (7)
- 6 Relating to the whole world; worldwide, international (6)
- 7 The zone of life on earth (9)
- 8 Built facilities that are necessary for a community to operate (14)
- 9 Found on landmasses of continents and islands (11)
- 11 Representing the interactions between organisms and their environment (4, 3)
- 13 Vegetation community occupying a large area of the earth's surface (5)
- 14 Shared attitudes, values, goals and practices characteristic of a group (7)

Down

- 1 The capacity to remain diverse and productive over time (14)
- 2 The availability of food and one's access to it (4, 8)
- 4 Increasing economic, political and cultural interconnectedness of countries (13)
- 5 The science of the creation and use of tools, machines and systems to perform specific functions (13)
- 10 Community of interacting plants and animals and their physical surroundings (10)
- 12 A group of organisms capable of interbreeding and producing fertile offspring (7)