

Rules of the Climate Quiz

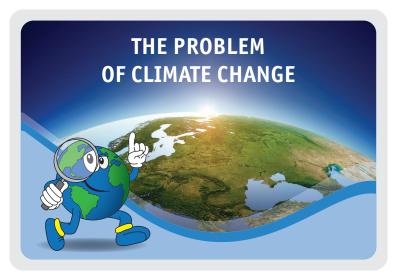
The Climate Quiz is an easy-to-play game with question cards on climate change. The quiz questions complement the Climate Box textbook and make it easier and more fun for students to learn about climate change issue.

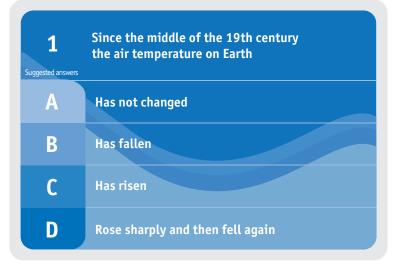
Each of the 100 cards has one question and four suggested answers, only one of which is correct. A player scores one point for each correct answer. The winner is the player who scores the most points.

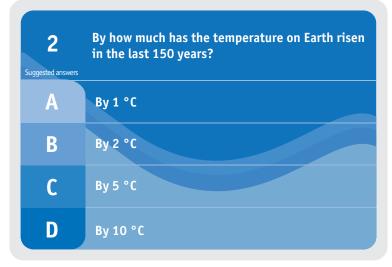
The Climate Quiz questions are divided into three topics, corresponding to the three sections of the Climate Box textbook:

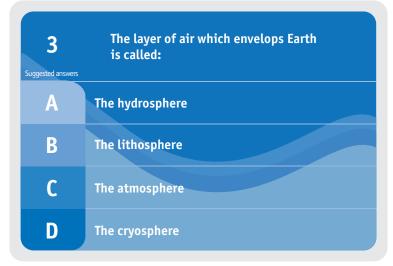
- 1. The problem of climate change
- 2. How climate change affects the natural world and human beings. Can we adapt to the inevitable consequences of climate change?
- 3. How to prevent dangerous climate change?

The quizmaster can find the correct answers to the questions on a separate card entitled 'Answers'.





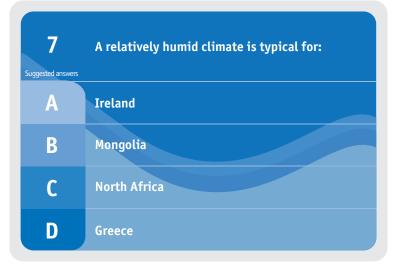


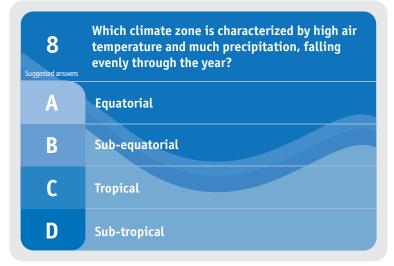


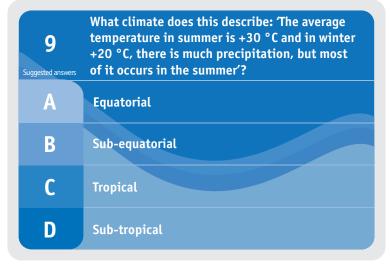
Climate is: Suggested answers The weather pattern in a particular territory over a period of many years A feature of the weather specifying the frequency of precipitation The state of the weather in the course of a week What old people remember about weather patterns, weather lore

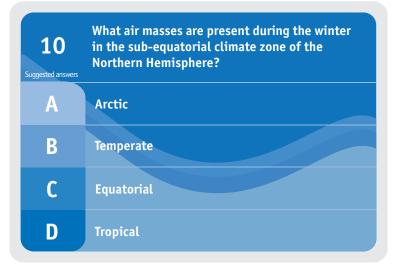
5 Suggested answers	Which of these features is not relevant to climate?
A	Air temperature
В	The pattern of precipitation
С	Dominant winds
D	Longitude

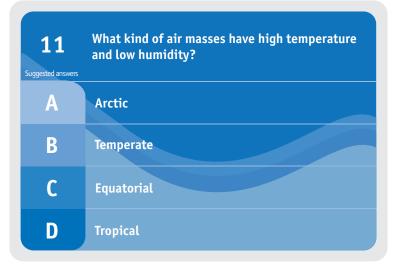
What is the climate of Barcelona? Suggested answers **Equatorial Temperate Tropical** Sub-tropical

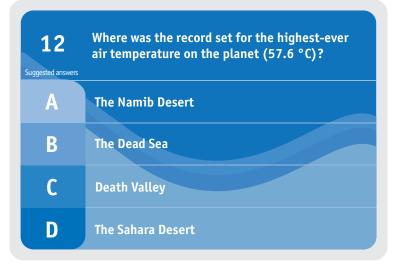












13 Suggested answers	Where is climate warming happening the fastest?
A	In Southern Europe
В	In tropical latitudes
С	In the Arctic
D	In the Southern Hemisphere

What is the name of the science that monitors, 14 studies and forecasts the weather? Suggested answers Climatology Hydrology Glaciology Meteorology

15 What does paleoclimatology study? Suggested answers Climate change that is happening today as a result of human activity Climate in the past Mountain climates Climate in the future

16 Suggested answers	Which of these methods do scientists use to find out about the climate on Earth hundreds of thousands of years ago?
Α	Study of tree rings
В	Study of bubbles in Arctic ice
С	Study of satellite images
D	Study of meteorological data

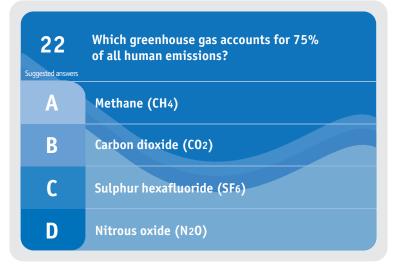




Which of the following factors has only 19 short-term impact on climate (a few years or decades)? Suggested answers Continental drift **Volcanic eruptions** Change in the tilt of the Earth's axis Human emissions of greenhouse gases

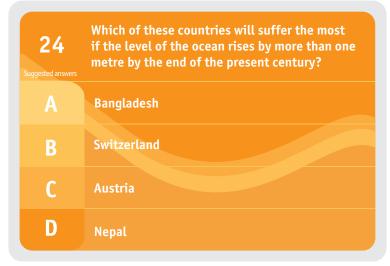
What impact do volcanic eruptions have 20 on climate? Suggested answers They do not have any impact They cause temperatures to rise They cause temperatures to fall They sometimes cause temperatures to rise and sometimes to fall

21 Suggested answers	Which of the following is a greenhouse gas?
A	Nitrogen (N)
В	Carbon dioxide (CO2)
С	Carbon monoxide (CO)
D	0xygen (02)

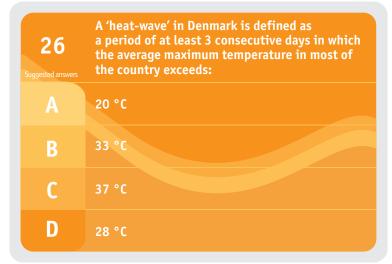


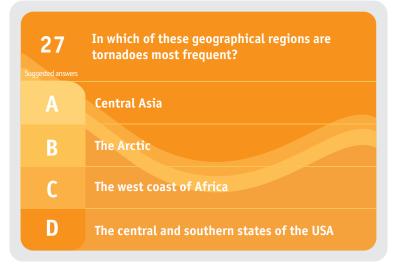


23 Suggested answers	As the climate becomes warmer, the level of the world ocean:
A	Rises
В	Falls
С	Remains unchanged
D	Cannot be predicted

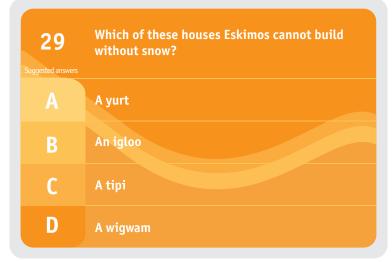


25 Suggested answers	Which of these cities is not threatened by rising levels of the world ocean?
A	Bangkok
В	New Orleans
С	Shanghai
D	Vienna





28 Suggested answers	Which of these natural disasters are not related to climate change?
A	Droughts
В	Earthquakes
С	Tornadoes
D	Avalanches



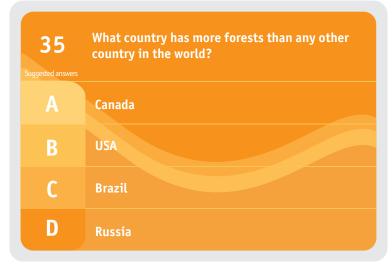
30 Suggested answers	Which of these ecosystems has the richest species diversity?
Α	Coral reefs
В	Taiga forest
С	Tropical forest
D	African savanna

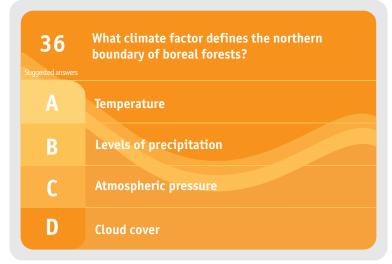
31 Suggested answers	Which ecosystem is unaffected by rise in the level and temperature of the world ocean?
A	Salt marches
В	Coral reefs
С	Alpine meadows
D	Mangrove forests

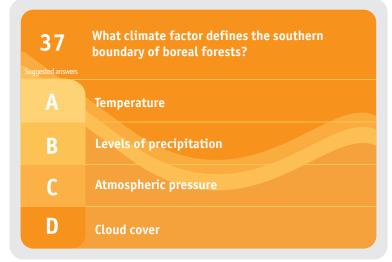
32 You are an ecotourist if: Suggested answers You cook food on a bonfire when you are camping You travel to the most beautiful places on the planet You observe rare animals You minimize your impact on the natural environment when on holiday

33 Suggested answers	According to classification of protected areas by the International Union for the Conservation of Nature (IUCN), economic activity is not allowed in:
A	Natural monuments
В	Protected landscapes
С	Nature reserves
D	National parks

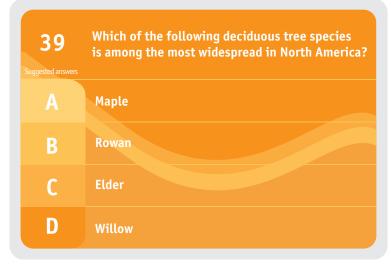
34 Suggested answers	What is protected in a biosphere reserve?
A	The whole biosphere
В	Typical natural communities
С	Rare types of animal that are hunted
D	Areas of outstanding natural beauty









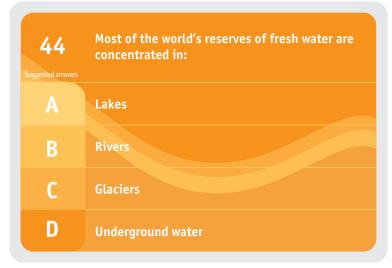


40 Suggested answers	In Eastern Siberia pine forests are advancing into steppe ecosystems because of:
A	Rising temperatures
В	Falling temperatures
С	More precipitation
D	Less precipitation

41 Absorption of carbon in young forests: Suggested answers Is high Is low Does not occur On the contrary, young forests emit carbon

42 Suggested answers	What is the ratio between emission and absorption of carbon in forests where there are many old trees?
Α	There is more absorption than emission
В	There is more emission than absorption
С	Absorption is roughly equal to emission
D	Old trees cannot absorb carbon

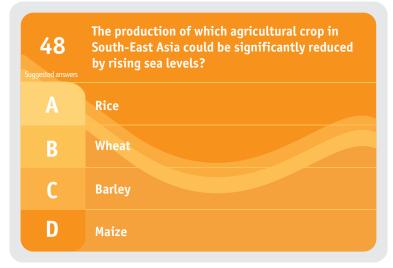
43 Suggested answers	How do Russia's forests influence carbon levels in the atmosphere?
A	They soak up carbon dioxide
В	They are a source of carbon dioxide
С	Emission is equal to absorption
D	They have no gas exchange with the atmosphere





46 Suggested answers	Which of these regions of the world is particularly prone to drought?
A	Central Africa
В	South-East Asia
С	Small islands of the Caribbean Sea
D	Scandinavian countries

47 Suggested answers	The main climate problem for countries of the Middle East will be:
A	Shortage of water
В	Excessive damp
С	Melting of permafrost
D	Tropical cyclones



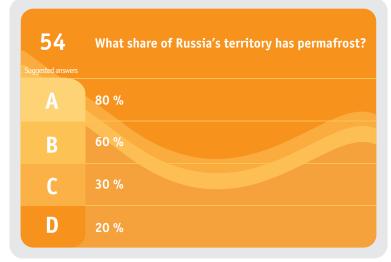
49 Suggested answers	The most obvious sign of climate change in mountain regions is:
A	The melting of glaciers
В	Increase of windy days
С	Drying up of mountain rivers
D	Reduction of precipitation

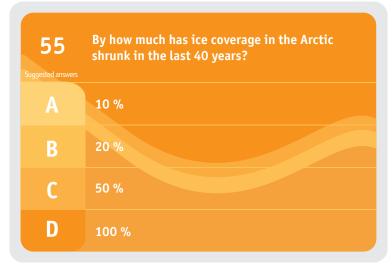
50 Suggested answers	Who of the following authors most likely would have changed the title of his/her work of literature due to climate change impacts, if they wrote it at the end of the 21st century?
A	Robert Burns, 'Yon Wild Mossy Mountains'
В	Thomas Mann, 'The Magic Mountain'
С	Emily Brontë, 'Wuthering Heights'
D	Ernest Hemingway, 'The Snows of Kilimanjaro'

51 Suggested answers	A landslide in the mountains is:
A	A mass of snow, which falls or slides down a slope
В	A serious flood
С	A moving mass of stones and earth
D	A hurricane wind

52 Suggested answers	Why do glacial lakes represent a hazard due to climate change?
Α	Harmful chemical compounds are formed in the water
В	The water becomes too hot due to higher air temperatures
С	Melting of glaciers raises water levels in the lakes, creating a threat of floods and landslides
D	Disease-carrying insects breed in the lakes

53 Suggested answers	Which of these economic sectors, often found in mountain regions, is least vulnerable to the impact of climate change?
A	Tourism
В	Mining
С	Agriculture
D	The production of hydroelectricity



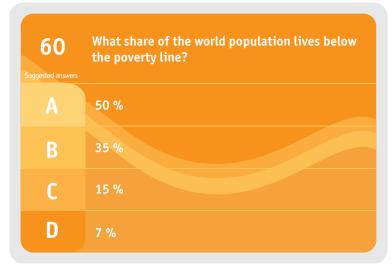


56 Suggested answers	Which of these climate change impacts has the least affect on people's lives and ecosystems in the Arctic?
A	Stronger winds (blizzards and storms)
В	Reduction in the extent and thickness of sea ice
С	Long-lasting heat waves in the summer
D	Melting of permafrost

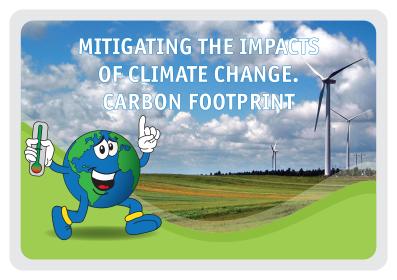
57 What is a 'heat-island'? Suggested answers An island in tropical latitudes An island threatened with disappearance due to rising sea levels The centre of a big city where the temperature is higher than in the suburbs Part of a forest that has been burnt out in a fire

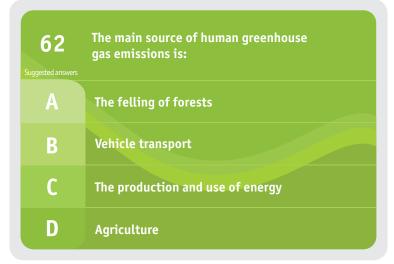
58 Suggested answers	Which of these people will most likely be the first to lose his job as a result of climate change?
A	A banker in Singapore
В	A teacher in India
С	A farmer in Kenya
D	A fireman in Mexico

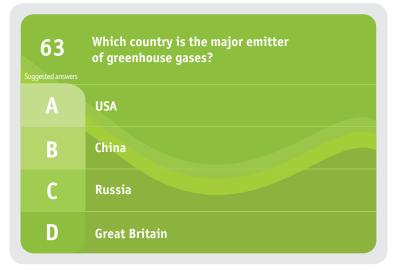
59 Suggested answers	Who of the following could be called a climate migrant?
Α	A German pensioner who moves to live by the sea in Turkey
В	A Turk who got a better job in Germany
С	Somebody from Haiti, who moves to the US because his village was destroyed by a powerful hurricane
D	A farmer from the southern state of Texas who moves to the northern state of Montana, because he was offered higher wages there



61 Suggested answers	In which of the following countries are personal incomes the lowest?
A	Brazil
В	Germany
С	Turkmenistan
D	Ethiopia

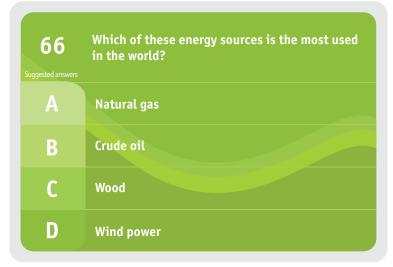


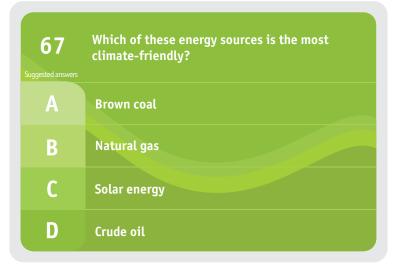


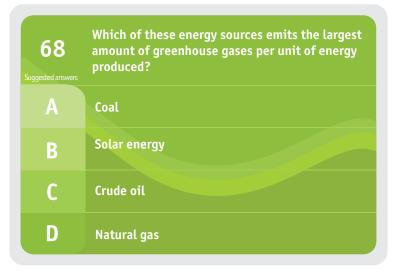


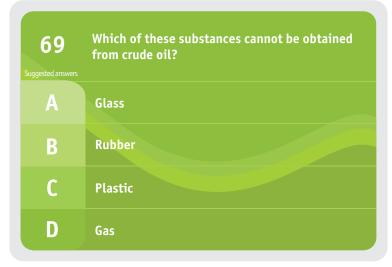
64 Which of these energy sources is non-renewable? Tidal energy **Biofuel** Crude oil Solar energy

65 Suggested answers	Which of these energy sources is not a fossil fuel?
A	Uranium
В	Natural gas
С	Peat
D	Brown coal









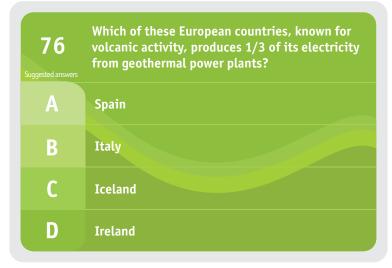
70 Suggested answers	What is the difference between a combined heat and power plant (CHPP) and a thermal power plant (TPP)?
Α	A CHPP heats water and a TPP generates electricity
В	A CHPP generates electricity for big cities and a TPP generates electricity for towns and villages
С	A CHPP generates electricity and heat and a TPP only generates electricity
D	A CHPP is a central distribution station, which receives energy from a network of small TPPs

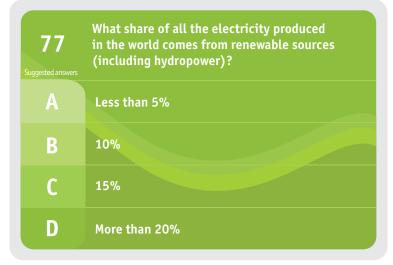
71 Suggested answers	What is the main problem with nuclear power plants?
A	They emit more carbon dioxide than other types of power plant
В	They create dangerous radioactive waste, and there is a risk of accidents with disastrous consequences
С	It is hard to find a suitable location for a plant
D	Reserves of nuclear fuel are almost exhausted

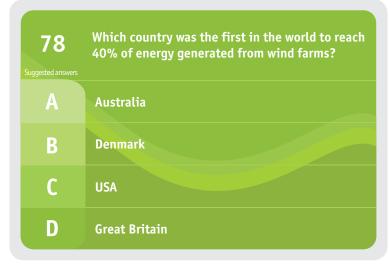
72 Offshore wind farms are built: On land, by the coast In the middle of the ocean In the mountains In the sea, not far from the coast 73 Is biomass a renewable source of energy? No, because the remains of ancient organisms from deep inside the Earth's crust cannot be replaced No, because its energy is converted by combustion into electricity Yes, because energy cannot be destroyed Yes, because plants can grow again

74 Suggested answers	In Brazil 1/5 of vehicle fuels are produced from:
A	Banana skins
В	Coffee beans
С	Sugar cane
D	Coconut oil

75 Suggested answers	Which of these types of power plant does not use the power of water?
Α	An hydropower plant
В	A thermal power plant
С	A pumped storage power plant
D	A wave power plant







Which of these cities would make the greatest **79** use of solar power? Cairo Oslo London Moscow

80 Suggested answers	In which country was the first tidal power station built?
A	Japan
В	Great Britain
С	France
D	USA

81 Suggested answers	What is the meaning of the 'Class A' label on electric devices produced in the European Union?
A	The devices were produced at energy-efficient factories
В	The devices are safe to use
С	The devices are very powerful
D	The devices use very little energy

82 What does a thermal camera measure? Heat loss from the pipes of residential and public buildings Heat distribution on any surface, such as the walls of a building Carbon dioxide emissions from industrial enterprises The amount of heat used to keep a building warm

Which of these actions to maintain 83 the temperature inside a building is not environmentally friendly? Use of electric heaters Use of heat reflectors behind radiators Insulation of the front door Sealing cracks in the window frames

Why is it better to use LED bulbs, although they 84 are more expensive than energy-efficient fluorescent bulbs? They have more varied designs, making them suitable for different sorts of lamps They can be disposed of together with general rubbish (they do not require special processing) They do not contain potentially dangerous mercury, they last longer and they use less energy They are unbreakable, since they are made from particularly strong plastic

85 Suggested answers	What is the meaning of 'carbon footprint'?
A	Carbon dioxide emissions from all industrial enterprises
В	Total reserves of carbon in the Earth's forests
С	Total emissions (direct or indirect) of all greenhouse gases by a person, an organization, an event, a product, a city or a country
D	Reserves of carbon that are transformed into carbon dioxide when crude oil and natural gas are burnt to obtain electricity

86 Suggested answers	What is CO2 equivalent used to calculate?
A	Total carbon dioxide emitted into the atmosphere by several similar enterprises or organizations
В	Savings on fuel consumption to heat buildings
С	The amount of CO ₂ absorbed by a plant over its life
D	The volume of all greenhouse gases emitted from any activity, expressed in terms of CO2 for ease of measurement and understanding

What is the best way to find out the energy 87 efficiency of a home appliance? Its energy-efficiency label Readings on the electricity meter Life expectancy of the appliance The material, which the appliance is made from

How can a person or a company compensate 88 for their carbon footprint? By choosing new energy-efficient devices By switching off devices and lights when they are not being used By reducing the number of lights By planting trees

Which type of transport emits the largest 89 quantity of greenhouse gases? **Railway** Ship **Bicycle** Road vehicle

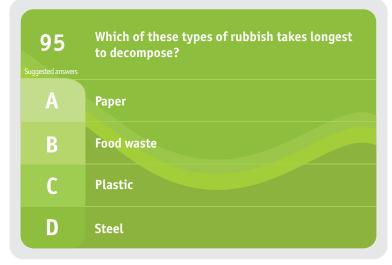
90 What is a carpool? A new type of vehicle powered by a solar battery Taking passengers on car journeys An environmental standard for vehicle engines Special parking for electric vehicles

Which of these ways of getting around a city 91 is the most climate-friendly? Public transport, such as buses Private transport with low fuel consumption **Bicycle** Carpool (several people using one car to get to the same place, for instance to work)

92 An active building is a building, where: No energy is used **Energy** is produced Everything is managed by a computer system The residents are environmental activists

93 Suggested answers	In northern countries a passive building is a building, which:
A	Does not use energy
В	Is very well insulated and loses almost no energy
С	Does not meet building standards
D	Is not computer controlled

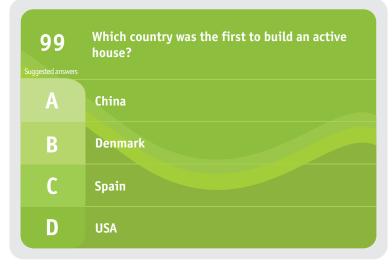
Most of the heat loss from a building 94 is through the: Floor Windows Walls Ceiling



What bag should you take shopping in order 96 to reduce your carbon footprint? Don't take a bag – use a disposable one from the shop Your own plastic bag Your own paper bag Your own canvas or cotton bag

97 Suggested answers	Which of the products that you buy with your parents has the smallest carbon footprint?
A	Local products
В	Products brought from some other region of your country
С	Products brought from neighbouring countries
D	Exotic products from distant countries

Which advice for energy-efficient use of 98 a saucepan is correct? The saucepan bottom should be concave The top should be on The bottom should be smaller than the burner The saucepan should always be open



100 In what country was the Kyoto Protocol signed? Japan Germany **France**



Answers

1. C	14. D	27. D	40. C	53. B	66. B	79. A	92. B
2. A	15. B	28. B	41. A	54. B	67. C	80. C	93. B
3. C	16. B	29. B	42. C	55. B	68. A	81. D	94. B
4. A	17. C	30. C	43. A	56. C	69. A	82. B	95. C
5. D	18. C	31. C	44. C	57. C	70. C	83. A	96. D
6. D	19. B	32. D	45. D	58. C	71. B	84. C	97. A
7. A	20. C	33. C	46. A	59. C	72. D	85. C	98. B
8. A	21. B	34. B	47. A	60. B	73. D	86. D	99. B
9. B	22. B	35. D	48. A	61. D	74. C	87. A	100. B

88. D

10. D 23. A 36. A 49. A 62. C 75. B

11. D 24. A 37. B 50. D 63. B 76. C 89. D 12. C 25. D 38. C 51. C 64. C 77. D 90. B 13. C 26. D 39. A 52. C 65. A 78. B 91. C