

Subject Area

The Natural World

Topics & Curriculum Links

the importance of water (Science; Civics)

conserving energy and natural resources (Science; Civics)

reducing waste and pollution (Science; Civics)

dangers in the environment (Geography; Civics)

weather and changing climates (Geography)

plants and animals (Science)

machines, energy, and fuels (Technology)

transportation (Technology)

food chains (Science)

protecting plants and animals (Science; Civics)

places and countries (Geography)

dates and events (History)

Vocabulary

natural resources; places; animals; plants; daily routines;
 food; weather; climate; fuels; energy; transportation;
 machines; materials; dates; numbers; measurements;
 countries; continents

Grammar

present simple; present continuous; past simple; present
 perfect; future simple; question forms; imperative; passive;
 adjectives; prepositions; adverbs

Teaching Ideas

See also [pages 6–7](#) for general ideas that you can adapt.
 Or go to www.oup.com/elt/teacher/readanddiscover

Electricity Research

After reading Chapter 3, students do research about how electricity is made in their country, using books or the Internet. They can also do research about how much electricity comes from different sources, for example, coal, gas, nuclear. They can also do this for other countries as a comparison. Then they present their findings on a poster, using charts and diagrams.

READ & TALK City or Village Life?

After reading Chapter 8, students work in two groups. Ask one group to think about the arguments for living in a city and the other group to think about the arguments for living in a village. Then in turn each group presents their arguments, like this: *You can ... There is a lot of ... There isn't any ... It's easy to ...* The other group can argue back with arguments against. Give a prize for the most convincing arguments!

Caring for Our Planet Poster

Students design a poster about how to care for our planet. Or students work in small groups, and each group designs a poster about one topic, for example, energy, pollution, plants, animals. Posters can then be displayed together. Students can vote for their favorite design.

Activities Answers

Pages 36–37 1 1 sun ✓ 2 water ✓ 3 oil 4 plants ✓ 5 coal 6 animals ✓
 2 1 renewable 2 water 3 fresh 4 fossil fuels 5 electricity 6 pollution
3 Example answers Things that use electricity: computers. Things that don't use electricity: bicycles. **4 1** Renewable resources can replace themselves naturally. 2 Plants, animals, and people all need water to live. 3 They have to travel a long way to collect water, or move to a new place. 4 We can keep it clean and not waste it. 5 They cannot be replaced so one day they will run out. 6 free answers

Pages 38–39 1 1 USA 2 Sahara Desert 3 Bangladesh 4 Gobi Desert
 5 South Korea 6 China 7 Australia 8 Tuvalu 9 New Zealand 2 1 sun
 2 gases 3 warm 4 fossil fuels 5 greenhouse effect 6 carbon dioxide
3 1 true 2 false 3 true 4 false 5 true 6 true **4 1** Carbon dioxide increases the greenhouse effect. 2 Scientists think that global warming is changing our climate. 3 Parts of Funafati are only 10 centimeters above sea level. 4 Our planet has natural ways to reduce carbon dioxide. 5 By using fewer fossil fuels and producing less carbon dioxide.

Pages 40–41 1 Geothermal energy: underground heat, hot water, steam; Wind energy: wind farms, wind turbines, colder countries; Energy from Water: rivers, lakes, ocean waves, ocean tides; Solar Energy: sunshine, solar panels, sunny countries 2 1 sun 2 radioactive waste 3 water 4 water 5 China **3 1** Nuclear waste is not safe for thousands of years. 2 In Ukraine, 336,000 people had to move to new homes. 3 We can use solar panels to power watches and calculators. 4 Wind energy is very useful in colder countries. 5 Hot water and steam from underground can heat buildings. 6 We can make electricity from ocean waves and tides. **4 1** In places where it's very sunny all year long. 2 We can use water from rivers, lakes or oceans. 3 free answers

Pages 42–43 1 1 short 2 less 3 solar energy 4 cleaner 5 plants 6 bigger
 2 Good for Earth: catalytic converters, cycling, walking, carbon offsetting, biofuels; Bad for Earth: big cars, planes, pollution, exhaust gases **3 1** power 2 clean 3 solar 4 cars 5 biofuels 6 planes 7 big
 8 cycle 9 dirty 10 trees. Secret word: passengers
 4 free answers

Pages 44–45 1 Recycle: newspapers, parts of cars, glass containers, empty cans, plastic containers, clothes; Make into compost: garden waste, food waste 2 1 true 2 true 3 false 4 false 5 false 6 true
3 1 Pollution is dangerous for animals. 2 About a billion people do not have clean water. 3 Many people now recycle a lot of waste. 4 Waste from factories can pollute water. 5 We can try to reuse more things. **4 1** By waste from factories and human waste. 2 By using a compost bin. 3 Because there are too many, and it's difficult to recycle them. 4 free answers 5 free answers

Pages 46–47 1 grass, cow, person; corn, mouse, owl; lettuce, rabbit, fox; plant plankton, fish, sea lion, killer whale 2 1 false 2 true 3 false
 4 true 5 true 6 false **3 1** Many useful plants grow in rainforests. 2 We are using too many trees. 3 Fish eat plant plankton. 4 We make flour from wheat and corn. 5 We all need plants. **4 1** They need sunlight, water, and carbon dioxide. 2 Olive oil. 3 For wood to make furniture or paper, or to make space to grow crops, or to raise cattle. 4 By keeping our planet clean, by using fewer fossil fuels to reduce global warming, by using fewer trees, by planting new trees.

Pages 48–49 1 1 chicken 2 flies 3 ant 4 elephant 5 panda 6 cow 7 bee
 8 gorilla 9 polar bear 10 beetle 11 sheep 12 whale 2 1 animals
 2 fish farms 3 eggs 4 nectar, honey 5 work 6 compost **3 1** hunters
 2 habitat 3 rare 4 pollution 5 feathers 6 rainforest 7 whale 8 cows
4 1 When we cut down rainforest tree we destroy habitats. 2 If the ice at the North Pole melts, polar bears will be in danger. 3 Elephants were hunted because people could sell their tusks. 4 Rainforests are the natural habitat of gorillas and tigers. 5 Animals are safe in safari parks.

Pages 50–51 1 Problems for our planet: 1 energy 2 waste 3 transport; How we can care for our planet: 4 greedy 5 less 6 food 7 reuse
 8 electricity 2 1 protect: damage, 32 2 increase: reduce, 35 3 old: new, 33 4 near: far, 32, 34 5 cold: hot, 33 6 summer: winter, 34
3 1 It's important to remember to turn off lights. 2 It's good to eat fruit from your own country. 3 It's good to reuse and recycle things as much as possible. 4 We can help the planet in small ways.
 4 1, 2 & 3 free answers