

Teacher's Notes: Air Pollution

Learning Objectives:

The students will be able to identify rocks, plants, animals, water. The students will be able to identify natural resources. The students will be able to explain what the following natural resources are needed for (plants, animals, water, rocks, wood, soil, air). The students will be able to read the following words: soil, air, water, rocks.

The students will be able to define the following words: natural resources, soil, plants, air.

Activities

- 1. Have students go outside and look for natural resources.
- 2. Get a collection of magazines. Have students look for pictures of natural resources. Depending on group you could use the pictures for different things:
 - Everyone glues their picture on one big poster board.
 - Students make their own collage of natural resources
 - Students write a sentence describing each natural resource.
- 3. Students do image searches using the technology printable. Have the students save pictures of their favorite ones. Those are then inserted onto a Word document or a PowerPoint. Students can type a word or sentence describing each natural resource.

General Tips: The goal is to build background knowledge while leading an engaging discussion on any and all information that can be talked about on a given page. The items that you choose to bring up or focus on should be modified for the students you are working with. For example, if you have a student who can point to something in the picture, answer yes/no questions be sure to incorporate a lot more of that as you go through the book. On the same token, be sure to ask a lot of comprehension questions and critical thinking questions at the level appropriate for students. There is something for everyone.

Page 1: Pollution means that something in the world is dirty. It can be water pollution, where the water is dirty, it can be the land that has chemicals or something in it that makes it so plants can't grow. When the air is dirty, it is called air pollution. This book is about dirty air, air pollution. **WH Questions:** What is pollution? What is dirty water called? Is there pollution on the beach? Is there pollution in the water? What is the turtle eating? **Yes/No** Does pollution mean clean? Is pollution good? Is pollution dirty? Is it good for turtles to eat plastic bags? Is there pollution on the beach?

Point: ocean, turtle, bag, beach, garbage **Opinions/Experiences:** Have you seen garbage on the ground? Why do you think people throw things on the ground **Peer to Peer Interaction:** After you read Page 1, ask students, "What is dirty air, land, and water called?" The answer is the main idea card

"pollution." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 2: This book is about air pollution. Look at the picture you can see the air getting dirty. Look at the smoke. **WH Questions:** What do you see that is making the air dirty? What is in the air? **Yes/No:** Does smoke make the air dirty? **Point-** factory, smoke in the air, **Opinion/Experiences** have you seen smoke coming out of chimneys before? **Peer to Peer Interaction:** After you read Page 2, ask students, "What is dirty air called?" The answer is the main idea card "air pollution" Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 3: Air is all around us. We breathe in air. Plants and animals need air to live. Air is invisible. You cannot see air. Smoke comes out of the back of your car. It is called exhaust. Exhaust is bad for the air. **WH Questions:** What do people need to live? Who needs air to live? What comes out of cars? IWhere does exhaust go? **Yes/No**: Is exhaust in the air good? Does exhaust come out of a car? Does exhaust come out of grass? **Opinion/Experiences:** Do you ride in a car? What happens to the air when you ride in a car? **Peer to Peer Interaction:** After you read Page 3, ask students, "What does exhaust come out of?" The answer is the main idea card "cars." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 4: Exhaust comes out of airplanes too. Exhaust comes out of cars and airplanes. The exhaust is bad for the air. It makes the air dirty. Exhaust causes air pollution.

Point: airplane, exhaust **WH Questions:** What comes out of airplanes? What does exhaust make dirty? **Yes/No:** Do airplanes cause air pollution? **Opinion/Experiences:** Have you traveled on an airplane before? Where can people go on an airplane? **Peer to Peer Interaction:** After you read Page 4, ask students, "What flies in the air and gives off exhaust?" The answer is the main idea card "airplane" Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 5: Another way that air gets dirty is smoke. Smoke comes out of chimneys. Factories have a lot of smoke coming out of them. People make things in a factory. Paper is made in a factory, soda is made in a factory, the cans for soda are made in factories. Factories pollute the air with their smoke. **Point:** factory, smoke, chimney **WH Questions:** What is a factory? What does smoke come out of? What is a chimney? **Yes/No** Is smoke pollution? Is smoke good for the air? **Opinion/Experiences:** What is something that is made in a factory? **Peer to Peer Interaction:** After you read Page 5, ask students, "What causes air pollution?" The answer is the main idea card "soil." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 6: Another thing that causes air pollution is forest fires. When a forest burns a lot of smoke goes into the air.

Point: forest, fire, flame, smoke **WH Questions**: What causes smoke? What is a forest fire? **Yes/No**: trees, fire, smoke **Opinion/Experiences**: Why do forests catch on fire? Have you seen a fire before? **Peer to Peer Interaction**: After you read Page 6, ask students, "What causes smoke in the forest?" The answer is the main idea card "forest fires." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 7 When there is a windy day, the wind causes dust to blow around. The dust is air pollution. **WH Questions:** What happens when the wind blows? What is dust? **Yes/No** Does a windstorm cause dust to blow? Is dusty air air pollution? **Opinion/Experiences:** What happens when it is windy? Have you been outside when it was windy? **Peer to Peer Interaction:** After you read Page 7, ask students, "What causes dusty air?" The answer is the main idea card "windstorm." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 8: We do not want air pollution because it is not good for our lungs. When we breathe dirty air it can make us sick. It can make people cough. Can you cough? **Point**: face masks **WH Questions**: why do they have face masks on? **Yes/No**: Is air pollution good? Is air pollution bad? Can air pollution make you cough? **Opinion/Experiences**: Have you ever coughed when the air had smoke in it? **Peer to Peer Interaction**: After you read Page 8, ask students, "what happens to people when there is air pollution?" The answer is the main idea card "breathe." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.

Page 9: Air pollution is a problem. We do not want the air to be dirty. We need clean air. We want clean air when we breathe.

Point: air, breathing, nose **WH Questions:** What kind of air to we need? **Yes/No:** Is dirty air good to breathe? Is clean air good to breathe? **Opinion/Experiences:** How can people make sure air is clean? **Peer to Peer Interaction:** After you read Page 9, ask students, "What do people, animals and plants all need to stay alive?" The answer is the main idea card "natural resources." Students will find the main idea card and read it to their partner. Teacher will prompt them to ask their partner some of the questions talked about above.