2nd Grade NWCAA PRESENTATION
(45 minutes)

Outline:
• Introduction
• What do we know about the air we breathe?
• Air Pollution
• Solutions
• Pollution Search Activity
• Conclusion

Props: air filters, sock, candle and plate, Pollution/Solution Search Activity

If possible have 2nd graders sitting on the floor so they can more easily focus on what you have to say.

SCRIPT

Introduction:
Hello, my name is __________, and I am here today to talk about air. I am in your class on behalf of the Northwest Clean Air Agency. It's NWCAA's job to talk to people about keeping the air clean.

What do we know about air already? We breathe it! Everybody take a deep breath in. Let's take another one! Where does the air go into your body? Through your mouth and nose into your lungs. Your lungs are inside your chest. Put your hands on top of your lungs and let's take another deep breath to feel the air entering our body. Can anyone tell me what part of nature helps clean the air? Trees! What is in the air that we need to breathe? Some classes might have already heard about Oxygen and Carbon Dioxide. Draw the air cycle: trees -> humans, etc. We all need clean air in order to live. Animals need it too.

Introduction option: To introduce the presentation in 2nd/3rd grades you may start with a jumping jack activity. I usually skip this if they are already calm because it just seems to get the students worked up! But this can be a good activity to do if you know the group is wiggly, for example if it is just after lunch. Plus they'll like it and they'll think you're cool. Have students count breaths for ten seconds. Practice what a normal breath is, not panting and sped up. I usually take about 2 breaths in 10 seconds. Now have the students do jumping jacks for 1 minute. Now count breaths in 10 seconds. It's usually double. So we need air to move around, run & play!

Sometimes our air can get dirty or polluted. Have you heard the word pollution before? If the air is polluted, that means that it is dirty. Have you ever been sitting around a campfire and had the smoke blow in your face. It might make you cough or make your eyes itchy. The same things happen to people who live in places where the air is very polluted.
Everyone give your nose a little rub, because your nose does a good job stopping some of that dirty air before you breathe it into your lungs. But if the air is really dirty some of it will get into your lungs. Do you know anyone with asthma? If you have asthma it makes it hard for you to breathe. Since our air has become more polluted more kids get asthma. Today we are going to talk about ways to help keep our air clean.

**What things make most of the pollution where we live?** Let’s do an experiment to see how some of the air pollution is made. Anytime you see smoke that is air pollution. Let’s make a list of the things you know make smoke. Any burning, candles, garbage burning, etc. Now watch as I burn this candle. You can’t always see the smoke, but watch what happens when I will put the plate over the candle to collect the pollution. I am not burning the plate, just collecting the pollution that is being made. Whoa! Gross! (Draw sketch of fire on board) Cars also make pollution. (Draw sketch of car on board) We put this sock on the tail pipe of a car and it collected the pollution that came out. Factories (draw sketch on board) also make pollution.

I bet you have some ideas about how to keep the air clean. We are going to do an activity that will help us look at what is making the pollution and how to fix it - or find the solutions.

**Pollution Search Activity:** Pass out activity. Students can work with the students around them to find the pollution and solutions. Students will circle (with a slash through it, like no smoking signs) the pollution sources, and color in brightly the good choices that make less air pollution. (Emphasize the latter!) You have an overhead copy of this activity. Go through it with the students and make a list on the board of the solutions - you should be able to come up with a bunch!

**Conclusion:** Show air filters to wrap up. (See K/1 script)

**Packet:** Review packet and take home materials. You can show these to your families and share what you have learned today about keeping our air clean.