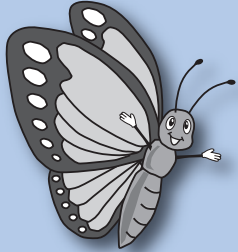


Air Quality Know-It-All

ACTIVITY 10



Learning Objective:

- Review and assess what the students have learned about air pollution.
- Reinforce that student actions can have a positive impact on air quality.

Subject

- Social Studies

Materials

- Indoor or outdoor game space
- Air Quality Know-It-All student worksheet

Teacher's Background Information

This activity has two parts – a game involving a quiz and pledge cards. You can do both parts of this activity or just either one.

Part 1

Your students have worked hard to complete activities in this guide and now it is time for some fun. Line the students up on a horizontal line (either in the gym, or outside on the playground, or on a soccer field). Leave enough room for the students to move forward a good number of steps (15–20). Show the students where the finish line is.

Now, ask the class to take out their papers and write their names on them. (You can also do this activity paperless and just have the students move on their honor.) Now explain to the students that you will ask them a question about air quality and they will have a minute to write their answer down on their paper. Then call on a student to answer the question. All students who answered correctly can take two steps forward. Those who did not have the correct answer stay where they are. Continue until there is a winner (or Air Quality Know-It-All).

There are questions on the next few pages for each activity in this guide. Pick questions that were covered in the material you taught.

Part 2

After the game have students fill out their Air Quality Pledge card. Have a brainstorming session before about some possible tasks the students can pledge to do:

- Turn the lights off when I leave the room.
- Don't leave my MP3 charger plugged in all of the time.
- Ask mom and dad to turn down the heat in the winter by a few degrees and put a sweater on. Or turn up the temperature on the air conditioner in the summer.
- Don't leave the TV on when no one is watching it.
- Recycle more at home and school.
- Reuse your lunch bag.
- Ride your bike to school or to your friend's house instead of asking mom or dad to drive.
- Teach my little sister/brother to recycle.

For more ideas visit the DNR's Do A Little Save A Lot Web page.

***After each student has filled out their pledge card show the class how many pledges there are.**

Remind students that even the little tasks can really add up to cleaner air!

Activity Questions

1. **Q:** We all do this all day and all night without even thinking of it.
A: *breathe*
2. **Q:** True or False: Asthma makes it hard for people to eat peanut butter.
A: *false*
3. **Q:** This is a gas in air that we need to survive.
A: *oxygen*
4. **Q:** A disease that makes it hard for us to breathe, especially when we come into contact with one of its triggers.
A: *Asthma*
5. **Q:** List one asthma trigger.
A: *pets, cold air, air pollution, allergens, exercise*
6. **Q:** This is a color-coded scale we use to show if there is pollution in the air.
A: *AQI or Air Quality Index*
7. **Q:** It is like a winter weather advisory or tornado warning, but for air quality.
A: *AQA or Air Quality Advisory*

Continued on next page.

Activity Questions

-
- 7. Q:** It is like a winter weather advisory or tornado warning, but for air quality.
A: *AQA or Air Quality Advisory*
-
- 8. Q:** True or False: The air we breathe has more than one gas in it?
A: *true*
-
- 9. Q:** Our government signed this in 1970 to protect our air.
A: *Clean Air Act*
-
- 10. Q:** This type of air pollution happens ONLY in the summer in Wisconsin.
A: *ozone*
-
- 11. Q:** This type of air pollution happens any time of the year in Wisconsin.
A: *particle pollution*
-
- 12. Q:** Where does most of our energy come from?
A: *power plant or coal*
-
- 13. Q:** Which gives off more pollution, riding your bike or driving a car to school?
A: *driving a car*
-
- 14. Q:** True or False: Air pollution can come from smoky fires.
A: *true*
-
- 15. Q:** What plant gets stippled, or polka-dots, on it when there is a lot of air pollution?
A: *milkweed*
-
- 16. Q:** Does ground level ozone affect the upper or lower side of milkweed leaves?
A: *upper*
-
- 17. Q:** Does air weigh anything?
A: *yes, air has mass*
-
- 18. Q:** Name 2 ways you can sense that air is around us.
A: *see, hear, touch, taste, smell*
-
- 19. Q:** True or False: Children and older adults are in the “sensitive to air pollution group?”
A: *true*
-
- 20. Q:** On the AQI chart what color means good air quality?
A: *green*
-
- 21. Q:** On the AQI chart what does red mean?
A: *Air quality is bad. Everyone needs to be careful outside.*
-

Continued on next page.

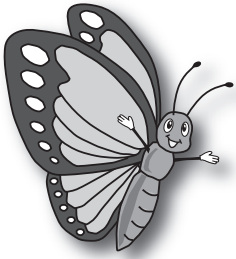
Activity Questions

22. **Q:** Measuring air pollution is one way we can determine _____.
A: *air quality (Hint this answer is a glossary word)*
23. **Q:** Which one of these things is good for air quality: Turning off the lights when you leave a room or starting up the lawn mower and letting it run while you talk to the neighbor?
A: *turning off the lights*
24. **Q:** Which one of these places can you check the air quality, on the internet, in the paper, or on the news?
A: *all of the above*
25. **Q:** What pollutant is formed when VOCs, NO_x, sunlight, and heat all come together?
A: *ozone*
26. **Q:** Name one pollutant that can be in particle pollution.
A: *dust, smoke, water vapor, allergen*
27. **Q:** True or False: You should pay attention to air quality even if you do not have asthma?
A: *True. Many people can be sensitive to air pollution. Children, older adults, or people who work or play outside can all be affected by poor air quality.*
28. **Q:** Which of these is good for air quality – recycling more or unplugging things in your house when they are not in use?
A: *both*
29. **Q:** True or False: If the air is clear it must be clean, with no pollution in it.
A: *False. We cannot always see air hitchhikers (or air pollution).*
30. **Q:** True or false? Kids can't help keep our air clean.
A: *False. Kids can have a huge part in keeping our air clean. Kids can do big things and little things to help keep the air clean. Remember, it all adds up to cleaner air!*

Remember:

- Teachers, please remember to post or make available the **bold-faced** vocabulary word definitions in each activity (*see the glossary on page 65 for definitions*).

Air Quality Know-It-All



Hello Air Heads! After completing air quality activities you know a lot about where **air pollution** comes from and why it is important to reduce pollution whenever possible. Now it's time to test your skills! Your teacher will ask you some questions. Fill in your answer below. If you get the answer right you get to move ahead 2 steps. If you get the answer wrong you have to stay where you are. Whoever gets to the finish line first becomes the class Air Quality Know-It-All and wins! Good Luck!

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____



**After the game,
make sure to fill out
your pledge card.**

**Remember every
little bit helps,
because it all adds
up to cleaner air!**

PLEDGE

I pledge to keep the air clean by:

Signature _____

Date _____

