

# Classroom Activities: Ways to Protect the Planet

This game is a fun and engaging way to challenge students' knowledge about actions that can be taken to protect the planet.

#### **LEARNING OBJECTIVES:**

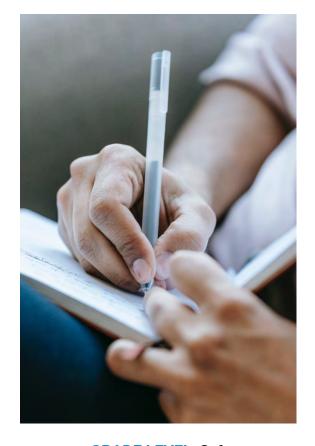
- Identify actions that can be taken to protect the planet
- Collaborate as a group
- NGSS: 3-5 ETS1-2: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem
- NGSS: 5-ESS3-1: Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment

#### **DURING THIS ACTIVITY, STUDENTS WILL:**

- · Reflect on eco-actions
- Work together as a team to compile a list of answers
- Discuss actions they have taken and can take to protect the environment and help their community

#### **MATERIALS:**

- Category Lists
- Individual dry erase boards or scrap paper for each group
- Markers or pens
- A timer



**GRADE LEVEL: 3-6** 

LISTS TO PROTECT
THE PLANET

## **Before Beginning**

- Prepare the category lists (by printing them and cutting along the dotted lines or having them available electronically)
- · Decide how to divide the students into groups for the game
- Gather enough dry erase boards and markers or scrap paper and pens for each group
- Decide how long each round will last (we suggest 3 minutes, but it can be more or less depending on your students)

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### Instructions

- 1. Explain the rules of the game:
- You will be divided into groups and given a dry erase board (or scrap paper)
- I will have a list with a category and six answers. I will read the title of the category, such as "Ways to protect the environment". Your group will have 3 minutes to list six, and only six, ways to protect the environment that you think are on my list.
- At the end of the three minutes, I will reveal the list. Your group will get one point for every answer that is on my list.
- I will then read the title of a new category and we will play again until we have gone through all eight categories.
- At the end of the game, the group with the most points wins!
- OPTIONAL: Give students one possible bonus point per category for adding one idea that could also help people. For example students could get maximum of one point for adding any one of these ideas to "planting a tree:" 1) provides oxygen 2) provides shade, which saves money/energy, 3) increases property values 4) increases human health/well-being 5) limits water run-off/contaminants getting into drinking water).
- 2. Give the students the chance to try. Ask them for ways to protect the environment. Once they have made several suggestions, share the following list:
  - 1. Recycle
  - 2. Conserve water
  - 3. Plant a tree
  - 4. Compost
  - 5. Avoid single-use plastics
  - 6. Save energy

Based off the answers of the class, explain the point system:

You would get one point for each correct answer: It is possible that you list an answer that is correct, such as walk more, but, if it is not on my list, you will not get any points. Part of the challenge of the game is figuring out what is on my list.

- **3.** If needed, ask a student to repeat the rules of the game, and make sure everyone has understood.
- **4.** Divide the class into groups and hand out the dry erase boards and markers (or scrap paper and pens). Set the timer for 3 minutes. Read the first category and write the category on the board so students can have it written down in front of them during the round.
- 5. At the end of the three minutes, ask the students to put their markers/pens down. Reveal your answers and ask each group to count up their points.
- **6.** Keep track of the points for each group on the board.
- 7. Continue playing until you have gone through all 8 categories.

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### **Discussion Questions**

Once you have finished, collect the material and discuss the game as a group, using the questions below as a starting point.

#### **ABOUT THE GAME**

- 1. Which category did you find the most difficult? Why?
- 2. Which answers surprised you? Why?
- 3. What could you add to the "ways to protect the environment" category?
- 4. What did you learn that you didn't know before?

#### **GOING FURTHER**

- 1. Can you think of another category we could add? What would you include on the list?
- 2. Which changes in your everyday life can your make to:
  - a. Conserve water?
  - b. Save Energy?
  - c. Protect Trees?
- 3. What do you think people need to know about:
  - a. Eco-friendly modes of transportation?
  - b. Ways to avoid single-use plastics?
  - c. Ways to protect wildlife and people?
- 4. Which of these categories do you think has the biggest impact on the environment? Why?

As an extension activity, have students select one category and research two solutions listed. Find evidence to support a claim about which solution would have the greatest impact on the planet. Also answer the question, "Which solution do you think would have the biggest impact for your family or community?" Include evidence to support your reasoning.

### **Teacher Tips**

- Encourage the groups to speak softly so the other groups don't hear and copy their answers
- Remind the class that even though their answers might be correct, they have to be the same as the ones on your lists to get points
- If cheating is a concern, you can go around the classroom and count up the points per group before sharing the answers to everyone or have the groups switch boards/papers and score each others'
- · If 8 rounds are too many for your class, adjust accordingly

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## Suggested Resources

Here are some resources that can give your students ideas of some tangible actions they can take to help the planet:

#### **CLASSROOM ACTIVITIES**

#### Plastic-Free for a Week Challenge

For one week, your class will attempt to reduce their use of single-use plastics by adopting plastic-free behaviours.

#### **Where is Your T-shirt From**

After learning about how our clothes impact the environment, students will learn about ways to reduce their carbon footprint.

#### **Caring for Butterflies**

By participating in community science project, students can actively contribute to conservation efforts.

#### **BOOKS**

You Can Change the World by Lucy Bell. (2020, Andrews McMeel Publishing) This book, targeting 8 to 12 year-old kids, offers many eco-action ideas with real-life examples.

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