



SET UP INSTRUCTIONS

Climate Change Affects Arctic and Ocean Environments Kit

Introduction to Portable Self-Guided Exhibit Kit

“Climate Change Affects Arctic and Ocean Environments” is one of four portable self-guided exhibit kits in the Climate Change Toolkit. Each kit includes an activity map and four hands-on activities that can be packaged in a small bag or box and bundled together for checkout by families. The kits are designed to present some of the science behind how climate change is affecting this environment while also providing opportunities for participants to learn how their behavior can make a positive difference. At the end of each activity guide look for the Climate Detective Challenge question; the answer to this question can be found along the edge of the activity map. Have fun!

Setting up the Kit

Things you will need to set up the kit:

1. Container such as a backpack, a wooden box, or a plastic tub that has internal dimensions of approximately 14” x 11” x 5” (l x w x h). This container will hold the 4 activities and activity map.
2. 4 activity bags to hold the contents of each activity (1 gallon plastic storage bags or cloth pouches)ⁱ.
3. Activity map printed from toolkit files.
4. Labels printed from toolkit files for activity box/ container.
5. CO₂ molecule icon game pieces (4 per activity map).
6. Velcro to attach game pieces to activity map.
7. General assembly supplies such as scissors, hole puncher, glue, string, etc.

Kit Preparation Instructions:

1. **Download** and **print** 24” x 18” (L x H) activity map (we recommend printing on vinyl or ordering as a game board)ⁱⁱ. **Place** inside activity box/ container.
2. **Download** and **print** the four CO₂ molecules game pieces. **Attach** velcro to game pieces and activity board.
3. **Download** and **print** title labels for “how to explore this kit” and other labels. **Attach** labels.
4. **Download** and **print** directions for inside of activity box/container. **Attach or place** directions inside activity box/ container.
5. **Assemble** each activity and **place** each into a small bag.



Setting up the Activities

Build a Shell

Things you will need:

1. Activity Guide
2. Build a Shell game board
3. Build a Shell game pieces
4. Several sheets of colored paper (construction paper or cardstock)
5. 49 metal brads
6. Small ring magnet
7. 12" piece of string

Preparation Instructions:

1. **Download and print** activity guide, Build a Shell game board and pieces.
2. **Cut** out the snail shell game board pieces. There should be 9 pieces that fit into the spaces on the game board.
3. **Cut** out 40 circular game pieces to represent the hydrogen.
4. **Place** one metal brad through each game piece.
5. **Attach** 12" piece of string to magnet.
6. **Place** all contents of activity in activity pouch.

Earth Reflects

Things you will need:

1. Activity Guide
2. Earth Reflects glacier pictures
3. Needle and thread OR stapler and staples
4. Small table lamp with incandescent bulb
5. Blue felt
6. White felt

Preparation Instructions:

1. **Download and print** activity guide and glacier pictures
2. **Cut** blue and white felt into pockets or mittens that fit a variety of hand sizes.
3. **Staple or sew** white and blue felt into pockets or mittens.
4. **Place** mittens, lamp, thermometers, and activity guide into activity pouch.

How Fast Will it Melt?

Things you will need:

1. Activity guide
2. How Fast Will it Melt? game board
3. How Fast Will it Melt? game pieces
4. Scissors or utility knife
5. Glue
6. Sheet of card stock or foam
7. Calculator
8. Dice

Preparation Instructions:

1. **Download and print** activity guide, game board, and sheet of ice pieces.
2. **Cut** out ice game pieces and **glue** to either card stock or foam (16 ct.).
3. **Place** game pieces, activity guide, calculator, dice, and game board into activity pouch.

Plankton, Polar Bears, and People!

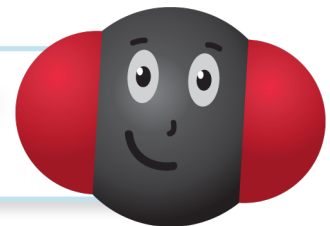
Things you will need:

1. Activity Guide
2. Plankton, Polar Bears, and People! puzzle pieces
3. Contact paper
4. Arch Puzzleⁱⁱⁱ

Preparation Instructions:

1. **Download** and **print** sheet of puzzle pieces onto contact paper.
2. **Cut** out puzzle pieces and **attach** them to the wooden arch puzzle.
3. **Place** activity guide and arch puzzle in the activity pouch.

For durability we recommend laminating activity guides, labels and other activity materials



These supplies can be purchased at:

ⁱ reuseit: www.reuseit.com

ⁱⁱ Chicago Game and Car Co.: www.chicagogameandcard.com

ⁱⁱⁱ Jefferson National Parks Association: www.jnpa.com