**Purpose**

In this activity, you’ll explore various climate change solutions and sort them by *type* of solution: adaptation or mitigation. Understanding the different categories of climate solutions is essential to determining the best approach to climate action. This activity will help you evaluate the need for a broad and varied response to climate change.

## Process

1. First, your teacher will divide you into pairs or small groups of three or four. With your group, define and discuss the terms *adaptation* and *mitigation*. Be ready to share out to the class.
2. Your teacher will either hand out or have you download the Climate Solutions cards. Working in your groups, cut out the individual cards and write a one-sentence description of each solution. You will already be familiar with some solutions, but you might need to conduct internet research to describe others.
3. Place the cards on the Venn diagram chart in the correct area by classifying each solution as an adaptation solution, a mitigation solution, or a solution that fits into both categories.
4. Your teacher will draw or project a large Venn diagram on the board, and ask you to follow these directions in order to share your responses:
	* One group will place two Climate Change solution cards on the Venn diagram.
	* That group must define the solutions and give a short reason for their placement of the cards.
	* The next group can move any of the cards they think were placed incorrectly by the prior group, but they must provide justification for doing so.
* Then, this group can place two cards that are not already up on the Venn diagram.
* Subsequent groups will follow the same process, until all cards have been placed and/or moved.
1. Finally, you’ll independently write a three- to four-sentence response that answers the question, *Why is it important that climate action includes both adaptation and mitigation solutions?*

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**Climate Solutions cards**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sustainable aviation fuel** | **Urban cooling centers** | **Seawalls** | **Carbon capture** |
| **Storm early-warning systems** | **Coastal wetland restoration** | **Electric vehicles** | **Heat pumps** |
| **Renewable energy** | **Drought-resistant seeds** | **Nuclear energy** | **Desalinization facilities** |
| **Vaccine access** | **Low-carbon cement** | **Electrical grid updates** | **High-efficiency fertilizer** |

 **Venn diagram chart**

**Mitigation Solutions**

**Adaptation Solutions**