A Drop in the Bucket with 'Catch! The World's Oceans' Icebreaker

Intended for ages 5 and up

Modification and Preparation List

Adapt this NASA activity for your needs!

In-Person Library or Outreach Program

Materials:

- O Inflatable Earth globe, or a Hugg-a-Planet Earth
- O 5-gallon water container
- O Measuring cups
- O Eye dropper
- O 5 gallons of water
- Small, clear container
- Optional: calculator
- Optional: writing space viewable by the entire group, such as a white board or poster paper and markers, or a blackboard and chalk



Facility needs:

• An area (*outdoor or indoor*) large enough for participants to comfortably stand in a large circle and where a ball can be safely tossed.

Preparation:

1-3 months prior to program:

- O Prepare and distribute promotional materials for the activity, including flyers, posters, library website, online event calendar, and social media posts.
- O Order/gather materials.





In-Person Library or Outreach Program (continued)

The day before the program:

- O Prepare an area large enough for all participants to stand in a circle.
- Fill the 5-gallon water container with water.
- O Place measuring cups, eye dropper, and small clear container next to the bucket.
- O Optional: set up a writing space next to the bucket so all participants can see what you write.
- O Inflate the Earth globe (if necessary).
- O Review the Catch! The World's Oceans and A Drop in the Bucket activity guides.

Day of program:

- O Invite participants to join in an icebreaker with <u>Catch! The World's Oceans.</u>
- After the icebreaker, begin A Drop in the Bucket demonstration.
- O Conclude with discussion on how people can conserve water in their homes, schools, and communities.

Virtual Program Demonstration:

Materials:

In addition to the above materials, you will need:

- O Computer and Internet access
- O Web camera
- O Microphone

Preparation:

1-3 months prior the program

- O Set up a registration link for the program using an online platform such as Zoom, GoTo Meetings, or Facebook Live
- O Promote program on social media, library website, event calendar, etc.
- O Watch the NASA@ My Library STEAM Strategies: Virtual Programs video
- Order materials





Virtual Program Demonstration (continued):

Day of program:

- O Set up and test your computer, camera, and microphone.
- Fill the bucket with water and arrange it next to you with the other materials in view of the camera.
- O Log in to your online platform account and open the meeting at least 15 minutes before the start of the program.
- At the start of the program, welcome everyone and invite them to introduce themselves in the chat or unmute themselves to talk.
- O Consider an icebreaker that people can participate in the chat, such as "Share your favorite marine animal."
- O For younger patrons, show the NASA Space Place video: <u>How Much Water is on Earth?</u>. For older patrons, consider showing one or more of the following videos:
 - NASA: Show Me the Water
 - Earth's Changing Freshwater Monitored by NASA
 - For 15 Years, GRACE Tracked Freshwater Movement Around the Globe
- O Proceed with the <u>A Drop in the Bucket</u> demonstration, inviting participants to share their answers in the chat or unmute themselves.
- O Conclude with discussion on how people can conserve water in their homes, schools, and communities.

