

Step By Step Activity Sheet

School Name:

Lugarno Public School

Workshop Title:

Gross Pollution Trap - experiment

SDGs:

4, 6 & 17

Equipment List:

- 3 x Buckets (painted with Gross Pollutant Trap optional)
- 1 Jug freshwater
- ½ Metre of mesh/fly screen material
- Tape or fasteners
- 10 zip lock bags (or as many as you need for characters in narrative
- Various items of litter to go in zip lock bags for story
- PDF narrative
- Optional a variety of aquatic plants in a pot to represent a pond or river filtration system.



Step By Step Activity Sheet

How To Do The Activity:

- 1. Place 3 buckets on a table outside
- 2. In the first bucket place 1 litre of water
- 3. 2nd bucket has the mesh attached on top with tape or fasteners
- 4. 3rd bucket has a sponge in the bottom
- 5. 1 jug of freshwater is on the table to use as an example of how the river looked at the start
- 6. A bowl to empty filtered water into at the end of narrative.
- 7. 10 zip lock bags $\frac{1}{2}$ filled with litter. For example, tea leaves = fertilizer, cold tea = toxic acid, ripped up paper for litter.
- 8. Select one student as the narrator to read the story. As each character is called out the student comes to the front and empties the contents of their zip lock bag into the first bucket.
- 9. When the story is over the first bucket represents the storm water run off. Explain how rain picks up garbage and debris on its journey and then it finishes up in the river or the first stage of a gross pollution trap (GPT). Show students how awful the river looks.
- 10. The next step is to pour the contents from the first bucket into the second bucket with the mesh on top to catch the larger items. This represents the second stage of a GPT where larger items will sink to the bottom and be collected. Remove the mesh and place the mesh with contents back into the first bucket, leaving just the filtered water.
- 11. Pour the filtered contents into the third bucket with the sponge. The sponge will collect some more of the pollution just like a GPT. Explain that there is an optional step and that is the pond filtration through aquatic plants.
- 12. Lastly, pour the third buckets contents into the bowl and compare the original jug of freshwater to the contents in the bowl. Explain that even with rigorous filtration pollution still seeps into our waterways.