



WATER FILTRATION - AGE 10-14



Scientists Names:

Instructions:

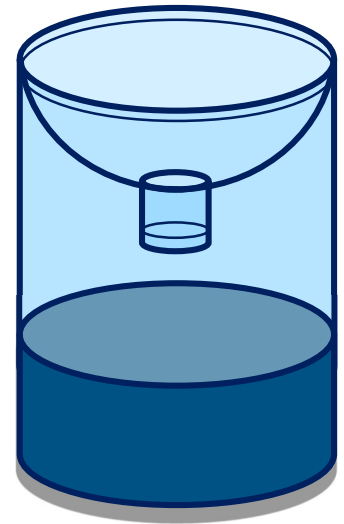
Prep:

1. Remove the top half of the 2 litre bottle and place it upside down into the bottom half of the bottle (this may have been done for you already). The top half will house the filter materials and the bottom half will collect the filtered water.

2. Layer the filter materials in the lid top half of the bottle (up to 4 different layers from a range of options - e.g. gravel, sand, cotton wool etc.)

3. Take note of what pollutants are in the water provided by your instructors (e.g. mud, plastic, leaves etc.).

4. Make predictions about what each filter layer will remove from the polluted water.



Filter:

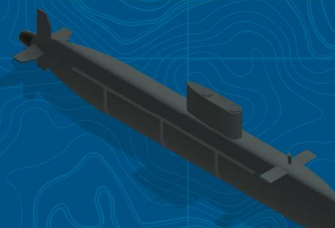
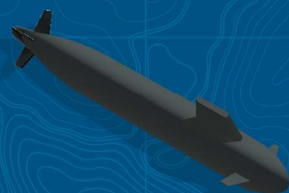
5. Pour the polluted water over the filter materials.

6. Observe what the collected filtered water looks like.

7. Remove each of the filter layers one at a time and record what each layer removed from the polluted water. Write down the results on the worksheet.

Pollutants present:

| | |
|----|-----|
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |





WATER FILTRATION - AGE 10-14



WATER FILTER CONSTRUCTION - INSTRUCTIONS:

Scientist names:

Construct your water filter:

Draw and label your filter layers on the diagram.
Include your predictions of which pollutants will be removed at each level.

Filter Layer 1:

- Material:

- Pollution filtered out:

Filter Layer 2:

- Material:

- Pollution filtered out:

Filter Layer 3:

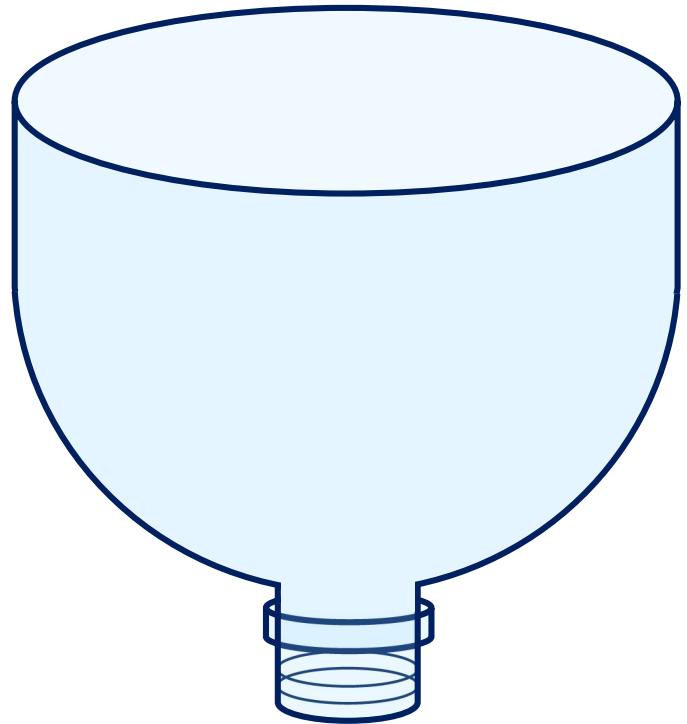
- Material:

- Pollution filtered out:

Filter Layer 4:

- Material:

- Pollution filtered out:



Observations:

What does the water look like?

Colour: _____ Transparency: _____ Smell: _____

Does the water seem drinkable? _____

Were your predictions correct?

Were you surprised by any of the materials due to their success or failure to filter pollutants?

