The

OneStepGreener

Activity Book

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Welcome to the One Step Greener activity book!

I am your planet Earth and I am really really sick. You see, some human beings have been taking my resources and not giving anything back. Essential parts of me are missing, my fresh water is depleting, my trees are being cut, my soil is being polluted and my oxygen supply is being cut. But you can do a lot to help me out, will you take the following steps over the course of this week to save me?
Step 1: Papier-Mâché Globe

Paper is precious, it comes from trees. But humans are always using it without care and this means that lots of trees are cut down at a rate faster than they are grown. This is harmful for me as trees give my inhabitants life— from lions to deer to humans, trees give food, oxygen and tones of other things essential for sustenance.

Today I want you to make a model of me, use the old newspapers in your house to make a papier-mâché globe!
Materials

- A balloon
- Newspaper
- 3 ½ cups water
- 1 cup flour
- 1/2 cup fevicol
- 2 bowls
- 1 kitchen pot
- 1 spoon
- Acrylic paint
- Paint Brushes

Instructions

- Blow up and tie your balloon. Use a little bit of tape to tape the balloon to one of the bowls so you don't make a mess.
- Tear newspaper strips of 4–5 pages of newspaper- there should be a LOT of strips.
- In another bowl make the papier-mâché paste! Boil 3 cups of water in the kitchen pot.
• Mix 1 cup of flour and 1/2 cup of fevicol together in a bucket or bowl. Stir in the hot water slowly and keep mixing so there aren't any lumps.
• Allow the mixture to cool a little before you start to work.
• Dip one strip of the newspaper at a time into the paste, remove excess paste.
• Stick the strip on the balloon.
• Complete one later and let the globe dry for 8 hours then add another layer. Keep adding layers to the balloon till you have made at least 3 whole layers. (this is cumbersome but the final product will be amazing!)
• When the papier-mâché is dry, use acrylic paint to paint your globe. Using different hues of green, blue and white, make me look like I did before. Remember I am not made of borders but of beautiful places!
Step 2: Learn More: Crossword!

Hey Earthling, how much do you know about your planet?

ACROSS
2. not sand but s___
3. another term for H2O
6. opposite of wet
7. opposite of longitude
9. a layer of the earth that has hole in it.
10. harmful greenhouse gases

DOWN
1. largest mammal
4. largest ocean
5. gives us oxygen
8. the absolute centre of the earth
Step 3: Potter’s Planting with Plastic

Plastic is not biodegradable and really severely ruins the environment. But there are many ways in which we can re-purpose plastic. If you have ever had cold-drinks and saved the bottles, here’s a great step for you to take!
Materials

- Old plastic bottle
- Soil
- Natural Fertilizer
- Seeds
- Acrylic Paints/Paint Brushes (optional)
- Knife
- Scissors

Instructions

1. Take a single use plastic bottle after the liquid is consumed.
2. Cut it into half, and use the side which has the bottom. SAVE THE OTHER HALF FOR STEP 7!
3. Take your knife and poke very tiny holes at the bottom of the bottle so that the plant water can drain itself.
4. In the bottle put soil, a little bit of fertilizer and the seeds that you wish to grow.
5. Make sure your plant is sapling since a bottle can't contain anything bigger
6. Water your plant every alternate day to see a beautiful green sapling!
7. You can also paint the outside of the bottle with acrylic paints - make this step number 2 if you decide to decorate it!
Step 4: Match the Following!

Do you know what these very technical terms mean? Match the following!

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Deforestation</td>
<td>The top of the ocean, where the water meets the atmosphere.</td>
</tr>
<tr>
<td>GreenHouse Gases</td>
<td>Global warming and large-scale shifts in weather patterns caused by the rising temperatures, driven by humans due to rapid industrialization.</td>
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<tr>
<td>Sea level</td>
<td>The layer of all living things</td>
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<tr>
<td>Climate Change</td>
<td>A gas that absorbs and emits radiant energy within the thermal infrared range.</td>
</tr>
<tr>
<td>Biosphere</td>
<td>Removal of a forest cover where land is then converted to a non-forest use.</td>
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</tbody>
</table>
Step 5: Imagine this Is Heaven

Can you imagine a world that is like heaven. Green and beautiful with no suffering?

Draw and describe your ideal sustainable life.
Step 6: Self-Reflection

Here’s a list of unsustainable activities, do you do them? Mark the activities you do. Where are the areas in your life that you need to make a change?

- Do you take plastic bags from the grocery store?
- Do you have items that need to be constantly changed that are plastic- for example, your toothbrush?
- Do you litter?
- Do you eat lots of meat?
- Do you buy chips packets that are made of plastic?
- Do you not reuse your items?
- Is your shower more than 5 minutes long?
- Do you leave the lights on in your house even when you don’t need them?
- Do you use your private car more than public transportation?
- Do you not carpool?
• Do you separate your waste into biodegradable and non-biodegradable?
• Do you not educate yourself on environmental matters?
Step 7: Rainwater Harvesting

Rainwater is a great resource for clean water but most of it gets wasted because it's not harvested. Here is an easy and effective way to learn about rainwater harvesting.

Materials

- Half of the plastic bottle from step 3
- Scissors or Knife
- Coffee Filter
- Sand
- Coarse sand/Gravel
- small rocks
- Cup to collect filtered water
Instructions

- Place the plastic bottle half on the cup
- Place each layer of material as shown in the diagram below
- Take a cup of dirty water and run it through the system
- Out will come clean and drinkable water!

On a large scale this is what happens to rainwater when it reaches the soil but because of roads and constructions, my soil can’t do its job! But now you can do it for me! Can you imagine scaling this up?
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Write your ideas below!
Congratulations Earthling you have worked hard this week, I hope you will spread my message so that more people can help save my life!