

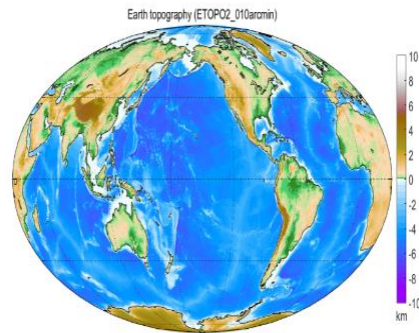
OUR BIG BIG EARTH (LEVEL 2)

Description	A project that teaches the learner about the world and its diversity to help them develop tolerance to other cultures.
Leading Question	How big and diverse is our planet earth?
Total Time Required	~5 hours over 3 days
Supplies Required	Paper, pencils, coloring pens, & glue
Learning Outcomes	<ul style="list-style-type: none"> - World Geography and demographics: List the continents and oceans, number of countries and world population - Realize the importance of the enriching diversity of our Earth - Develop tolerance and appreciation to other cultures of the world - Learn some methods around estimation and visualizing huge numbers
Previous Learning	Planet Earth, and the concept of countries and peoples

DAY 1

Today you will learn about the Earth and the important facts about the Earth.

Suggested Duration	Activity and Description
5 minutes	<ul style="list-style-type: none"> • Introduce that we are going to learn about our planet Earth. It is round, like a ball stretched from the middle.



Source:

https://www.asu.cas.cz/~bezdek/vyzkum/rotating_3d_globe/figures/elevation_2d_map_Earth_topography_ETOPO2_010arcmin_GMT_globe_px0650.png

30 minutes

- World in numbers: continents and oceans, countries and people.
- Answer the world in numbers worksheet with the learners (it is preferred to have a hard copy of the worksheet).
- Answers: There are 195 countries in the world, and a total of 7.7 billion people

45 minutes

- A challenge to create a 3D model of planet earth.
- Hint: some easy ways that learners can use to construct the globe is using paper bowls, layers on used paper and then drawing on the outer layer or using wrapping a ball they have with paper.
- Criteria:
The model is 3-d, with the names of continents and oceans written clearly on it.
(Or the map has the names of continents and oceans.)
The model is durable to be used as a reference by the family.
How impressive is the creativity that learners have put into making it?

15 minutes

- Learners present to parents their model or map.
- Parents observe and assess the product.

DAY 2

Today you will look at the population of the Earth.

**Suggested
Duration**

Activity and Description

5 minutes

- Activity: Looking at the picture below, this is the top of a very deep container of apples. The shop owner organized them by putting Green apples on the left, red apples in the middle, and yellow apples on the right. Assuming these are 100 apples at the top, how many of the hundred would be red? How many are Green? How many are Yellow? Write your guesses as percentage: a number followed by this sign %



- Activity: Some mathematicians divided all the 7.7 billion people in the world into 100 groups, to represent Percentages of people living on each continent, they made this [Population distribution](#) drawing of the world map with 100 human characters.
- Activity: Use the [Population distribution](#) visual to count what percentage of people live on each continent.
 - North America
 - South America
 - Africa
 - Europe
 - Asia
 - Australia

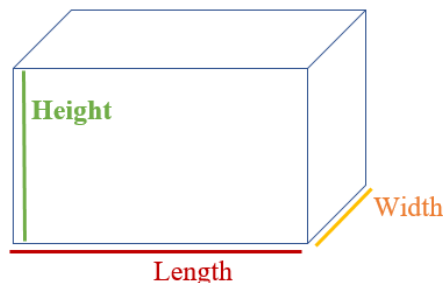
Answers:

- North America 5%

- South America 9%
- Africa 16%
- Europe 10%
- Asia 60%
- Australia (less than 1%)
- Questions:
 - Which continent has most people living on?
 - Which continent seems to be least populated?
- Optional: for Parent to explain: You know that there are around 25 Million people living in Australia. However, this number is less than 1% and that's why the visual showed nothing on Australia. Actually, 1% of the whole population is a huge number.

30 minutes

- Optional Activity
- We learned that 7.7 Billion people are living on planet earth. How big is this 7.7 Billion as a number?
- Let's try to visualize 7.7 Billion as a number:
- A Million is a Thousand Thousands, and a Billion is a Thousand Millions!
- Let's try to imagine a room full of rice, how many rice grains can fit in your room?
 1. First, we need to measure the amount of 'space' in the room. This is called Volume. As you are familiar with Area as the measure of surfaces, Volume is the measure of space that an object occupies. The Volume of a cuboid is calculated by multiplying the length (in metres) by width by height: $V = \text{Length} \times \text{width} \times \text{height}$
 - Choose one room of the house that is a cuboid (which has a rectangular floor)



- Either measure its dimensions, or ask the help of your parents to estimate the dimensions of your room in metres, then calculate the Volume.

2. Then fill a teaspoon with rice grains and count them. This number is N.
3. A teaspoon is about 5 ml, so to reach 1 Liter we must multiply by 200. Therefore, multiply $N \times 200 =$ approximately number of rice grains in 1 Litre of space
4. 1 Cubic Metre, or the space within a cube of 1 metre dimension, is equivalent to 1000 Litres. So now, we need to multiply the previous answer by 1000: $(N \times 200) \times 1000 =$ approximately the number of rice grains in 1 cubic metre.
5. Finally, to estimate the number of rice grains that fit in your room, multiply the previous answer by V:
 $[(N \times 200) \times 1000] \times V =$ approximately the number of rice grains that fit in your room.
6. Compare the answer to 7.7 Billion. What do you think of this number now? Do you see how big it is?

20 minutes

- Now that we know how big our planet is, and how many people live on it at the moment, let's try to see how interconnected our lives are
- How 'global' is our family?
- Activity: learners, with the help of parents, answer a set of questions to realize our global interconnectedness. (parents to choose only the relevant questions)
 - Do we have family members living in other countries/ continents?
 - Do we have friends from other countries or continents?
 - Does any of us use or know a salutation/greeting in another language? Where did that language originate?
 - Any family member who likes a dish from a different culture/country?
 - Any family member who has travelled to another country?

15 minutes

- To find out how global events affect our daily life. let's look into the COVID-19 pandemic:
 - Do you know where did it actually start? (which city, in which country, in which continent)
 - Can you spot that on the map?

- How strange is it that someone catching a virus in a faraway city, led to a global pandemic and had such a major impact on everybody's lives?!

45 minutes

- Parent supported research: where do the goods we consume originate from?
- The parents search for answers of the following questions and explain to the learners about the origin of these goods by locating on the Earth model they made yesterday. Answers can be found either by reading labels on the products, asking the salesperson at the market where we buy them, asking relatives and friends, or from newspapers
- Where do we get the necessities of our life (whether locally produced or imported from other countries). Choose any four of the below categories, and mark on the map the location of where you import them.
 - Rice, wheat for bread, lentils
 - Fruits and vegetables
 - The fuel that operates our electricity power plants and transportation vehicles
 - The manufacturing material and process of our phones or computers
 - The cotton in our clothes
 - Where are our electric appliances made? Where is the origin of the raw materials used in their manufacturing?
 - Why is it that our country exports to other parts of the world?

10 minutes

- Learners are asked reflection questions:
What do you think of all the things we have at home: how many people you think worked on them until they reached our house? (starting from extraction of raw material, to manufacturing, to transport.)

DAY 3

Today you will learn about tolerance.

Suggested Duration **Activity and Description**

30 minutes

- Tolerance: there are many similarities amongst all humans, but there are also differences.
- The differences are very interesting, because it would be boring if we were all similar!
- Let each of us fill this ID table, and then we discuss it.

Things that I did not choose	Things I chose for myself!
Name	My favorite dish
Nationality	My super hero
Religion	Favorite story
Eye-color	Favorite game

45 minutes

- Discussion around the ID tab, around the theme of perceiving differences and building barriers between peoples based on things they have not chosen.
- What is similar for all of us in the family?
- What are our differences?
- Do you think there are other learners from around the world who share similarities with you?
- Would you prefer playing your favorite game with your parent or with a learner from another country? Why?
- Do you like that family members have differences, or do you wish that we were all similar with no differences?
- Don't you think it would be boring if we were all similar?
- Don't we enjoy using the different things at home that were made in various parts of the world?

15 minutes

- Reflection questions:
 - What do you think if you see a kid who has a different skin color? Do you think they may share similarities with you?
 - If you have a friend from a different religion, what gift would you give them?

ASSESSMENT CRITERIA

- Observation of engagement while working on tasks.
- Interactions and answers to the questions.

EAA welcomes feedback on its projects in order to improve, please use this link:

<https://forms.gle/LGAP9k17fMyJrKJN7>

ADDITIONAL ENRICHMENT ACTIVITIES

- You can ask your learner to draw a map of the world with nothing written on it, and then play a game with family members to answer all questions that on [World in numbers worksheet](#)
- You can ask your learner to make a puzzle out of the world map, by drawing it and then cutting it into square pieces, to challenge family members to put it together.

MODIFICATIONS TO SIMPLIFY

- A simpler version of this project would be to do the activities of Day 1 and 3 only.

WORLD IN NUMBERS WORKSHEET

The earth is like a ball

On its surface there are land and water. Large pieces of land are called continents, and large water surfaces are called oceans.



Source: <http://www.myschoolhouse.com/courses/O/1/76.asp>

- How many continents are there in the world? Please name them.
- How many oceans? Please name them.
- In which continent do we live?
- If we want to travel to North America, what oceans and continents, do we have to cross?

Harder questions:

- How many countries are there in the world? (make a guess)
- How many people are there living around the whole world? (make a guess)
- What proportion of the worlds' population are children (under age 14)?

WORLD POPULATION DISTRIBUTION

What percentage of people live in each continent?



Source: Knowva Academy

<https://www.youtube.com/channel/UCwkpual46XUopl9tNGli4fw>

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