

How to use Diapers on A Plane Worldschooling Lesson Guides and Worksheets

Our Worldschooling Lesson Guides are free to use and intended to be a resource for parents to engage with their children. Combined with the accompanying blog post, which shares our family story of experiencing the related topic firsthand, these guides will help your family pinpoint ideas to focus on during your learning sessions.

Whether you are on a journey to the subject quite literally, or whether you are studying at home, the intention is to use these guides to initiate the discovery process. These lesson guides are not intended to be handed off to your kids for self directed learning. While we love checking out books from the library, reading and discovering new things, worldschooling is about seeking hands on opportunities.

As a family we abide by the philosophy of Socrates Questioning, a method of teaching and learning which Socrates practiced by asking questions of his students instead of lecturing. This method allowed them to discover the answers by asking more questions and examining ideas. Ultimately through enough questions we will be lead to the answer. These lesson guides don't have all the questions. They don't have all the answers. They are a starting point. Together, with your student you can begin the questioning process and seek out the answers together.

We could include dates and statistics, but that's not what students remember. Regardless of the type of learner you happen to be, everyone responds to learning that stimulates the senses and challenges the learner. Worldschooling at its core stirs the energy of the mind to stimulate a passion for the topic.

The provided worksheet plays off the lesson guide as a comprehension tool. A way to assess if the way you are presenting the information and the questions that are asked are being received.

Of course, use this the way you see fit! Use these as they fit your family best; these are just our ideas and how they work best for us.

Puerto Rico: Meteorology/Paleotempestology Hurricane Maria Worldscooling Lesson Guide

Q 1) What is a meteorology? What is paleotempestology? How are they different?

- A) Meteorology is the study of the atmosphere, climate or weather before it happens. Paleotempestology is the study of tropical cyclones, or hurricanes, after they happen. Meteorology is the study of all types of weather, while paleotempestology is the study of just cyclones. Meteorology studies the future, and paleotempestology studies the past.

Q 2) Is there a difference between cyclones, hurricanes and a typhoon?

- A) No, they are all tropical storms. The only difference between these names are the names themselves. Just like every region has a different way of speaking, or language, these names vary depending on where they are located. Typically cyclones are named when they occur in the South Pacific and Indian Ocean; hurricane is used in the Atlantic and Northeast Pacific and typhoon is used in the Northwest Pacific.

Q 3) When did Hurricane Maria attack the Caribbean? What islands did it affect?

- A) Hurricane Maria hit the Caribbean between September 16, 2017 and October 2, 2017. It originated in the North Atlantic Ocean and tracked towards the Dominican Republic. After landfall it made its way to St. Croix and St. Thomas passing by the exterior and finally hit Puerto Rico.

Q 4) Why was Hurricane Maria so devastating?

- A) Aside from the fact that Hurricane Maria directly hit the island with 175 mph winds as a Category 4 hurricane, the eye of the storm was 23 miles wide with winds extending 60 miles out from the center. It was the 5th strongest storm ever to make landfall in the United States territories, and the strongest storm to hit Puerto Rico in 85 years. It cut the island in half and passed through densely populated areas. Adding rain to the heavy winds caused intense flooding and the mountainous terrain enabled the Hurricane to bounce back and forth across the island. Additionally, Hurricane Maria slowed down once it made landfall which lengthened the amount of damage.

Q 5) What causes a hurricane?

- A) Hurricanes form over large bodies of warm water. The warm air from the water rises to meet the cooler air of the higher atmosphere, and in turn warms the cooler air causing storm clouds to form. The storm clouds begin to rotate in the higher elevation with the rotation of the earth. Due to the laws of physics, storms in the northern hemisphere rotate counterclockwise and in the southern hemisphere rotate clockwise (coriolis effect). When enough warm air forms, a hurricane eventually develops. Winds must reach a minimum of 74 miles an hour to qualify as a hurricane.

Q 6) When and where are hurricanes most common?

- A) Hurricanes form over the equator because it contains the warmest air. It contains the warmest air because the equator receives the highest intensity of solar energy. Hurricane season is between June 1 and November 30.

Q 7) How does a hurricane get its name?

- A) In the 1950's the World Meteorological Organization created six lists of 21 names, both male and female, to track the storms. One list is rotated through each season. If more than 21 storms occur in a single season, consequent storms will be named after the Greek Alphabet. Prior to implementing this system, confusion and misinformation was easily spread due to similar or even the same names being used to track different weather systems.

Q 8) What damage did Hurricane Maria cause?

- A) The most prominent effect Hurricane Maria had was on the power grid. 80% of Puerto Rico's utility poles and all transmission lines were knocked out, and it took 328 days to restore power back to 100%. 80% of the agricultural system was also devastated, suffering complete ruin of banana crops with coffee, plantains, yams and sweet peppers not far behind. 85% of phone and internet cables were destroyed. Public schools were used as shelters and closed for a minimum of five weeks in different parts of the island for residents who were without power, shelter or whose homes had been destroyed. 135,000 people left the island permanently and those who remained were without power for up to 328 days and are still being advised to boil their water before consuming. It is estimated that over 3,000 people lost their lives.