Water Brothers & Episode Guide Questions

FLYING RIVERS

- 1. What crisis is the city of Sao Paulo facing?
- 2. How much water does each tree in the Amazon transpire into the atmosphere each day?
- 3. What does the term Flying Rivers refer to?
- 4. Why are the flying rivers threatened?
- 5. How much water does the Amazon forest transpire per day?
- 6. From where does Sao Paulo receive most of its rainfall?
- 7. What are three of the major threats causing deforestation in the Amazon rainforest?
- 8. How much of the Amazon forest has been destroyed so far?
- 9. Of all the different causes of Amazon deforestation which one is responsible for the most destruction?
- 10. What are two ways that Alianca da Terra assists farmers to become more sustainable?
- 11. Why do farmers use fire to clear land?
- 12. Approximately how many forest fires were recorded across Brazil in 2015?
- 13. How has deforestation made the forest more vulnerable to fire?
- 14. What is the major cause of Sao Paulo's drought?

Water Brothers & Episode Guide Answers



- 1. What crisis is the city of Sao Paulo facing? A drought/water crisis/water shortage, one of the worst in its history
- 2. How much water does each tree in the Amazon transpire into the atmosphere each day? 300 to 1000 litres of water
- **3. What does the term Flying Rivers refer to?** Flying Rivers refers to the water that is transpired from the Amazon rainforest and formed into clouds that controls rainfall across the country/continent.
- 4. Why are the flying rivers threatened? Deforestation in the Amazon
- **5. How much water does the Amazon forest transpire per day?** 20 billion tons or 20 trillion litres of water is transpired by the Amazon per day, larger than the amount of water that flows into the Atlantic Ocean from the Amazon River!
- **6. From where does Sao Paulo receive most of its rainfall?** Sao Paulo receives most of its rainfall from the Amazon rainforest and the Flying Rivers
- 7. What are three of the major threats causing deforestation in the Amazon rainforest? Hydroelectric dams, illegal gold mines, loggers and farmers clearing land for livestock and crops
- **8. How much of the Amazon forest has been destroyed so far?** 20% of the Amazon forest has been destroyed so far
- 9. Of all the different causes of Amazon deforestation which one is responsible for the most destruction? Cattle ranching/beef production
- 10. What are two ways that Alianca da Terra assists farmers to become more sustainable? Improved soil and water conservation methods and genetic improvements that introduce new strains of cattle that grow faster and require less land.
- **11.Why do farmers use fire to clear land?** The cost is fairly low and can be done without permits/to avoid penalties
- 12. Approximately how many forest fires were recorded across Brazil in 2015? Over 235,000
- **13.How has deforestation made the forest more vulnerable to fire?** Deforestation has dried out the remaining forest and reduced the power of the flying rivers and amount and timing of rainfall
- **14.What is the major cause of Sao Paulo's drought?** Deforestation that has caused changes in rainfall/the flying rivers