

## PLANET EARTH: Freshwater

1. What is the source of all freshwater? Where does the journey begin & where does it end?

Rain is the source of all fresh water in mountains - and travels hundreds of miles to the sea.

2. How high is the highest waterfall?

Angel falls - falls unbroken for almost 1000 m -

3. What adaptation do the hellgrammites have to help live in the torrent zone?

bushy gills to extract oxygen.

bodies are flat to reduce drag

4. What adaptation do black fly larvae have that helps them survive?

anchor themselves with a ring of hooks  
+ a silk safety line

5. What adaptation do bamboo shrimp have that helps them survive?

fan like arms fan out for sifting through particles

6. The giant salamander is one of a few vertebrates found in the upper reaches of a river. How is this organism specialized to find food?

hunt at night

- Only large predator in the icy waters
- slow metabolism - live to about 20 yrs
- poor eyesight but sensory nodes on head detect changes in water pressure

7. What is so special about the salmon migration? Name one salmon predator?

world's largest Fresh <sup>fish</sup> water migration - and battle their way 100's of miles upstream  
Predator - Bears -

8. What are baby fish called?

Fry -

9. What is the most erosive water force?

Rivers - driven by gravity they are the most erosive force on the planet.

10. What river created the Grand Canyon?

Colorado River

11. River otters are highly social animals. Give two behavioural adaptations that reflect this.

- forms groups when fishing - adults share catches with cubs
- group cubbing, strengthens social bonds
- team play - tease crocodiles

12. What dangers face the river otter?

Major Crocodiles

13. Where are the biggest crocodiles located?

Mara river - Nile crocodile.

5 meters long

14. What holds more freshwater than all the rivers?

Lakes hold 20x more fresh water than all rivers combined -

15. How do male cichlids protect their fry from predators?

They hold their young in their mouth for protection

16. Where is the world's largest & oldest lake? What is its name?

Baikal → Eastern Siberia

contains  $\frac{1}{5}$  of world's all fresh water in lakes + rivers

17. What is the area called where rivers flood the land?

River Delta - Estuary

18. Why is the mouth of the Amazon River especially rich in life?

- Has more water flowing out of it than the next 10 rivers combined
- Rich in nutrients & sediment because it is where salt water + fresh water blend together

19. What is the last stage of river flow? What do rivers deliver there & what plants are found there?

- The last stage is where it widens + slows down
- The river provides a lot of nutrients leading to an abundance of plants <sup>because</sup> as it's ~~slow~~ slow <sup>moving</sup>

20. How have crab-eating Macaques adapted specifically for living in mangrove forests?

They can stay under water for up to 30 seconds - living an amphibious lifestyle