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| Stories |
| Misty morning |
| We might lose the reef |
| Stealing their future |
| Greta |
| Not just nice words |
| Water cycle |

1. Fog is a kind of cloud that does what?
2. What is the Great Barrier Reef made of?
3. How much of it has died in the last 30 years?
4. What did Greta Thunberg say the politicians are stealing?
5. What age was Greta when she first learned about climate change?
6. What age is she now (careful!)?
7. What does Greta say she cares about?
8. What does she say our civilization is being sacrificed for?
9. What brought Greta across the Atlantic?
10. What did she say will push world leaders to do something about climate change?
11. Her role, she said, is to be one of many ---------.
12. What does Greta want from world leaders?
13. What is a cycle in science?
14. What is the name of the stretch of water in the photo?
15. Why do toes turn blue in Loch Lomond?

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| Stories |
| Evaporation |
| Evaporation (part 2) |
| Precipitation |

1. If you could zoom right into a little drop of water near the surface, what would you see?
2. What is it that molecules in a solid can’t do?
3. Molecules in a liquid are ------- apart than molecules in a solid.
4. What can the molecules in a liquid not do to each other?
5. What do molecules in a liquid do to each other, as they’re zipping around?
6. What happens to the speed of a molecule that gets a bump in the direction it’s moving?
7. What can sometimes happen next?
8. What is that water molecule part of now?
9. Who did we ask about the number of water molecules in a drop?
10. Roughly how many molecules did she say are in one drop of water?
11. Sometimes a collision between two molecules gives one of them enough ------ to escape.
12. What do we call water that has escaped from the liquid surface?
13. What is the word for a liquid turning into a gas?
14. What is the name for that part of the water cycle where water falls from the sky?
15. Why isn’t it just called rainfall?
16. Name one type of solid water.
17. What is sleet?
18. Name three of the four main ways that water gets back to Earth.

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| Stories |
| Condensation |
| Condensation (part 2) |
| Precipitation (part 2) |

1. Remember that water vapour is a ---.
2. How can we tell, just by looking at them, that clouds are not made of water vapour?
3. What are clouds made of?
4. How many of the little droplets in a cloud would make one raindrop?
5. What is the word for when a gas turns into a liquid?
6. State one thing that has to happen to water vapour before it can become part of a cloud.
7. Why does water vapour start to rise as soon as it leaves a water surface?
8. As you go higher in the air, does it get warmer or cooler?
9. What can happen to a gas when it cools?
10. So what happens to the water vapour when it rises high enough?
11. What does it become part of?
12. Have you ever watched one cloud closely to see what it does?
13. Clouds are ----- shifters.
14. What are wispy cirrus clouds made of?
15. What do clouds closer to Earth consist of?
16. What do the droplets do when conditions are right?
17. What do they do when they are heavy enough?

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| Stories |
| Back to the sea |
| How long is the water cycle? |

1. What happened first to the little bit of Loch Lomond water on its travels?
2. What did it do next, after it rose high in the air?
3. Next it became part of a little -------- in a cloud.
4. Then a ------- of them came together to form a raindrop.
5. Why will the raindrop usually not fall straight back down?
6. Which ocean would it have joined if it had been blown by a wind from the north?
7. How long can a drop of water spend in an ocean before it evaporates again?
8. From starting on the surface of a lake or sea, when has one particle of water completed one water cycle?
9. The water cycle can be fast. It can be ----.
10. If it evaporates from a water surface then falls back on that same surface is that fast or slow cycle?
11. If it falls on land, ends up in a river and is carried out to sea, is that a fast or slow cycle?
12. How long can a drop of water spend in an ocean before it evaporates again?
13. How does water get back into the air, if a plant takes it in through its roots?
14. How long on average does water spend in the air before falling back to earth?
15. How long does it spend in the soil?
16. How long on average does a glacier trap water?
17. How old is the Earth?
18. So what does that mean for every drop of water on our planet?

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| Stories |
| The effects of climate change |
| How do we know climatechange is happening? |

1. What did climate change used to be called?
2. Why is climate change a better name for it?
3. Name two effects of higher temperatures that will become common.
4. Name one effect of heavier rainfall that will be more frequent.
5. What type of weather will happen more often and more intensely?
6. What will be driven extinct?
7. State one more effect of climate change, mentioned in the story.
8. What traps energy from the sun in a greenhouse?
9. How does that affect the inside of the greenhouse?
10. What traps energy from the sun on the Earth?
11. How does that affect the Earth?
12. How else do we know that climate change is happening?
13. What is Earth’s average temperature doing?
14. What is happening to the temperature of the oceans?
15. What is shrinking?
16. What are becoming more frequent?
17. State one more piece of evidence that climate change is happening now.
18. What warms everything in a greenhouse?
19. What stops all the energy in sunlight from being carried away in a greenhouse?
20. What stops all the energy in sunlight from escaping into space?
21. Name two greenhouse gases.
22. Carbon dioxide in the atmosphere acts like what?
23. What effect does that have on Earth?
24. Where does a lot of the methane in the air come from?
25. If there were no greenhouse gases in the air, Earth would be much ------ than it is now.
26. How long have humans been pumping carbon dioxide into the atmosphere?
27. What effect does this have on the temperature of the Earth?
28. What effect does this have on the climate?

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| Stories |
| What is the greenhouse effect? |
| Greenhouse effect |
| Where does carbon dioxidecome from? |
| Does breathing causeclimate change? |

1. Name three things that make carbon dioxide on Earth.
2. What’s another name for combustion?
3. What two elements combine in our bodies to create carbon dioxide?
4. Where does the carbon come from?
5. If the food we’re eating is fruit or vegetables, where did the carbon in it come from?
6. If you eat meat from a herbivore where did the carbon in it come from?
7. If you eat meat from a carnivore, where did the carbon in it come from?
8. So where does all the carbon in the food we eat come from?
9. What is a cycle in science?
10. Name two cycles that happen on Earth.
11. Carbon in the air and where else goes around the carbon cycle?
12. Roughly how long does it take for carbon in dead plants or animals to get back into the air?
13. How do bacteria help that to happen?
14. Name three of the four parts of the landscape involved in the slow carbon cycle.
15. In the slow carbon cycle, what dissolves in the little droplets of water a cloud contains?
16. What carries carbon from the air back to Earth?
17. What makes a raindrop slightly acid?
18. What can take place when a raindrop touches rock?
19. How does the carbon then get to the ocean?

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| Stories |
| Fast carbon cycle |
| Slow carbon cycle |

1. What type of animal in the ocean uses the carbon?
2. What happens to it when the animal dies?
3. Over long periods of time what do the shells turn into?

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| Stories |
| Slow carbon cycle (part 2) |
| Speeding up the slow carbon cycle |

1. In the carbon cycle, how long does it take carbon to get from the atmosphere into rocks under the Earth?
2. What happens to the rock in the lower plate when two plates collide?
3. What happens to the carbon in the rock?
4. How does that carbon get back into the atmosphere (as carbon dioxide)?
5. Sooner or later what will then happen to it?
6. What have humans done to part of this carbon cycle?
7. Which part of the carbon cycle are plants animals normally part of?
8. Where does the carbon in plant and animal bodies go, after they die and decompose?
9. But what happened to huge numbers of dead plants at certain places in the past?
10. What did heat and pressure do to them over millions of years?
11. What would normally have happened to the huge amounts of carbon in these rocks?
12. What did we humans start doing to these rocks 200 years ago?
13. What effect did that have on the amount of carbon dioxide being released into the atmosphere?
14. What is the effect of that huge increase in carbon dioxide into the atmosphere?