**Eco Earth Game Text**

**Login Window**

*“Please enter your team name”*

*Start* *[BUTTON]*

**World View**

*“Welcome to Eco Earth! You’ll learn about the greenhouse gases that are emitted from production to disposal of four products; mobile phones, plastic bottles, leaving electronic devices on standby and beef, and how each of these impact the habitats you’re exploring during your time at the zoo today.*

*At the end of each chain you’ll be asked a series of questions on what you’ve learnt. Your score will decrease for every incorrect answer, so do your best to come out on top and keep your score as close to 10,000 points as possible! Good luck!*

*When you’re ready, click into your starting habitat and work your way through the chain. Look out for the bonus animal game rounds, too!”*

**Habitat Introductory Text**

*“Welcome to the Arctic Tundra! The Arctic is mined for natural gas. One of the uses for this natural gas is to generate electricity, which is wasted if electronics are left on standby. The Arctic is estimated to hold the world's largest remaining untapped gas reserves. Click on the unlocked padlock to start your journey, and learn about the greenhouse gas footprint of leaving electronic devices on standby. Don’t forget to explore the table, too!”*

*“Welcome to the Rainforest! The rainforest is mined for the raw materials that make mobile phones. This involves the cutting down of trees to build the mines and to improve road networks. This destroys habitats. On top of this, when trees are cut down, the carbon they store is released into the atmosphere. Click on the unlocked padlock to start your journey, and learn about the greenhouse gas footprint of mobile phones. Don’t forget to explore the table, too!”*

*“Welcome to the British Countryside! 2.1 million cattle are used for beef production annually in the UK. In 2015, overall UK agriculture released an estimate of 49.1 million tonnes of greenhouse gas into the atmosphere. Click on the unlocked padlock to start your journey, and learn about the greenhouse gas footprint of beef. Don’t forget to explore the table, too!”*

*“Welcome to the Ocean! Oil is mined from the ocean floor. One of the uses for this oil is the production of plastic bottles. London alone drinks 2 million plastic bottles of water daily (and that’s just water!) Click on the unlocked padlock to start your journey, and learn about the greenhouse gas footprint of plastic bottles. Don’t forget to explore the table, too!”*

**Habitat Text**

[if a locked padlock is clicked]

*“Uh oh, looks like that window is locked. Click on the window with the open padlock.”*

**Countryside Chain**

|  |  |  |
| --- | --- | --- |
|  | **Chain** | **Related Fact (Narrator speech)** |
| **1** | Carbon is released as trees and plants are cut down to make space for cows and to grow their feed |  |
| **2** | Carbon is released from pesticides that are put on cow feed to stop them being damaged by pests | Carbon is also released when electricity is generated to produce pesticides |
| **3** | Carbon and nitrous oxide are released from fertilisers that are used to help cow feed grow | Nitrous oxide is 300 times more harmful to the environment than carbon |
| **4** | Carbon is released when electricity pumps water from underground rivers, reservoirs, streams and canals to provide water for the cows to drink and to grow their feed in the fields |  |
| **5** | Carbon is released when farm vehicles and machinery are used on the farm and fields |  |
| **6** | Methane is released when grazing cows pass wind | Methane is 23 times more harmful to the environment than carbon |
| **7** | Carbon is released when animals are transported to the slaughter house |  |
| **8** | Carbon is released as electricity powers fridges, lights, computers, water and many more resources in the slaughter house |  |
| **9** | Carbon is released from the production of the materials used to package the beef |  |
| **10** | Carbon is released when beef is transported to the shops and restaurants it is sold in. | Sometimes beef is flown over from a different country |
| **11** | Carbon is released as electricity powers fridges, lights, computers, heating, water and many more resources in the shops and restaurants |  |
| **12** | Carbon is released as customers travel to the shops and restaurants |  |
| **13** | Methane is released as beef and packaging decomposes in landfill |  |

**Ocean Chain**

|  |  |  |
| --- | --- | --- |
|  | **Chain** | **Related Fact (Narrator speech)** |
| **1** | Carbon is released as drilling rigs are constructed, installed and run |  |
| **2** | Carbon is released as oil is transported via pipes/ships to treatment plants |  |
| **3** | Carbon is released as electricity is required to clean the oil |  |
| **4** | Carbon is released as oil is transported via pipes/ships/rail/tankers to manufacturers |  |
| **5** | Carbon is released when electricity is generated to form the oil into plastic bottles and lids |  |
| **6** | Carbon is released as empty bottles are transported to a bottling plant |  |
| **7** | Carbon is released when machinery fills bottles with drink |  |
| **8** | Carbon is released when bottles are packaged |  |
| **9** | Carbon is released as plastic bottles are transported to shops and restaurants |  |
| **10** | Carbon is released as electricity powers fridges, lights, computers, heating, water and many more resources in the shops and restaurants |  |
| **11** | Carbon is released as customers travel to the shops and restaurants |  |
| **12** | Methane is released as plastic bottle decomposes in landfill | Methane is 23 times more harmful to the environment than carbon |

**Arctic Tundra Chain**

|  |  |  |
| --- | --- | --- |
|  | **Chain** | **Related Fact (Narrator speech)** |
| **1** | Carbon is released when natural gas drilling rigs are constructed, installed and run |  |
| **2** | Carbon is released as natural gas is transported via pipes/ships/tankers to treatment plants |  |
| **3** | Carbon is released as electricity is required to clean and dry the natural gas |  |
| **4** | Carbon is released when natural gas is odorised so people can smell it and be alerted to a gas leak |  |
| **5** | Carbon is released as natural gas is transported via pipes/ships/tankers to power stations in the UK | In the UK natural gas has almost run out, so it is imported from further away |
| **6** | Carbon is released when natural gas is burned in power stations to drive turbines, which then produces electricity |  |
| **7** | Carbon is released as electricity is needed for pylons/power lines to carry electricity | 10% of electricity wasted along metal pylons |
| **8** | 15kg of carbon wasted per year by leaving TVs on standby | 9-16% of the electricity consumed in homes is used to power devices left on standby |

**Rainforest Chain**

|  |  |  |
| --- | --- | --- |
|  | **Chain** | **Related Fact (Narrator speech)** |
| **1** | Carbon is released as oil drilling rigs and mines are constructed, installed and run to extract raw materials which mostly come from rainforests | Mining takes place in, and destroys rainforests |
| **2** | Carbon is released as raw materials are transported to factories in China, Taiwan, Japan or Korea |  |
| **3** | Carbon is released when electricity is generated to construct raw materials into usable phone parts |  |
| **4** | Carbon is released when mobile phones are packaged |  |
| **5** | Carbon is released as constructed mobile phones are transported to the phone shop |  |
| **6** | Carbon is released as electricity powers lights, computers, heating, water and many more resources in the phone shop |  |
| **7** | Carbon is released as customers travel to the phone shop |  |
| **8** | Carbon is released when electricity is used every time the phone is charged |  |
| **9** | Carbon is released as raw materials continue to be drilled/mined if phone is not recycled | 80% of the carbon footprint of a phone happened before it’s turned on for the first time |

**Risks – Narrator Speech**

**Countryside**

*"It's raining so much!"*

*"Our summers are getting far too hot; lots of people are getting sick."*

*"Sea levels have risen; our coasts are flooding! If this carries on, sea levels could rise by up to 1.9m.”*

*“Sea levels rising by 1m would see most of Bangladesh, Vietnam, Norway and the Maldives underwater!”*

**Ocean**

*"All my friends are leaving for cooler waters, even the fish are leaving, what will I eat?"*

*“All the coral is losing its pretty colours. It’s stressed and is more susceptible for disease and death.”*

*“The water is too acidic because of a chemical reaction from absorbing too much carbon.”*

*“The crabs, clams and mussels struggling to produce and maintain their shells in these waters.”*

**Arctic Tundra**

*“Permafrost is a frozen layer of soil. It's melting and all the drinking water is soaking into the soil."*

*"The ice is melting away. At this rate the Arctic could be ice-free by 2030, or earlier”*

**Rainforest**

*“It’s really hot here, I need to find some shade to cool down.”*

*“I haven’t seen any rain here in days.”*

*“Oh no, the trees are catching fire releasing more carbon into the atmosphere!”*

**Habitat Questions and Answers (shown once chain is complete)**

**Countryside**

1. *What gases are released from using fertilisers?*
   1. *CORRECT: Carbon and nitrous oxide*
   2. *Carbon, nitrous oxide and methane*
2. *Which of the below are examples of where water is pumped from to provide water for the cows and their growing feed?*
   1. *CORRECT: Underground rivers, reservoirs, streams and canals*
   2. *Sinks, baths and lakes*
3. *What gas is released when grazing cows pass wind?*
   1. *CORRECT: Methane*
   2. *Carbon*
4. *What is needed to power the fridges, lights and computers inside the slaughter house?*
   1. *CORRECT: Electricity*
   2. *Carbon*

**Ocean**

1. *Name two modes of transport to get oil to the treatment plants from the oil rigs?*
   1. *CORRECT: Pipes and ships*
   2. *Aeroplanes and cars*
2. *Where do the empty bottles get transported to?*
   1. *CORRECT: A bottling plant*
   2. Shops and restaurants
3. *What gas is released when machinery fills each bottle with drink?*
   1. *CORRECT: Carbon*
   2. *Nitrous oxide*
4. *What gas is released when plastic bottles decompose in landfills?*
   1. *CORRECT: Methane*
   2. *Carbon*

**Arctic Tundra**

1. *What's the missing word? "Carbon is released as \_\_\_\_\_ is required to clean and dry the natural gas"*
   1. *CORRECT: Electricity*
   2. *Carbon*
2. *Why does natural gas need to be odorised?*
   1. *CORRECT: In case of a gas leak, people need to be able to smell it*
   2. *Less carbon is released if the gas smells*
3. *Where does the natural gas get transported to?*
   1. *CORRECT: Power stations*
   2. *Schools and colleges*
4. *How much carbon is wasted per year by leaving TVs on standby?*
   1. *CORRECT: 15kg*
   2. *2kg*

**Rainforest**

1. *Where do most of the raw materials to build mobile phones come from?*
   1. *CORRECT: Rainforests*
   2. *Oceans*
2. *Where are mobile phone raw materials transported to?*
   1. *CORRECT: China, Taiwan, Japan or Korea*
   2. *USA and the UK*
3. *What's the missing word? "\_\_\_\_ is released as constructed mobile phones are transported to the phone shop"*
   1. *CORRECT: Carbon*
   2. *Electricity*
4. *True or false. Carbon is released every time a mobile phone is charged.*
   1. *CORRECT: True*
   2. *False*

**Help Window**

*“All these greenhouse gases are destroying the [INSERT HABITAT NAME]. Can you help save my home?”*

*“Can you help?”*

*“Yes” / “No”*

**Pledge Windows**

*“Choose your pledge*

*Select one of the pledges below that you will promise to try and do to help save the [INSERT HABITAT NAME].”*

**Pledges by habitat**

**Countryside**

1. *I will try to skip eating beef (and better yet, meat!) for one day a week (you could follow @meatfreemonday)*
2. *If I have access to a special food waste bin, I will throw beef (and any other food waste) in it*
3. *When ordering food, I will pick an alternative meat (or better yet, a vegetarian option) instead of beef*

**Ocean**

1. *I will use a reusable bottle instead of buying single use plastic bottles*
2. *I will recycle any plastic bottles I use*
3. *If I want water when eating out, I will ask for tap water instead of getting it in a plastic bottle*

**Arctic Tundra**

1. *I will switch electronics off of standby when I am not using them*
2. *I will switch light switches off when I am not using them*
3. *I will unplug my mobile phone charger from the wall*

**Rainforest**

1. *I will reconsider upgrading my phone every year/two years if it still works okay*
2. *I will take care of my phone to make it last as long as possible*
3. *I will recycle my phone instead of throwing it in landfill*

**Thank You Window**

*“Your chosen pledge”*

*[DISPLAY CHOSEN PLEDGE]*

*“Thank you!”*

**Game End Window**

*“Thank you for playing Eco Earth! We hope you’ve enjoyed learning about the greenhouse gas footprint, and more about how you can help save our planet.*

*Please return the iPad to your group leader.”*