<https://www.youtube.com/watch?v=ffjIyms1BX4>

1. How much as CO2 increased since 1790?
2. How long has it been since CO2 levels were as historically high as they are now?
3. What examples does he give of “carbon sinks” places where normally carbon gets absorbed?
4. What kind of weather records are being set in the last three decades?
5. How much are oceans rising?
6. The heating of the ocean is making it more acidic. What does this do to seashells?
7. How much has summer sea ice in the Arctic decreased since 1978?
8. What are the predictions for temperature and ocean levels in the next 100 years if CO2 continues on the same trajectory?

<https://www.youtube.com/watch?v=sTvqIijqvTg>

1. Why is there such an extreme range of temperatures on the moon and less variation on the Earth?
2. Which three molecules absorb infrared radiation? Draw them with their charges here:
3. Why does CH4 and CO2 do that N2 and O2 do not?
4. What percentage of the outgoing heat from the Earth is trapped by greenhouse gases?
5. Based on ice core samples, does the increase in CO2 have a large or small impact on temperature?

<https://www.youtube.com/watch?v=8BgD9xul16g>

1. What is the Vostok ice core sample? How does it give us information about historical climate change?
2. Explain what it means when he says the earth is “self-regulating”?
3. What level of carbon do you believe that we should be aiming for as a climate change reduction target in Canada?

<https://www.youtube.com/watch?v=5PQKYt6H4Fw>

1. Explain why people in poorer countries are more vulnerable to the effects of climate change.
2. How is climate change effecting the Inuit?
3. Define climate justice.

<https://climateatlas.ca/video/indian-island-new-brunswick>

1. What climate changes and events are being documented in Indian Island?
2. What solutions have they come up with to adapt to the changes?
3. What other long term solutions would you suggest?
4. Explain some of the emotional/cultural connections the people have to the land.

<https://www.youtube.com/watch?v=VTfgNFz1DBM>

1. Give an example of direct and indirect climate change impacts in the example given of a cell phone.
2. List three ways you can change how you eat to have a lower carbon footprint. Think of another way not listed in the video.
3. What is the greenest mode of transportation? List three ways you could reduce emissions in your driving.
4. List three ways you can reduce heating in your home’s carbon footprint.