Intro

1. Based on class last week, write 2 ways humans have contributed to climate change:

1. Do you think climate change is getting any better (less effect) or worse (things keep getting more extreme)?

AGENDA

1. Intro (10)
2. Feedback Loops (20)
3. Greenhouse Effect Review Quizizz (20)
4. Albedo (20)
5. Permafrost?? Or Quizizz again?

What's Ahead

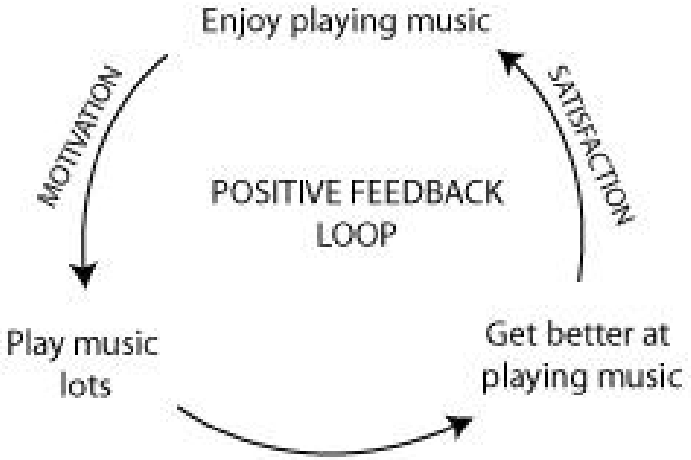
- Climate Change / Greenhouse gases quiz MAY 7!!!

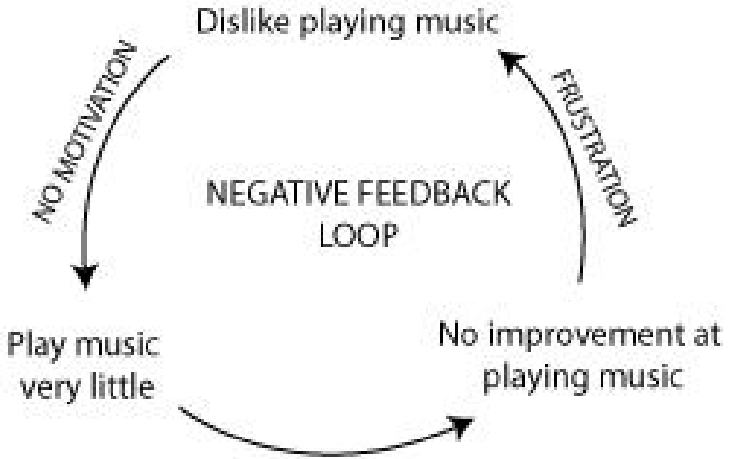
Feedbacks.

https://www.youtube.com/watch?v=inVZoI1AkC8&t=247s

Draw the feedback loop:

What is a positive feedback loop? Is it always beneficial?


Enjoy playing music
MOTIVATION
SATISFACTION
POSITIVE FEEDBACK LOOP
Play music lots
Get better at playing music


Dislike playing music
NO MOTIVATION
FRUSTRATION
NEGATIVE FEEDBACK LOOP
Play music very little
No improvement at playing music

Now let's try some examples together

When you receive a compliment, you feel more confident in yourself:

Population growth, there are more people being born, so the population increases


26, 2012

SO HOW DOES THIS HAPPEN IN EARTH SCIENCE?

1. Draw a picture of how the greenhouse effect works

NOW: Let’s think about how anthropogenic emissions create a positive feedback loop with the greenhouse effect:

Scenario: *Humans burn fossil fuels to create energy, CO2 is released into the air, more CO2 traps heat*

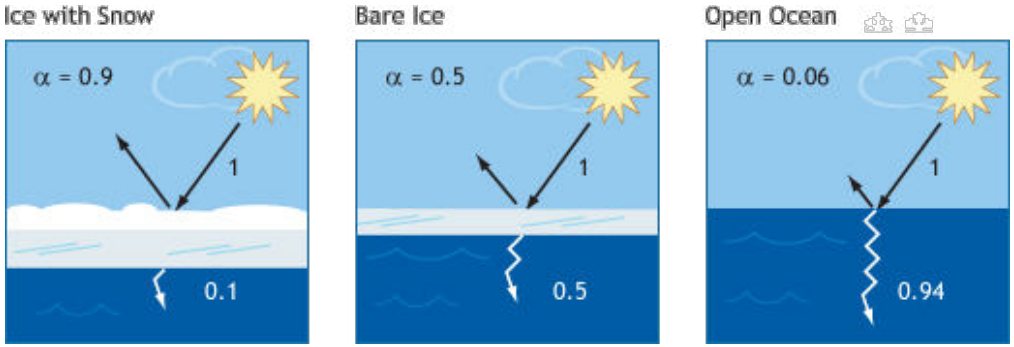
Quizizz

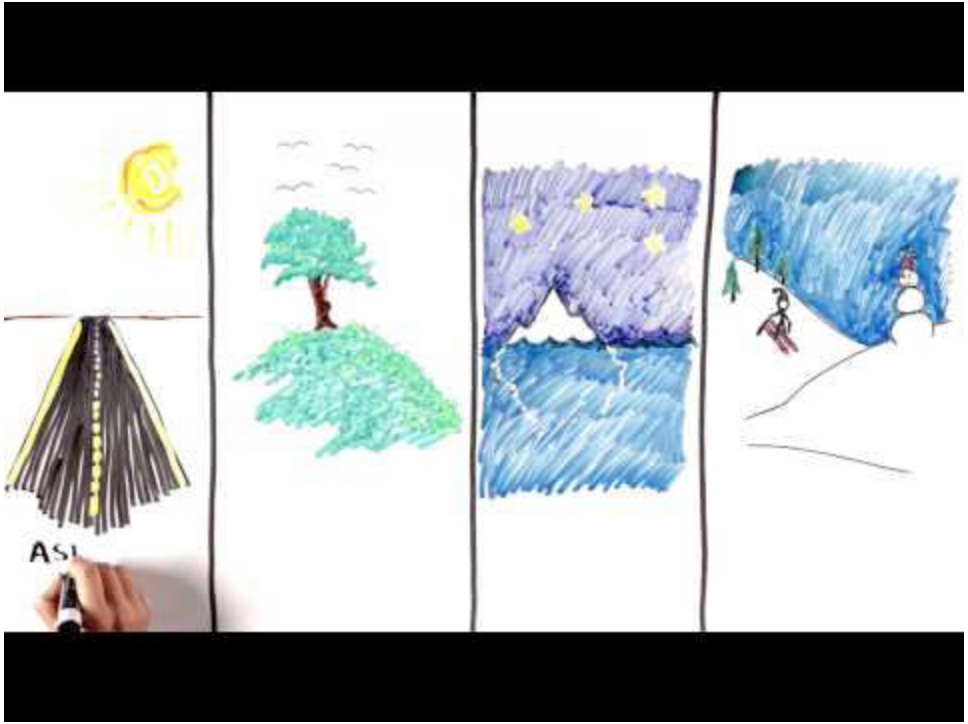
Ice

1. Which would keep you cooler in summer, a white shirt or a dark shirt? Why?

Ice

Consider this: light-colored objects reflect more solar energy (i.e., heat), and stay cooler as a result. In contrast, dark-colored objects absorb more solar energy, becoming warmer.
When light from the Sun strikes Earth's surface, some of the energy is absorbed as heat and some is reflected back into space. The darker the object, the more radiation is absorbed. The fraction of radiation that is reflected back into space is known as ***albedo***. These diagrams illustrate how albedo (α) is higher over ice and snow than over bare ice or open ocean.

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