Spheres of Earth

01
Atmosphere
All the gases above your head and in your lungs

02
Geosphere
All the earth materials around you and beneath your feet

03
Hydrosphere
All the water in the air and on land (and underground, etc)

04
Cryosphere
Part of the hydrosphere and it's all the frozen parts of water

05
Biosphere
All the living things on Earth, in Earth, and around Earth

06
Other....
Cause scientists can't ever really agree on the correct number of anything it seems like...

Energy Needed

Energy is needed to move material between the spheres. What are some examples of energy being transferred from one sphere to another?


EPISODE 6.1
FOUR SPHERES
PART 1
KIDS


EPISODE 6.2
FOUR SPHERES
PART 2
KIDS

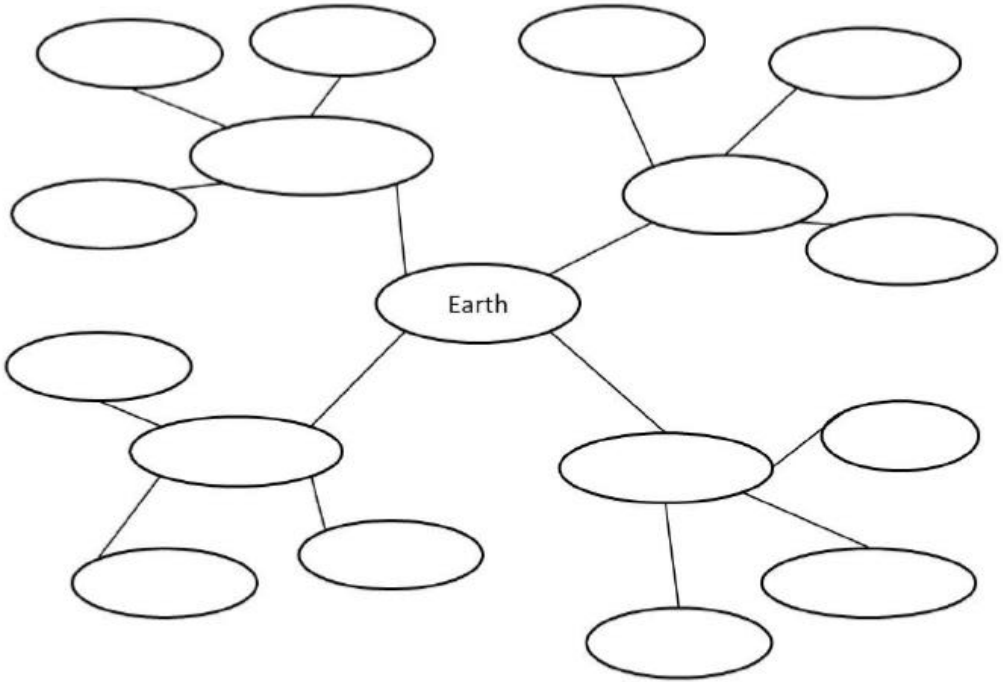
How do spheres interact with each other?


EPISODE 10.1
WHAT ON EARTH
KIDS

Spheres of the Earth: Concept Map

Make a concept map with the following terms:

Earth, hydrosphere, animals, atmosphere, rocks, lithosphere, biosphere, oxygen, oceans, bricks, ozone, rivers, plants, mountains, bacteria, wind, snow



Which sphere would these words belong in?

Atmosphere

Geosphere

Hydrosphere

Cryosphere

Biosphere

Rocks

Oxygen

Bacteria

Animals

Snow

Wind

Ozone

Rivers

Mountains

Analyze

Pick a location on Earth and analyze it for the five spheres.

Assignment Expectations

Look up pictures and research into your chosen location.
What do you observe about that location in terms of spheres?

Analyze Location

On your whiteboard, write down some parts of your location and fit into the five spheres.

Five Spheres

Padlet!

Add what you found about your location to the Padlet that is linked in Google Classroom.

What did you find about your location's five spheres?

Today's Schedule

Choose

Pick one of the spheres you think is the most important for life on Earth

Research

Find facts to provide evidence to support your opinion

Debate

Come back into the main room to defend your position with everyone else

Things to Consider

How does it help the humans?

How does it help the other sphere?

What would happen if that sphere didn't exist?

Let's Prepare for a Debate!

- Pick the breakout room you think is the most important
- Work with the people in your breakout room to create your position
- Decide who is doing what:
  - Giving your group's position at the beginning
  - Going to participate in the free-for-all

Suggestion? Write down on a piece of paper or whiteboard what you are going to say

Defend your sphere!

Debate Format

1. Introductions

2. Back and Forths

3. Conclusions

Which sphere do you think won? Why?