Name _____

The Sagebrush Sea

Pre-Watching (Complete before the video)

1. Read all questions on both sides of this page so you know what to look for in the video.

Video Summary - It's been called The Big Empty – an immense sea of sagebrush that once stretched 500,000 square miles across North America, exasperating thousands of westward-bound travelers as an endless place through which they had to pass to reach their destinations. Yet it's far from empty, as those who look closely will discover. In this ecosystem anchored by the sage (plant), yarrow and balsamroot (plants), eagles and antelope, badgers and lizards, rabbits, wrens, owls, prairie dogs, songbirds, hawks and migrating birds of all description make their homes.

In 2015, a cooperative agreement among western state, federal, and local partners protected 10 million acres of habitat to ensure survival of the Greater Sage-Grouse.

In December 2018, the Department of the Interior's Bureau of Land Management revealed a plan to remove more than 8 million of these acres from protection, leaving the future of the species in the hands of state governments.

During the Video - Write complete sentence answers for each question.

2. Read this definition and explain how this is shown in the video.

Habitat fragmentation is **defined** as the process during which a large expanse of **habitat (land)** is transformed into a number of smaller patches of smaller total area and isolated from each other.

3. What are the human actions shown in this video? List a few of the ways that humans have changed the sagebrush area AND say why that change was made.

4. What does "unbroken expanse of sage" mean? At 28:00

5. How are animals impacted (directly or indirectly) by humans?

6. How does adaptability affect animal survival?

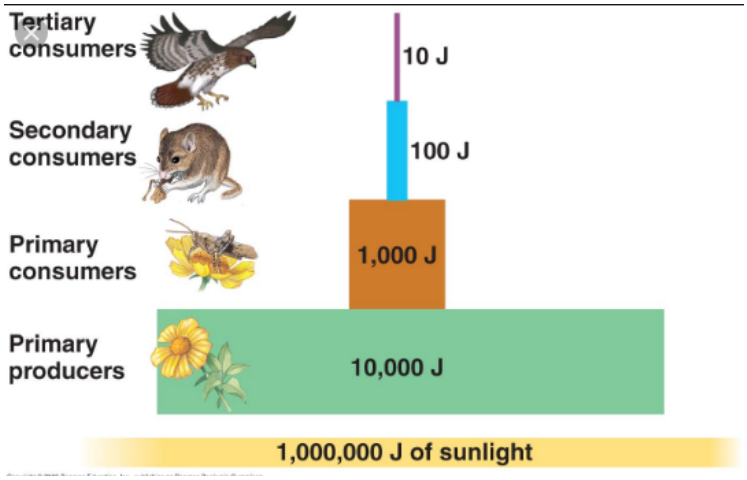
After the Video

7. What are some possible solutions that humans could do to improve this habitat that is currently being impacted?

8. Draw a food chain based on the variety of different plants and animals featured in the video. (go back to the opening reading for some ideas for plants and animals).

Food Chain #1

9. Challenge - Explain how this concept of trophic levels (from our last class) is shown in the video. Talk to your table if needed.



In Spanish

Lea todas las preguntas en ambos lados de esta página para saber qué buscar en el video. Resumen del video: se ha llamado The Big Empty: un inmenso mar de artemisa que una vez se extendió 500,000 millas cuadradas a través de América del Norte, exasperando a miles de viajeros con rumbo al oeste como un lugar sin fin por el que tuvieron que pasar para llegar a sus destinos. Sin embargo, está lejos de estar vacío, como descubrirán aquellos que miran de cerca. En este ecosistema anclado por la salvia (planta), la milenrama y la balsamroot (plantas), las águilas y los antílopes, tejones y lagartos, conejos, gallinas, búhos, perritos de la pradera, pájaros cantores, halcones y aves migratorias de todas las descripciones hacen sus hogares.

En 2015, un acuerdo de cooperación entre socios estatales, federales y locales del oeste protegió 10 millones de acres de hábitat para garantizar la supervivencia del Gran Sage-Grouse. En diciembre de 2018, la Oficina de Administración de Tierras del Departamento del Interior reveló un plan para eliminar la protección de más de 8 millones de estos acres, dejando el futura de la especie en manos de los gobiernos estatales..

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Habitat fragmentation is **defined** as the process during which a large expanse of **habitat (land)** is transformed into a number of smaller patches of smaller total area and isolated from each other.

The video shows that humans are making many roads, housing areas, and oil fields that break a large piece of land into smaller pieces.

3. What are the human actions shown in this video? List a few of the ways that humans have changed the sagebrush area AND say why that change was made.

- **Roads - used for transportation.**
- **Oil rigs - used to extract natural gas.**
- **Houses and electric poles - used for residential development and housing**

4. What does "unbroken expanse of sage" mean? At 28:00

It refers to a large area of land without habitat fragmentation.

5. How are animals impacted (directly or indirectly) by humans?

Animals are killed by vehicles, trapped in fences, or possibly hunted by predators that have new perches on human structures to hunt from.

6. How does adaptability affect animal survival?

If an animal can adapt to a new habitat, like crows eating garbage, then that species has a better chance to survive. Animals that don't adapt could go extinct.

After the Video

7. What are some possible solutions that humans could do to improve this habitat that is currently being impacted?

- **Create preservations where humans cannot build.**
- **Do not allow new roads to be made.**
- **Remove fences to allow migration.**
- **Remove human structures that create predator habitat.**
- **Replant areas that have been degraded.**

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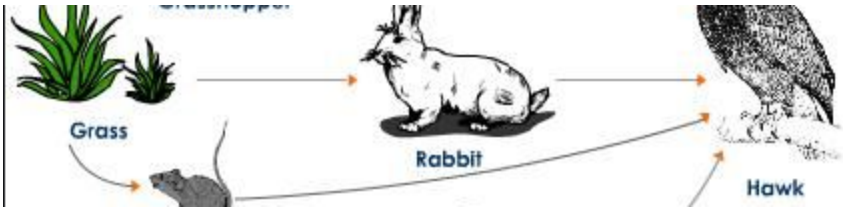
Food Chain #1

Example - needs arrows and names



9. Challenge - Explain how this concept of trophic levels (from our last class) is shown in the video. Talk to your table if needed.

There is a large abundance of plants in the areas, with many primary producers, but fewer animals as you move up trophic levels.