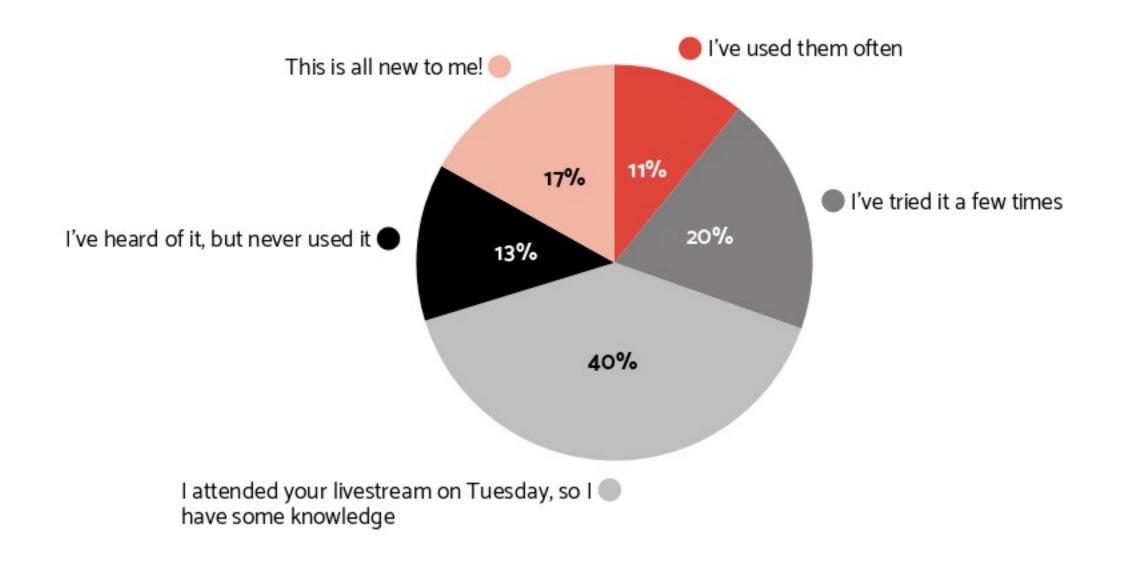
#### What is your familiarity with anchoring phenomena and how they are used in a unit of instruction?







he loves to dance!	color size no trees	He has a very brightly colored, elaborate plumage around his head.
Why was he so aggressive?	I wonder what he sounds like when he dances?	Why is Sampson so aggressive?
Aggression	Why does he behave differently than we expect prairie chickens to behave?	Notice- likes dancingWonder- why he's hostile



How large was his territory?	his beutiful colors	What characteristic make him the best fit for the hens?
Sampson seems to be more aggressive than other prairie chickens on the reserve.	Why did someone name him at all, why Sampson?	He looks similar to the roughed grouse we have in our area.
dancing seems important	ag gression	Colorful, large



Why so aggressive?	Why do prairie chicken do the dance?	Very distinctive feather pattern
Very brightly colored. Not many trees around	He was aggressive	Why does he respond different than average prairie chicken?
Sampson is aggressive, changes color and love to dance	Why does he have no fear?	Protective and aggressive.



Why was he pecking the camera?	Hes is big	Why is he so aggressive? Is this normal for the species?
He can be aggressive towards outsiders	He's aggressive. Why?	I wonder what factors are most important in his dance to a mate.
Did he see the photographer as a threat?	Aggressive but beautiful	So much aggression



Why is he hostile? Where else do these birds live?

How much bigger was Sampson than the other males? Were there other males?

the look in his eye and his posture reminds me of my chickens

How does he get his yellow color?

What has caused him to attack humans instead of run away from them?

Looks different from chicken I have seen

Why is he so agressive

Can prairie chickens live in other places other than prairies?

239



Have we personified the bird too much?	Aggressive and dominant male	Why is their existence important to prairies?
Why is he so aggressive ?	Aggression and color pattern	Why was he so agressive
He seems aggressive!	How do they learn how to do the dance?	Aggressive and string character



bright yellow markings	Brightly colored bird	bold - even aggressive
He likes dancing and the bright colors make him stand out!	Why was he so aggressive?	He is Bold!
The photographer knew how to handle the situation to get the shots he wanted.	Why is Sampson so different? What made him different from other prairie chickens?	Traits - color, size, etc.



Why is he so aggressive?	How do they know where Sampson is or will be?	What made him more aggressive than the other males?
why the "horns"?	What is the likely cause of death?	I noticed his beautiful coloring. I am wondering what state location.
Vibrant and dull colors.	What is challenging their existence/ making them endangered?	Was the photographer hurt?



why is he so agressive?	Attractive	Will these birds still mate if there are too many outside distractions?
why so much bright yellow?	Sampson cares for others by protecting them. He is a leader.	I notice what seems like an elongated neck
Why is his photographer so bent on taking Sampson's photo?	Why do the males congregate, and do they fight?	He has unique feather coloring



aggressive/why is he aggressive?	How his behavior is so odd and what would be the reason for it	Aggressive, why
Why is he such a bully?	He is a phenomenally attractive bird, splendid coloring	He has a band on his leg.
How did he get his "personality"?	He's bold	I wonder why he is so bright yellow.



He was very different from the other birds.	What makes Sampson different?	I wonder what the 'dance' looks like.
Colorful	If aggressive behavior wasn't typical for his species, why was he so agressive?	What does his coloring have to do with his survival?
Why is the photo taken to make him look like a giant chicken	The article said hes shy at first but then he came up to the photigrapher and attacked him.	How long so they live?



Did taking Sampson's photo make him more stressed and more susceptible to disease?	Aggressive to others	Why is Sampson uncharacteristically aggressive?
Is Sampson territoriality?	Why does he dance like that?	He wasn't scared of humans, instead he was aggressive.
How long is their breeding season?	Why was he being so aggressive?	He is banded



What is the typical life span of this bird?

I wonder if he had a mate

I wonder if Sampson has ever felt attacked by another human.

Is Sampson only aggressive during mating season or all year round?

Sampson was defending his territory. My question is what is the average life span of prairie chickens?

I wonder what predators Sampson would have faced presettlement, and if his aggression would have been adaptive to drive them off. Are they really "chickens?" What did Indigenous peoples there name them - what does that naming convey as to their being?

He has a much different behavior compared to other birds that live in the same habitat

Does the amount of daylight affect their breeding?



Why does Samson seem threated by human interaction?	If he is still alive	Why was he so aggressive
Sampson was persistent.	Why is he so aggressive?	bright eye feathers!
What is the life span of a prairie chicken?	His color is beautiful	Why was he so aggressive?



Is Sampson stressed?

What changed genetically to cause his agressivenessed

I've heard of booming grounds from Central Wisconsin area.

The male chickens dance at leks. They make unique sounds so those areas are called "booming grounds". Most prairie chickens at why but not Sampson. Sampson might have been aggressive because it was breeding season. Sampson has likely died.

What does the mating call they make sound like?

he reminds me of our little dogs trying to protect our house

very short beak

Is this a learned or instinctive behavior?

Does not look like chickens I have raised?





He does seem to be reacting to a threat or making himself look bigger to impress.

His species is threatened, which could explain his aggressive nature.

Are those ears?

Great photos

aggressive

Aggressive - but then again he is wild. Maybe aggressiveness is deemed highly in the 'dance'.

Wonder how many chicks he fathered since he was so aggressive?

Is Sampson's behavior characteristic of males during mating season?

Why wasn't Sampson shy?

239



What made Sampson so different from the other birds?	Why he is so bold?	Why is he considered rare?
Is it breeding season?	Why is he more aggressive?	What does Sampson sound like?
Handsome bird	Wonder what this would be like if it was tangible. To see it from other angles!	Is his aggressive behavior genetic or environmental?



why is he that color?	Was his aggression a trait that got him more mates?	Why is he so aggressive?
Did Samson's aggressiveness shorten his life-span or are prairie chickens similar to domestic chickens in life-span?	Is this unusual behavior for these birds?	As a chick was he exposed to human contact or other species.
He is in charge of his area!	Why are others calm when Sampson is aggressive?	Does the refuge know why Sampson is so aggressive?



Why is being aggressive dangerous for Sampson?

I wonder if his aggression is learned behavior

Was Sampson a successful mater? Did he attack the female birds or just humans?

Did he break the camera?

The colors are so vibrant.

What makes sampson different?

Part of his neck is different and doesn't have any feathers. I wonder why.

Is he using protecting mechanism or using defense mechanism?

Wonder if his progeny had the same aggressive behavior.



Have they ever found Sampson or his remains?

Do they live in groups?

Sampson is tencious. Has he adapted to his environment?

What is the photo that he took? I want to see one of him as he was pecking the lens

In the photo he has bracelets, I wonder what they are for?

Very colorful

I wonder if female and male prairie chickens the same color

How does Sampson behave with males of his own kind? Is he aggressive towards everything and everyone?

I wonder what his mate looks like



Why is Sampson more aggressive than other birds. Does this affect his mating in a positive or negative way?

Was something wrong with Sampson? Had he learned to act in an abnormal way because he was living in a preserve and had more contact with humans?

How long do Attwater's Prairie Chicken live in the wild? Are any of them in captivity?

Accustomed maybe to humans

Was his behavior a result of instinct or an experience

Are prairie chickens related to grouse?

What makes him so aggressive? What is the lifespan of a prairie chicken? What does the mating dance look and sound like? Where can I find prairie chickens?

He was unusually aggressive.

How big do they get?



Are there certain genetic dispositions to aggressive behaviors such as Sampson's?

What makes him so aggressive?!

Are Attwater's Prairie Chicken used for consumption? If not, what type of chickens are bred for consumption?

Are there any Samson Jrs?

Why was Sampson comfortable with the people,

Do male and female prairie chickens have similar colors?

How much of the behavior is genetic vs. how much is environmental?

Why is he so aggressive compared with most prairie chickens?

Sampson is an unusually aggressive bird for his species. Why has he become so aggressive. Has the population of Prairie Chickens increased?



Why is he so persistent?

How big are Attwater's Prairie Chicken? Was Sampson bigger than average?

I wonder how Sampson died

Why would he have been so much more aggressive? Any difference from the general population?

Why was he different?

What predators eat prairie chickens?

It's interesting that this encounter happened near Houston

What does "concupiscent" mean? "Concupiscent males perform each spring..."

If he's well known and has been there a fair amount of time, have any of his offspring been noted as having similar behavior?



What makes most prairie chickens calm, but sampson aggressive		Why is aggressive behavior dangerous to these birds?		Was his behavior encouraged by humans in some way?
	J		,	

why he react like that?

Was Sampson aggressive with other non predator animals?

What animals prey on prairie chickens

The photographer was warned!

Had Sampson been aggressive to other humans?

Would Sampson survive off the refuge?



How often is her successful	Sampson is bold. He is colorful.	Why is Sampson's behavior different than others.
Does Sampson have contact with other humans?	Why he was the one one that had that behavior?	Where there any other aggressive phesants observed?
Sampson was aggressive. Is this normal?	What triggered Sampson's behavior?	Why was he so aggressive?





Do males with louder booming sounds have more breeding opportunities?

What is the basic food source? Was he protecting his mate, or the nest?

What affect to do these birds have on the prairies and what is expected to happen if they become extinct.

How many of these birds are left, what kind of threats do they face and what types of conservation efforts are being explored relating to them

What happens to the prairie chickens due to the diminishing prairie?

Ranchers

Do males learn to dance by watching other males?

How do humans impact the prarie ecosystems and the behavior of animals?

controlled burning



Fire	ecosystem	Habitat
shelter from predators	Parasitic relationship with pheasants	



Why was he more aggressive than the others

Interactions between the prairie chickens

What influences the behaviors of these birds?

What factors limit the population of prairie chickens?

What is the effect of fires on the chickens?

Hat is the limiting factor? Water, food, predators?

How do other components of the ecosystem affect the breeding of the Prairie Chicken?

What is the population of the Prairie Chickens in the US?

How do cattle impact the prairie chickens?



Why is Samson so brazen?	What do these prairie chickens eat?	What does the mating dance look and sound like?
how do you get more classroom discussion	Why are prairie chickens endangered?	Why are they end angered?
Other examples of behavioral variation in animals?	black footed ferret and bottleneck genes as another item from	How is cattle ranching related to prairie chickens?



What makes a prairie difficult to live in?

How do chicken typically interact?

What about the dance do the hens like? Is there a bad dance?

Do the prairie chickens need all the requirements to reproduce or can they reproduce with just one or two?

Are the behaviors of the birds affected by different environmental conditions?

How are prairie chickens like my chickens?

How have prairie chicken populations changed over time

How is the recovery of the endangered prairie chicken progressing?

How do they find each other -those prairies are huge



Why was being aggressive dangerous for Sampson?

How does agriculture practices affect prairie chickens?

Does the praried chicken face different issues in different states/areas?

Why are they endangered? What is being done to regrow populations?

What factors are necessary for the prarie chicken's survival?

What is a sample food chain for a prairie chicken?

What are the most important limiting factors for prairie chicken population?

Are prairie chicken evolving their behaviors due to environmental stresses?

What are the biological effects the aggressive behaviors have on the prairie chickens.



What are the factors that affecting the population of Prairie Chicken in US?

Are these birds aggressive to other organisms within the same ecosystem?

How are they like the grouse found where live?

What is the diet of the Prairie Chicken?

What is the typical life span of a prairie chicken?

What changes have occurred if any in the dances of prairie chickens. Also, how similar is the dances of sharp tail grouse?

Evolution of the Prairie Chicken, from almost extinction to modern times.

How do cattle affect prairie chickens?

Are prairie chickens a native species?



What predators are there for the prairie chickens?

How do the fires affect the chickens?

Where does the prairie chicken fall into the food chain? With this - what would endanger their survival? How can genetics (selective breeding) be used to produce proteins that are the most efficient and economical for both the agriculture industry and the consumer?

Do the prairie chickens and cattle have a symbiotic relationship and what are the characteristics of that relationship?

How can humans help increase the population of the prairie chicken?

What impact does habitat loss have on the life cycle of the prairie chicken?

Can you help us to plan virtually?

What is being done to protect prairie chickens and their environment?



What's the relationship between cattle and prairie chickens?

Do Prairie Chickens get along with cows?

How does fire play a role?

What are the population numbers of these birds?

Are prairie chickens common in the US?

I live in Wisconsin where there are some prairie chickens in the central part of the state. I am curious how these compare to prairie chickens in the rest of the country. How many different prairie chicken species are there?

What factors limit the population id prairie chickens?

What are the limiting factors of the prairie chicken species?

Why was he more aggressive?



what is on fire?

What do prairie birds eat? And what animals prey on prairie birds?

How do the abiotic factors affect these prairie chickens?

What is the role of fires? How do they affect the prarie animals and plants?

Are there different breeds of prairie chickens?

How do humans impact the prarie ecosystem?

How changes in the ecosystem impact reproduction

What factors limit the population?

why is he aggressive

#### What questions do you want to investigate?



What factors limit the population of prairie chickens?

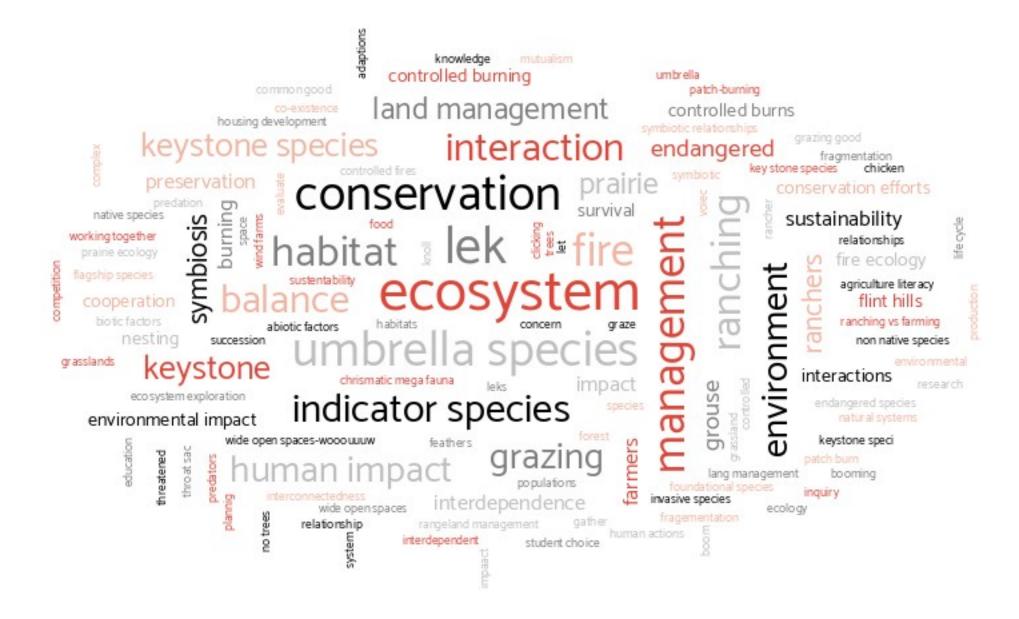
What are the current conservation efforts being taken to help prairie chickens?

Do cows & prairie chickens benefit from one another?

What is the relationship between the population of cattle and the population of praire cheickens.

#### After you've heard Brian speak, what words do you think are important to our investigation?







Habitat	Amount of grassland	Space
habitat	Land	Available leks
Space!	Habitat	Human impact



Available acreage.	Environmental	Habitat
weather	SpaceRange size	Habitat
Habitat	Lack of rain	Weather



Availability of Tallgrass prairies	Space	Land
Environment	preditors	Human impacts– farming/ ranching
food availability	Land	Habitat - grassland



Predation	urbanizationclimate changeloss of habitat	cars
land, water, people, ecology, fire, food, agriculture	Development	Phosphates and nitrates in the soil.
Habitat, water, pheasants	weather	Space and habitat



Food supply	Amount of land	Habitat fragmentation
grassland acreage	Changes in climate.	Population growth
Weather	fire	Weather



Space	Weather	Human Impact
Human impacts	Habitat	Loss of habitat
Impact on Humans Habitat	Competition	Environment



Availability of grasslanf	Overpopulation	pheasant competition
Habitat loss	Weather	Grassland habitat availability
Space	Habitat	weather



Weather	weather, habitat and food	habitat loss
Predators	Predators	Insecticide use with hinder their food sources.
Weather	habitat, predators, nest competition	pheasants



Mailny weather...but drought...climate...habitat loss

available space

It seems like shrinkage of habitat resulting from human encroachment is major. With shrunken habitat, other factors like inclement weather, play a larger role then. weather, predators, size of grass prairie, farming and other human encroachment.

Forest encroachment

Environment (Land size/ habitat quality), weather (rain and drought), human impact, food

temperature & humidity

subdivisions

ground cover





the land and development of it	pheasant eggs in nest	Pheasants laying eggs in their nests
Space, predators, pheasants, weather (temperature and precipitation), collisions with cars,	weather, open range grasslands	Size of prairie, range sizeAvailable water, food
Habitat	Human impact	Nesting habitat predators



Land availability, land use, weather, other species	Weather extremes, amount of unbroken open prairie,	Predators, food, weather, urbanization
Climate/weather/fire/precipitation	Habitat	Space, food, humans, water, weather
Technological advancements	Narrowing habitat	humans



Competition	Predators, rainfall, food availability, access to females	Weather, drought, too much rain
Weather	Westher	available habitat
Predators	Climate	Land management, or lack of



Space availability	Food	Genetic diversity of the species.
Habitat continuity	drought	habitat and climate
Insecticides, fires, natural disasters	Space, cover	predators



Habitat, predators, human impact.	Space	obstructions
resources- food, water, land, etc; climate; predators	connecting natural habitats	space
The high death loss due to impact with barbed wire fences.	Large amounts of habitat required.	Predators, competition for resources, weather, availability of appropriate grass and foraging habitat, land management



Lack of other species that help maintain optimum habitat.

#### To what extent are these human actions beneficial to prairie chickens and/or cattle?



