



WILD WISE: COEXISTING WITH CARNIVORES

Student Pre-Assessment

Name: _____ Date: _____

Period: _____ Teacher: _____

- 1) Look at the pictures and circle the animals that you think live in the wild in Issaquah or Sammamish.



Gray wolf



Badger



Grizzly bear



Coyote



Raccoon



Black bear

- 2) How much do you agree with the statements below? (*Circle how much you agree or disagree*)

I think it's cool that carnivores live in my area	strongly disagree	disagree	In the middle	agree	strongly agree
I feel worried about carnivores living in my area	strongly disagree	disagree	In the middle	agree	strongly agree
I'm grateful that I live in an area that has carnivores	strongly disagree	disagree	In the middle	agree	strongly agree
I feel intimidated that I live in an area that has carnivores	strongly disagree	disagree	In the middle	agree	strongly agree

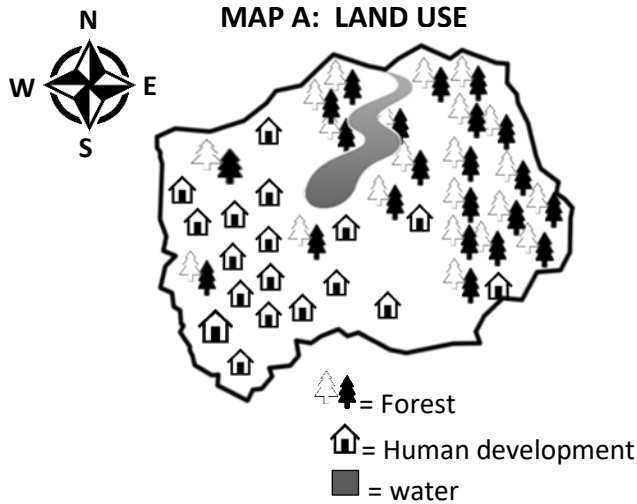
- 3) Please read the following sentences and answer the questions below.

A group of 6th grade students are learning about cougars in their class. They make the observation that they see more signs of cougars, like claw marks on trees and deer carcasses, when the weather is warmer. They decide to conduct an investigation to decide if this is true.

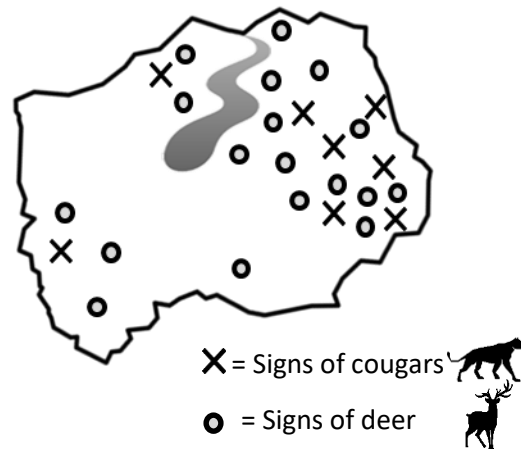
Circle which of the following is the best investigable question to find out if their observation is correct.

- a) Why do we see more signs of cougars in the summer?
 - b) Are there more signs of cougars in the area in the summer or winter?
 - c) Are there more deer in the area in the summer?
 - d) Do cougars prefer to hunt deer or rabbits?
- 4) After conducting their investigation, the students conclude they are correct and make the claim that there are more signs of cougars in the warmer months. Circle which of the following pieces of information would **best support this claim**.
- a) The students spend more time outside when the weather is warmer.
 - b) The coyotes that live in the area also eat deer.
 - c) It is harder to notice signs of cougars when there is snow on the ground.
 - d) Not all the students followed the same methods when collecting their data.
 - e) There are more deer in the area in the summer.

Use the two maps below to answer the following questions.

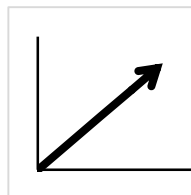


MAP B: SIGNS OF COUGARS AND DEER



- 5) According to the maps, in which area are cougars most often found?
- a) North b) South c) East d) West
- 6) Looking at the information provided in the two maps, which of the following statements is the best explanation why there are more cougar sightings in that area?
- a) Cougars like areas where they can get into people's garbage cans and look for food.
- b) Cougars like areas where deer and other prey animals are found.
- c) Cougars like to live next to a river.
- d) Cougars like to live far away from people.
- 7a) If the number of cougars in the area decreased what do you predict will happen to the number of deer living in the area?

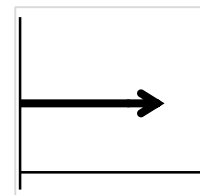
a) Increase



b) Decrease



c) No change



7b) Why is this your prediction? _____

8) In the spaces below, describe two things you can do to reduce your chance of having problems with carnivores, like cougars, bears or raccoons

a) _____

b) _____



COEXISTING WITH CARNIVORES

SHARING FINDINGS AND RECOMMENDATIONS

Student presentation checklist

Section 1: Investigation Question

- ☐ We shared our investigation question.
- ☐ Our investigation question explores how natural or human-made landscape features affect carnivore behavior.
- ☐ We described how our community observations from our community map and our community interview helped us to develop our investigation question.
- ☐ We explicitly stated our manipulated variable and our responding variable.

Section 2: Research Methods

- ☐ We explained why we selected our research method.
- ☐ We explained why we didn't select other research methods we considered.
- ☐ We described our research methods in enough detail that they could be replicated by someone in our community.

Section 3: Data Analysis and Presentation

- ☐ We summarized and shared our data in a logical way.
- ☐ We clearly stated at least two confounding variables.
- ☐ We stated how our confounding variables may have impacted our investigation results.
- ☐ We presented our data in a visualization such as a graph or chart.
- ☐ Our visualization is neat, easy to read, and includes the appropriate titles, labels, and captions.

Section 4: Conclusion

- ☐ Our conclusion is presented using the Claims, Evidence, Reasoning format.
- ☐ Our claim addresses our investigative question.
- ☐ Our claim is supported by our evidence (investigation data).
- ☐ We explained how our evidence supports our claim.

Section 5: Recommendation

- ☐ We shared an actionable recommendation for coexisting with carnivores that can be completed by members of our community.
- ☐ Our recommendation is supported by the results of our investigation.

Section 6: Further Questions and Insights

- ☐ We stated any changes that we would make to our investigation methods.
- ☐ We stated why we would make those changes to our investigation methods.

Section 7: Presentation

- ☐ We shared presentation responsibilities evenly between group members.
- ☐ We will act professionally and speak loudly and clearly.
- ☐ Our presentation looks neat, professional, and is easy to follow.
- ☐ Our presentation uses color and pictures.



WILD WISE: COEXISTING WITH CARNIVORES

SHARING FINDINGS AND RECOMMENDATIONS

Presentation Rubric 2017-2018

Date: _____ **Interviewer:** _____ **School/Teacher:** _____ **Period:** _____

Investigative Question: _____

Points	2 - Meets Expectations	1 - Approaching Expectations	0 - Below Expectations	Total
Question				
<ul style="list-style-type: none"> What question were you trying to answer with your investigation? What observations (from your community mapping or adult interview) did you use to design your question? What were your manipulated and responding variables? 	<input type="checkbox"/> Clearly state an investigative question related to how natural or human-made landscape features affect carnivore behavior. <input type="checkbox"/> Link community observations with investigative question. <input type="checkbox"/> Presenter explicitly defines manipulated & responding variables.	<input type="checkbox"/> State an investigative question, related to either carnivores or to natural or human-made landscape features. <input type="checkbox"/> Link general observations with investigative question. <input type="checkbox"/> Manipulated and responding variables can be inferred, but are not explicitly defined by presenter.	<input type="checkbox"/> State an investigative question related neither to carnivores nor to natural or human-made landscape features, OR did not state an investigative question. <input type="checkbox"/> Did not link any observations with investigative question. <input type="checkbox"/> Presented question does not have a manipulated and/or responding variable.	
Methods				
<ul style="list-style-type: none"> What methods did you use for your investigation? Why did you choose the methods you did? Why did you choose not to use other methods? 	<input type="checkbox"/> Explain why research method(s) was selected and other method(s) that they considered but chose not to use. <input type="checkbox"/> Describe your research method(s) in enough detail that the methods can be replicated.	<input type="checkbox"/> Explain either why research method(s) was selected or other method(s) that they considered but chose not to use. <input type="checkbox"/> Describe research method(s) in broad categories with few details.	<input type="checkbox"/> Did not explain why research method(s) was selected or other method(s) that they considered but chose not to use. <input type="checkbox"/> Did not describe method(s).	

Points	2 - Meets Expectations	1 - Approaching Expectations	0 - Below Expectations	Total
Data				
<ul style="list-style-type: none"> What were your results? What did you find? What kinds of things (variables) affected your data? Would your results be different if you did your investigation on another day or a different time of year? How? 	<input type="checkbox"/> Data summarized and shared in a logical way. <input type="checkbox"/> Data presented in an appropriate visualization (e.g. chart or graph). <input type="checkbox"/> Identify at least two variables that could affect their investigation (confounding factors).	<input type="checkbox"/> Raw data presented but not summarized. <input type="checkbox"/> Data presented in an unclear or inappropriate visualization. <input type="checkbox"/> Identify one variable that affected or could affect their investigation.	<input type="checkbox"/> Data not presented. <input type="checkbox"/> Data not presented in a visualization. <input type="checkbox"/> Did not identify confounding factors.	
Conclusion				
<ul style="list-style-type: none"> Does your conclusion answer your investigative question? What investigation data did you use to develop your claim? How does your evidence support your claim? 	<input type="checkbox"/> Claim: Conclusion statement presented that addresses the investigative question. <input type="checkbox"/> Evidence: Support claim by directly citing their investigation data. <input type="checkbox"/> Reasoning: Presents a logical explanation for <i>how</i> their evidence supports their claim.	<input type="checkbox"/> Claim: Conclusion statement presented, but it does not address the investigative question. <input type="checkbox"/> Evidence: Support claim using outside evidence and/or prior knowledge only (not their investigation data). <input type="checkbox"/> Reasoning: Presents a vague or unclear explanation for <i>how</i> their evidence supports their claim.	<input type="checkbox"/> Claim: No conclusion statement presented. <input type="checkbox"/> Evidence: No evidence cited. <input type="checkbox"/> Reasoning: Does not present an explanation for <i>how</i> their evidence supports their claim.	
Recommendation				
<ul style="list-style-type: none"> Why do you think your recommendation will work? Why does it make sense based on what you learned? What evidence would you use to support your recommendation? 	<input type="checkbox"/> Share an actionable recommendation for coexisting with carnivores that can be completed by community members. <input type="checkbox"/> Provides a clear explanation connecting their investigation and conclusion to their recommendation.	<input type="checkbox"/> Share a recommendation that cannot be completed by members of their community. <input type="checkbox"/> Provides an explanation for their recommendation, but their recommendation does not connect to their investigation and conclusion.	<input type="checkbox"/> Did not share a recommendation for coexisting with carnivores. <input type="checkbox"/> Does not provide any explanation for their recommendation.	
Further Questions and/or Insights				
<ul style="list-style-type: none"> If you were to do this again, would you do anything differently? If so, what and why? What other questions does your investigation raise? 	<input type="checkbox"/> Explain what change(s) they would make to their investigation method(s) and why. <input type="checkbox"/> Share questions inspired by their completed investigation.	<input type="checkbox"/> Explain what change(s) they would make to their investigation, but not why. <input type="checkbox"/> Share other questions they want to investigate, but not related to their project.	<input type="checkbox"/> Do not explain any changes they would make. <input type="checkbox"/> Do not share further questions.	
Total Points	Final Score Key: [0-17] Below Expectations [18-26] Approaching Expectations [27-30] Meets Expectations			



WILD WISE: COEXISTING WITH CARNIVORES

Student Post Assessment

Name: _____ Date: _____

Period: _____ Teacher: _____

- 1) Look at the pictures and circle the animals that you think live in the wild in Issaquah or Sammamish.



Gray wolf



Badger



Grizzly bear



Coyote



Raccoon



Black bear

- 2) How much do you agree with the statements below? (*Circle how much you agree or disagree*)

I think it's cool that carnivores live in my area	strongly disagree	disagree	In the middle	agree	strongly agree
I feel worried about carnivores living in my area	strongly disagree	disagree	In the middle	agree	strongly agree
I'm grateful that I live in an area that has carnivores	strongly disagree	disagree	In the middle	agree	strongly agree
I feel intimidated that I live in an area that has carnivores	strongly disagree	disagree	In the middle	agree	strongly agree

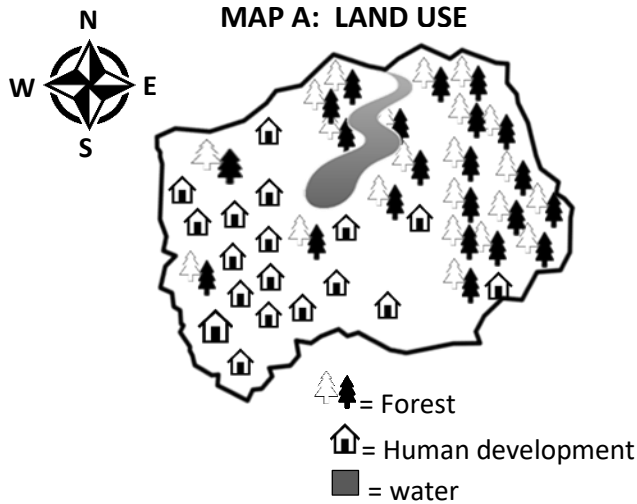
- 3) Please read the following sentences and answer the questions below.

A group of 6th grade students are learning about cougars in their class. They make the observation that they see more signs of cougars, like claw marks on trees and deer carcasses, when the weather is warmer. They decide to conduct an investigation to decide if this is true.

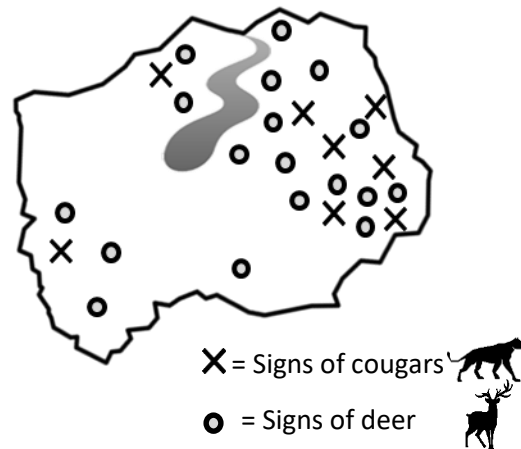
Circle which of the following is the best investigable question to find out if their observation is correct.

- a) Why do we see more signs of cougars in the summer?
 - b) Are there more signs of cougars in the area in the summer or winter?
 - c) Are there more deer in the area in the summer?
 - d) Do cougars prefer to hunt deer or rabbits?
- 4) After conducting their investigation, the students conclude they are correct and make the claim that there are more signs of cougars in the warmer months. Circle which of the following pieces of information would **best support this claim**.
- a) The students spend more time outside when the weather is warmer.
 - b) The coyotes that live in the area also eat deer.
 - c) It is harder to notice signs of cougars when there is snow on the ground.
 - d) Not all the students followed the same methods when collecting their data.
 - e) There are more deer in the area in the summer.

Use the two maps below to answer the following questions.

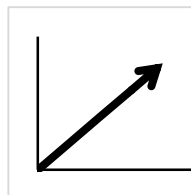


MAP B: SIGNS OF COUGARS AND DEER

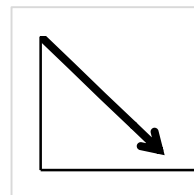


- 5) According to the maps, in which area are cougars most often found?
- a) North b) South c) East d) West
- 6) Looking at the information provided in the two maps, which of the following statements is the best explanation why there are more cougar sightings in that area?
- a) Cougars like areas where they can get into people's garbage cans and look for food.
- b) Cougars like areas where deer and other prey animals are found.
- c) Cougars like to live next to a river.
- d) Cougars like to live far away from people.
- 7a) If the number of cougars in the area decreased what do you predict will happen to the number of deer living in the area?

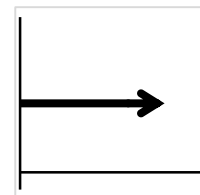
a) Increase



b) Decrease



c) No change



7b) Why is this your prediction? _____

8) In the spaces below, describe two things you can do to reduce your chance of having problems with carnivores, like cougars, bears or raccoons

a) _____

b) _____