Lesson 3.

Title Of Lesson: Data Analyzing	**Grade Level**: 6-8	**Time**: 60 minutes

Subject Matter Areas: ● Conservation ● Data Analysis ● Animal Habitat and Behavior

Preparation: In advance of this lesson, the instructor will collect the video chip from the trail cam, sift through the images, and download images onto shared drive AND a memory stick. For 6th-8th grade, students will determine usable/quality images themselves. Students will record photo findings in a shared spreadsheet (template provided).

Materials/Resources: ● Internet ● Trail Cam photos downloaded onto memory sticks for student use ● Lab book w additional tracking sheet ● Inaturalist Project Name: Klamath Mountains Youth Stewards   ○ https://www.inaturalist.org/projects/klamath-mountain-youth-stewards

Learning Objectives

Students will learn: ● Data collection techniques and analysis

Lesson Structure

Time	Introduction	Teaching Approaches
2	The last time we were here we deployed the trail cam. A lot of images were captured, and before our class today we retrieved the video card. Today we are going to look through the video and images that were captured and analyze them. Students will work as groups to sort through trail cam photos and record findings in shared spreadsheets and lab notebooks as they go.	Recap of Last Lesson orientation to today's lesson
Time	Lesson Content	Teaching Approaches
3	If you remember our previous discussions, a habitat is a place where an organism makes its home and meets all the environmental conditions an organism needs to survive.	Content Recap-Habitat

35	**Q. to Students:** What are the 4 components of a habitat? **Food, Water, Shelter, Space** Keep this in mind when you're viewing your pictures, because at the end of today we are going to determine if your campus is a healthy habitat. **Activity Instructions:** We're going to break up into groups of 2-3, then review some images that will include the trail camera information at the bottom of the pictures. This information will correlate with the data collection box in your lab book. We started in the hard copy lab books, but we are going to advance that and input data into a digital platform. In the real world of wildlife biologists, this is often the progression from field to desk. **Show examples of photos and a digital entry to the whole class.** 1. Each group will input data on a group google sheet. 2. Observe your images and record the data on the sheet. *Or* delete the image if it's poor quality, or a duplicate animal image. (Camera set to burst of 3,-input data one) 3. We are going to use a standard naming convention when we label our pictures. 4. Select 3-5 BEST photos and email to the Instructor. Then use your I Think, See, Wonder grid to make some observations.	Give instructions, then break students up into groups of 3 *Consider using the most exciting photo for this purpose* **Name_Date** Ex: *Crow_01092022* *Crow_1_01092022*	
5	**Popcorn Share** What did you all notice? Ask Each Group to share a few highlights from their images and discussion.	Random Group Share Out	
5	**Introduction Collaborative Data Sets** Next we are going to take the data that we found in the field and we are going to transfer this information into a larger database that can be viewed by students all over the Klamath Basin. **Q. to Students:** Why do you think it's important to try and gather a large sample size when monitoring animals? Invitation: Do you have a camera? Take your own pictures.		
Time	Wrap Up:	Teaching Approaches	

5	Today we learned:
	
	    ● How to track and record data
	    ● The importance of being accurate when inputting data
	    ● The importance of a large sample size when collecting data
		Recap of day

Evaluation

Students will have been able to answer the discussion questions.

If needed: https://www.inaturalist.org/home
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