

Lesson Plan #2 – Biodiversity/Plant Species K-5

Time: ½ Day

Curriculum: Students use a variety of resources to assess the biodiversity of a community.

Objective: Students will; collect a variety of different leaf types, identifying the species of the plants found in their area while recognizing that an area is made up of a variety of different organisms.

Materials: Field Journals; pencils; Baggies for collection; Art supplies/posters; Writing materials; posters for graph/glue/markers; field guides for identification

Goal: Take a closer look at biodiversity within the students' adopted site/school yard.

Wyoming State Standards:

K-4th: Science: 1.1, 1.3, 1.6, 2.2d

Lang. Arts: 4th- 3.5; 3rd- 2.2d, 3.1, 3.5; 2nd-2.2a, 2.2b, 3.1, 3.5; 1st-3.1; **K-** 3.1

Math: 4th- 3.1, 5.1, 5.2; 3rd- 3.1, 3.5, 5.1, 5.2; 2nd-3.1, 3.3, 5.1, 5.2; 1st & **K-**3.1, 5.1, 5.2

5th: Social Studies: 5.1

Science: 2.2 (1.4 & 1.6 with extension activities)

Lang. Arts: 2.2b, 3.3, 3.4

Math: 3.1, 4.1, 5.1

1:00 – 1:15pm: Have students explain what we did during the last visit. Review where our site is on the map. What did the student learn in the last lesson?

1:15 – 1:35pm: Go outside in the school playground. Hand out 1 baggie per student, ask students to collect as many different leaf types and grasses as they can. (Set some ground rules to ensure that plants are not damaged unnecessarily.) As they begin to come back to meeting area have each student record observations and predictions in their **field journals**. Collect journals. (weather, temperature, also)

1:35 – 1:55pm: If weather cooperates, meet at the designated meeting area and make a list of the different leaves that were collected. If not, go back into the classroom for the remainder of the lesson. (Naming species if possible, but is not necessary for assessing biodiversity. If choose to name species, give students resources to allow them to identify plants on their own.)

1:55 – 2:20 pm: Splitting the class into two groups, build a graph labeling or gluing a sample of each plant to a poster and then indicating the number found for each species. *3rd-5th students can elaborate on the chart by working with fractions if time allows. K-2 can work on sorting the leaves and counting for the chart.

2:20 – 2:45pm: Give a presentation on biodiversity followed by discussion that focuses on their adopted area.

2:45 – 3:00pm: Lead the students in a short discussion about noxious weeds. The students will be picking 5 different noxious weeds from the seeds provided and planting them in planters to be kept in the classroom under grow lights

throughout the winter. (This can lead into later lessons on seeds & plants and their structures, as well as germination). Measure the height of the plants (this will be 0, but a beginning for their graph of plant height that they will be keeping throughout the year). Record the height in their field journals.

3:00 – 3:05pm: Closure & Clean Up.