

YELLOW STARThISTLE. BACK TO BACK OBSERVATIONS and PLANT LIFE CYCLE AND FLOWER DISSECTION LESSONS DETAILS

Back to Back Observations

(30 minutes)

STEP ONE. Begin the lesson by asking students to read pages 15 and 16 in their *What's in Your World?* booklet. Ask the students--***what are some observations you can make about Yellow Starthistle?***

What does it look like? What are some of its distinguishing characteristics?

What features make it easy to identify?

Ask students to describe Yellow Starthistle in their journals, including details about each part and its noticeable features.

STEP TWO. Tell the students that now they are going to take a closer look at different noxious weeds by doing back to back observations. Pair off the students and have each student get their journal and a pencil. Ask each pair to sit back-to-back and give one student a picture or an example of a noxious weed. Tell the students that their task is to describe the plant to their partner by describing the plant's details without using the name of the plant (example: the leaves are smooth with two pointed edges on the right side). Ask the students to focus on describing all the parts of the plant as well as the distinguishing characteristics. Their partner will try to draw the object in their journal using the details that are being described to them.

STEP THREE. Once the students have finished describing and drawing, have the students compare and contrast the actual object structure to their partner's drawing.

How was your interpretation of the object different than your partner's interpretation?

Do you think you could identify the plant in the field after observing it more closely?

Have students switch roles, hand out different plants and repeat the activity.



Plant Life Cycle and Flower Dissection

(40 minutes)

STEP ONE. Begin activity by discussing the plant life cycle with students. ***How are the seeds produced by the yellow starthistle plant?*** Explain how plants go from seeds to becoming mature plants in the plant life cycle, including all the stages and processes (seed, germination, seedling, plant, bud, flower, pollination, fertilization, fruit, seed.) Tell students that they are going to take a closer look at the parts of a flower that contribute to making seeds by doing a flower dissection. Show students an image of the parts of a flower, point out each part and discuss the function of each part (petals, sepals, stamen, anther, filament, pistil, stigma, style, ovary.)

STEP TWO. Break students into pairs and assign them to stations or tables. Tell the students that they are going to be looking at real flowers and will try to identify each part of the flower. Also tell them that they will actually be dissecting the flowers--***what does it mean to dissect?*** They will be taking the flower apart and taping each part in their journals. They will then label the part of the flower in their journal. They will need to share the flower specimen with their partner or group, especially when there is only one of a part. Also remind the students that flowers can be very delicate and they must be careful when cutting parts of the flower. Hand out tape, scissors, hand lenses and flowers. Lead the class through the worksheet and each flower part, giving time for students to tape each piece of the flower to their sheet.