

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Learning About Labels

For this activity, you are going to imagine that you have a problem in your garden. Last year you planted all sorts of vegetables, but all you got were weeds. You are determined to have a good garden this year, so you go down to the store and buy an herbicide to kill all of your weeds. Now you are ready to go take care of the weeds, right? **WRONG!** Before using any herbicide, you must read the label so that you can keep yourself, others, and the environment safe.

1. What is the name of the herbicide that you bought?
2. To find out what chemicals you are spraying onto the weeds, you need to find the active ingredients. How many active ingredients are in this herbicide? List them.
3. Now that you have found the active ingredients and read the entire label (you don't need to read it for the activity, just if you were really going to spray), you are ready to go out and spray. What will you wear so that you can be safe while spraying? (Hint: PPE).
4. The weed that you have the greatest problem with is field bindweed (*Convolvulus arvensis*). If your garden is  $\frac{1}{4}$  acre, how many ounces of the herbicide are you going to mix into your tank?

5. Now that everything is mixed up and ready to go, you go outside and start spraying. Since you are wearing so much clothing, you get hot and your protective eye-wear fogs up so that you can't see. You take them off and figure you will just be careful where you are spraying (wrong decision!). Suddenly, a burst of wind blows some of the herbicide right into your face and gets in your eyes. What should you do?
  
6. Finally, you get your eyes taken care of, and you safely apply the rest of the herbicide onto your garden. The next day you are in shorts and sandals and decide to walk in the garden and see if the herbicide has done anything yet. You can't remember what the restricted entry interval (REI) is, so you look it up. How long does it say to stay out of the sprayed area? Is it o.k. to go into your garden with shorts and sandals?
  
7. **Bonus Question:** One month later, most of the weeds are gone, so you plant your garden. To your shock, a lot of the seeds don't even germinate and those that are alive look kind of sick. The only crop that looks good is corn. Why might that be?