

The following entry illustrates a common misconception about making observations. The student's comments are based on her feelings about the hermit crabs and isopods. She appears to try to make observations about the movement of the hermit crabs; however, she writes about her feelings concerning the movement and attributes human emotions to the crabs.

The student attempts to share observations about the movement of the hermit crabs. However, the information is not based on actual observations but ideas and speculations.

### Observations of the terrarium:

I liked how the hermit crabs moved in the terrarium. One of them we named Speedy because he was fast. The other one we named Shy because it didn't want to move out of the shell. I like Speedy because he is very funny and cute. I thought that the isopods would be different but it wasn't that bad. I like both of our hermit crabs.

Here, the student has described the hermit crab with human qualities: funny and cute. The student is also sharing their feelings about the hermit crabs.

\*Scroll down to see other samples.

In this sample, the student has shared some accurate observations such as “drooping down” and “there are no isopods to be seen”. However, the student also includes inferences as an explanation for these observations. It is the goal of the assignment to share actual observations. Other common elements of student work to watch for and correct are attaching human characteristics to the organisms and expressing opinion, emotion or feelings towards the organisms.

Student is making inferences as to how the crabs are behaving.

### Observations of the terrarium:

Very big plants are drooping down.  
Some small plants are trampled by  
the crabs and there ~~are~~ no isopods to  
be seen. The crabs keep spilling  
the bran flake dish, as if they are  
trying to starve the isopods. It  
seems mean.

Here, the student attaches humanistic qualities in that it is assumed the hermit crabs are knowingly trying to starve the isopods. The last sentence includes the student's opinion of the behavior.

These observations are descriptive of what the student actually sees.

\*Scroll down to see other samples.



In this entry, the student has shared what is being observed visually. There is only one statement that is not based on evidence but on the student's opinion. From this point, it would be important to encourage the student to be more descriptive when communicating what's being observed.

### Observations of the terrarium:

The sunflower seeds are finally coming  
off. The cabbage<sup>in</sup> coming out slowly, but  
they are coming. It takes  
forever for it to come  
out!

Student is sharing accurate observations of what is happening. These observations could be more descriptive.

Not only is this statement opinion, but the use of "it" makes the statement unclear. Is the student talking about the sunflower seeds or the cabbage?

\*Scroll down to see another sample.

This example contains both actual observations as well as the student's opinions. It is important to ask students to support their ideas with evidence based on what is actually observed in the classroom.

The statement is an inference. It is well supported by the evidence underlined in purple. However, it should not be listed as an observation.

These are the only actual observations made by the student. The rest is opinion or speculation based on what was observed.

### Observations of the terrarium:

Our hermit crabs haven't been  
eating much we never see them  
near the food and theres never  
any food missing. Our isopod  
like being under the water dish.

How did the students come to this conclusion? What evidence supports this statement?