Many species of native freshwater mussels have evolved adaptations that mimic food items for fish. When the fish comes in to eat the bait, they unintentionally carry some mussel glochidia (larval mussels) away from the trap. Your teacher is going to show you a series of images. Your job is to sketch what you see and write what you think the mussel is pretending to be and explain why you think that.

1. What I think this mussel is mimicking? Why?

2. What I think this mussel is mimicking? Why?

Were you right (circle) yes / no
If not, what is the right organism?

Were you right (circle) yes / no
If not, what is the right organism?
3. What I think this mussel is mimicking? Why?

_____________________________
Were you right (circle) Yes / No
If not, what is the right organism?

4. What I think this mussel is mimicking? Why?

_____________________________
Were you right (circle) Yes / No
If not, what is the right organism?

5. What I think this mussel is mimicking? Why?

_________________________
Were you right (circle) yes / no
If not, what is the right organism?

6. What I think this mussel is mimicking? Why?

_____________________________
Were you right (circle) yes / no
If not, what is the right organism?
Debrief questions:

1. What are the three components of evolution by natural selection?

2. What would the advantage to be this type of mimicry?

3. What could be possible disadvantages to this type of mimicry?

4. What selective pressures acted upon the mussels?

5. Why would each of these mussels have evolved to mimic a different species?

6. Mussels do not have eyes or the ability to see. How are they able to mimic the fish and other species so closely?