

10-21-09

I observe

the

most of the

the

At the end of the

I think snails crawl more
on sand paper.

I think this because

Sand paper has 34 and wax paper has
24

I observed
class Data

I think snails 34
tally

Crawl/more on
Sandpaper • I think
this because
fairtest •

10 ||| 10

FOCUS QUESTION: How do goldfish behave? How do they behave when food and hornwort are added to the aquarium?

I PREDICT The gold FI
SH WILL SWIM
I noticed a way
The goldfish
hornwort

went in and out

What happens when you put
drops of water on different
kinds of wood?

4-13-09

absorbs

Cedar

Repel

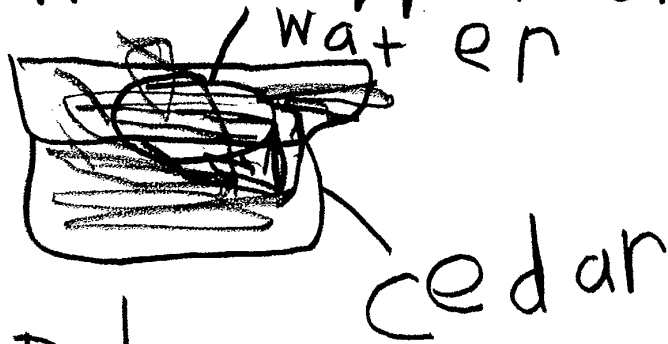
basswood

Plywood

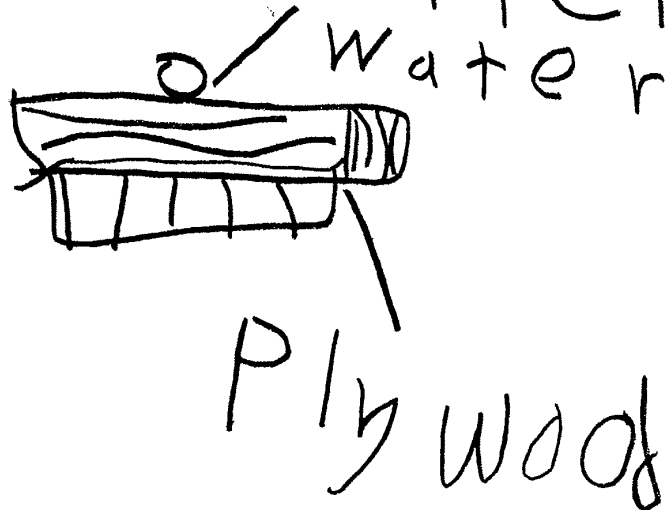
Pine

particle board

Cedar absorbs
the water



Plywood Repels
the water



How many paperclips does it
take to sink the cedar and
particleboard?

4-20-09
PREDICT

| wood | clips |
|-------------------|-------|
| cedar | 30 |
| particle board | 40 |

| wood | clips |
|-------------------|-------|
| cedar | 12 |
| particle board | 5 |

It took 12 clips to sink cedar.
It took 5 sink clips to sink particle board.
cedar is harder to sink than particle board.

Kindergarten, Sample A—*Animals Two by Two* Unit: Kelan

- The students in Kelan’s class are studying this unit in the fall. In this investigation, they are testing to see to which food the greatest number of snails go when placed where they have equal access to four choices. After a class discussion in which they make a class data table and interpret the results, and then a writing session, students write a conclusion about what they have observed. The teacher provides this frame: “I observed most land snails ate _____. ” Because this is a fall entry, the teacher provides more scaffolding and expects students to write fewer words independently than later in their next unit when they also will provide quantitative data to support their claim.
- In Kelan’s conclusion, he writes, “I observed most land [snails] ate [bananas].” (The last word could be *snails*, but his teacher noted that he had told her “bananas.”) This is an accurate and complete conclusion at this point in the year.

Kindergarten, Sample B—*Animals Two by Two* Unit: Helen

- Students in this class are studying the same unit in the winter. They have investigated whether land snails crawl more on sandpaper or wax paper. The scaffolding that the teacher provides after the shared-writing minilesson is “I think snails crawl more on _____. I think this because _____. ” She intends for this scaffolding to elicit *sandpaper* in the first sentence, and quantitative data to support the claim in the second sentence.
- Helen correctly copies and completes the claim. Then she accurately supports that claim with quantitative data from the test results. She includes data for both the sandpaper and the wax paper, which is unusual at this age. Most students write in data for only one of the two.

Kindergarten, Sample C—*Animals Two by Two* Unit: Abbas

- Abbas begins his entry by copying some words from the word bank: “I observed” and “class data.” Then he uses the writing frame, correctly completing it with the word *sandpaper*. He also adds quantitative data—there were the most tally marks (“34 tally”) for sandpaper. His concluding sentence is interesting because the class has discussed that a “fair test” means that everyone sets up and conducts the test in the same way. The data from a fair test can help students answer a question they are investigating. So Abbas could be saying that he thinks these data are accurate because the students have conducted a fair test. He is capable of this high-level thinking even if he is not yet able to communicate it clearly in his writing.

Kindergarten, Sample D—*Animals Two by Two* Unit: Sinai

- In this investigation, students are testing how goldfish react when food and hornwort are added to the aquarium. The frame for their prediction is “I predict the goldfish will _____.” The frame for their conclusion is “I noticed the goldfish _____.” During their discussions before and after the investigation, the teacher adds words to the word bank to express different ways the goldfish can move in the aquarium.
- Sinai writes a reasonable prediction: “I predict the goldfish will swim away.” For her conclusion, she writes, “I noticed the golfsh [goldfish] hornwort went in and out.” She might have copied the word *hornwort* as part of her description of how the goldfish went in and out of the hornwort. The scaffolding that the teacher provides gives students just enough structure to support them, but not so much structure that they easily just fill in the blanks.

Kindergarten, Sample E—*Wood* Unit: Jake

- If this were a fall notebook entry, kindergartners might make a T-chart like this, and their recording of the test results would be their conclusion. If they have been writing in science notebooks since the fall and they study this unit in the spring, then they would write a conclusion on the facing page, as shown in this sample.
- Note that Jake has made an icon above *absorbs* and *repel*. His teacher has modeled how to do this so students can remember the meaning of each word and also learn how to represent the test results in drawings.
- In his conclusion on the facing page, Jake chooses to write about one wood that absorbs water and one that repels water. Note how he draws and labels accurate results as well as writes an accurate sentence about each result.

Kindergarten, Sample F—*Wood* Unit: Ben M.

- In this spring entry, the teacher has students make a T-chart as a way of writing a prediction for their investigation. In some cases, you would want kindergartners to add *because* and provide reasoning for their prediction, but that would be difficult in this case.
- Ben makes one T-chart for his prediction and a second chart for his test results. Both T-charts are organized and easy to understand. Later, he writes a strong scientific conclusion, starting with reporting accurate quantitative data for the test results for both the cedar and the particleboard. Then he makes an accurate qualitative or comparative statement about the data: “Cedar is *harder* to sink then particleboard.”