Science

SOAKING STAMPS

Component: Scientific Skills and Methods
Outcomes: Begins to describe and discuss predictions, explanations and generalizations based on past experiences.
PA Standard(s): SC 3.2A

Objective: The student will observe the properties of paper in water.

Warm up Activity:
The teacher holds up a postage stamp and asks students to tell what they know about it.

Description:
1. The teacher shows a stamped, addressed envelope and opens the envelope, asking students when they receive mail.
2. The teacher asks what students and their families do with the envelope after they have pulled out the letter. “Have you ever thought of saving the envelope so that you can add the stamp to your collection?”
3. The students respond to the question, “What will happen when I put this cut corner of the envelope in a bowl of warm water?” “How long will it take for the stamp to separate from the paper?”
4. Students observe the teacher modeling how to soak a stamp off an envelope. She sets a timer for 5 minutes and checks the stamp when the timer buzzes. If the stamp did not separate, then she sets the timer for 5 more minutes, checking the stamp during the five minutes and at the buzzer’s ring.
5. Students try soaking at their tables, carefully when separating the stamp from the paper so as not to tear the stamp. Stamps are placed on wax paper to dry.

Extension Activity:
1. Students may repeat the above activity at the water station. Before they soak, they predict how long it will take for the stamp to separate. Using a timer, they pay attention to how long it takes for the stamp to separate from the paper.
2. Students dry their stamps from the water station and predict how long it will take for the stamps to dry.

Assessment:
The teacher notes each student’s reaction to the results of their predictions. When the experiment is repeated in the Extension Activity, the teacher will note the percentage of students who made accurate predictions.