Title of Lesson: Scientific Inquiry through Melting
Theme: Earth/Space Science
Unit Number: 1  Unit Title: Physical Properties of Matter
Performance Standard(s) Covered (enter codes):
   SKCS6
   SKE1

Enduring Standards (objectives of activity):
   Habits of Mind
   □ Asks questions
   □ Uses numbers to quantify
   ☑ Works in a group
   ☑ Uses tools to measure and view
   □ Looks at how parts of things are needed
   ☑ Describes and compares using physical attributes
   ☑ Observes using senses
   ☑ Draws and describes observations

Content (key terms and topics covered):
Winter weather, ice, snow, melting, night and day

Learning Activity (Description in Steps)
Abstract (limit 100 characters): The students are presented with a problem and make a hypothesis to the problem.
Details: I had used an 8-ounce plastic container to make a block of ice the previous night. I had also prepared a chart with various timeframes (end of recess, end of lunchtime, etc.) indicated on it so that the students would have choices to select when asked how long they thought it would take to melt.
As a large group I introduced the chart to the students and went over the different categories. I then read A Snowy Day by Ezra Jack Keats. In the book, a young boy experiences the joy of snow but realizes that the snow cannot be brought back home; it quickly melts inside of his pocket once the boy enters the house. After the book was completed, we discussed why the snowball melted once the boy entered his house. After a sufficient time, I once again brought out the poster and reiterated what time period each category displayed. I then asked the students to select which category corresponded to how long they believed it would take for the entire block of ice to melt. I tallied up their votes onto the chart, making sure that each student got his/her vote counted and tallied. After the votes were recorded, I placed the block of ice and tray on a countertop so that the students would be able to observe the extent of the ice's melting. At certain intervals during the remainder of the class, the students and I would check the ice to see how much of it had melted and discuss these observations.
The small group portion of the class followed the large group portion. During the small group, I had each group of students select a dark or light color of construction paper for a "night" or "day" winter scene, respectively. They then were each given half of a bell pepper and allowed to dip the pepper into the white paint and "stamp" the imprint onto the construction paper. After the students completed their scenes, they were allowed to lightly coat the Epsom salt and water mixture onto their construction paper for a glossy and wintry effect.

**Materials Needed (Type and Quantity):**

- A Snowy Day by Ezra Jack Keats
- Large block of ice (about 8 ounces)
- Large tray for collecting melted ice
- Poster board to record student predictions
- Epsom salt
- Dark and light colored construction paper
- White paint
- Paintbrushes
- Paint trays
- Half-dozen bell peppers

**Notes and Tips (suggested changes, alternative methods, cautions):**

**Sources/References:**

1) A Snowy Day by Ezra Jack Keats
2) 
3)