## Core Skills Analysis

### Science

- Students observed cause-and-effect when a water balloon was dropped without protection, noting it burst.
- Students explored the concept of a barrier by wrapping the balloon and seeing the reduced damage, linking to material properties.
- Students practiced forming simple hypotheses ("If I protect the balloon, it will stay intact") and testing them through the drops.
- Students began to understand that gentle handling can change the outcome of a physical event.

### Social-Emotional Learning (SEL)

- Students connected the fragility of a water balloon to the fragility of people's feelings, reinforcing empathy.
- Students identified gentleness as a protective action, practicing self-regulation by handling the balloons carefully.
- Students expressed emotions (e.g., excitement, disappointment) before and after each drop, building emotional vocabulary.
- Students learned that caring actions can keep others safe, reinforcing prosocial behavior.

### Mathematics

- Students counted how many balloons survived each trial, practicing one-to-one correspondence.
- Students compared the height of the drops (low vs. high) and discussed which condition led to more breakage.
- Students measured the thickness of the barrier materials using non-standard units (e.g., paper strips).
- Students recorded simple data (number of intact balloons) in a picture chart.

### Language Arts

- Students used descriptive words such as "gentle," "soft," "burst," and "protected" to narrate the experiment.
- Students retold the sequence of steps (drop, wrap, drop again) in their own words, strengthening oral sequencing skills.
- Students drew a picture of the activity and labeled parts, integrating writing with illustration.
- Students answered the question "What would happen if we were rough?" encouraging inferential thinking.

### Tips

After the balloon experiment, sit with Students and discuss how feelings are like fragile objects—when we are gentle, feelings stay safe. Extend the learning by having Students design a "feelings shield" using craft materials and then role-play scenarios where they practice gentle words or actions. Set up a simple egg-drop challenge to deepen the concept of protection and engineering. Finally, create a daily feelings chart where Students can place a sticker on a balloon picture when they handle a situation gently, reinforcing the link between actions and emotions.

### Book Recommendations

- The Feelings Book by Todd Parr: A bright, simple picture book that names many feelings and encourages children to talk about them.

- Hands Are Not for Hitting by Martine Agassi: Teaches gentle hand use and empathy through a playful rhyme, perfect for reinforcing the balloon lesson.
- The Watermelon Seed by Greg Pizzoli: A humorous story about a boy who learns to be gentle with his curiosity, linking careful actions to safe outcomes.

**Learning Standards**

- CCSS.ELA-LITERACY.RL.K.1 – Students retell a familiar story or personal experience (the balloon sequence).
- CCSS.ELA-LITERACY.RI.K.1 – Students ask and answer questions about the experiment (e.g., "What happens if we are gentle?").
- CCSS.ELA-LITERACY.W.K.2 – Students use drawings and dictation to compose a message about protecting feelings.
- CCSS.MATH.CONTENT.K.MD.A.1 – Describe measurable attributes of barrier materials (thickness, length).
- CCSS.MATH.CONTENT.K.MD.A.2 – Compare the number of balloons that survived with and without protection.
- CCSS.MATH.CONTENT.K.CC.A.1 – Count objects (balloons) and record the totals.

**Try This Next**

- Worksheet: Draw two columns—"Before protection" and "After protection"—and sketch the balloon in each state, then write one sentence describing the change.
- Data Chart: Create a simple tally chart for Students to record how many balloons stayed whole each trial, then discuss the results.