Loop, Twirl, Swoop;
How Roller Coasters Move

Name:	Miss Beckett
Grade Level:	First Grade
School:	Madison Elementary
Date:	November 7. 2011
Time:	12:45-1:30

Contextual factors/learner characteristics

- 20 students arranged in six pods of 3-4
- Wyatt (special needs) needs more instruction and struggles following along
- Need to give the students instructions whether you want them to answer in unison, raise their hand, or etc.

Goals:

- 1.P.2.1 Students are able to describe relative positions of objects

Objectives:

- After the lesson, students will be able to illustrate their faces while on a roller coaster with 100% accuracy.
  - I can draw a picture of my face when I ride a roller coaster.

Materials and Resources Needed:

- 20 pre-assessment worksheets (Falling Objects Quiz)
- Roller Coaster puzzle cut into 20 pieces
- "Roller Coaster" by: Marla Frazze
- 20 sticky notes
- 3 printed roller coaster cars pictures
- Computer connected to projector with internet (simulation video: http://www.youtube.com/watch?v=K6oRz3Surtk&feature=pyv)

The Lesson

1. **Introduction**

Getting attention	**Teacher: "***Today we are going to learn about something new, but in order for you to figure it out we're going to put a puzzle together. I will give you each a puzzle piece and we will put it together on the board."* Give students each their piece and help them put it together on the board. Show them the finished puzzle. **Teacher:** "*What's our puzzle a picture of*?

	Students: A roller coaster **Teacher:** "*Yes, it's a roller coaster!"*
Relating to past experience and/or knowledge	**Teacher:** "*Today we are learning about roller coasters. Have any of you seen a roller coaster before?* **Students:** (Yes, at the fair…Disney world, etc.) **Teacher:** *Have you ridden a roller coaster?* **Students:** (Yes, No…) **Teacher:** *What can you tell me about roller coasters? Do they go straight or have loops*?" **Students:** (loops!)
Creating a need to know	**Teacher:** "How would you feel if you were on a roller coaster?" **Students:** Sick, Excited, Happy, etc.
Sharing objective, in general terms	**Teacher:** "We are going to learn about roller coasters and how they move"

2. **Methods (core of the lesson)**

   - *"Before we learn more about roller coasters, we are going to take a quick quiz together to see how much you already know. I'm going to give each of you the quiz and we will go over the questions together. I will read the questions and you will need to choose the best answer. Don't worry about getting the right answers, just try your best."* (Pass out the quizzes and begin reading the questions, one by one. Once everyone is done, collect the quizzes)
   - *"Now, we are going to read a book all about roller coasters. Lets VERY quietly move to the reading carpet."*
   - Once everyone is moved and sitting quietly, begin reading the book. Stop at pages 14 & 15. Ask: *"What do you think the next picture is going to look like?"*
   - Finish reading the book. "*Now, everyone can go back to your desks. We are going to draw a picture."*

3. **Closure**
   - *"How would you feel if you were on this roller coaster? What do you think you would look like? (*Hang up the three roller coaster cars on the board) *We are now going to draw a picture of what we would look like on a roller coaster and put them on the roller coaster cars."* Once complete, stick each of the pictures on the roller coaster cars, so it looks like the students are riding them.

4. **Assessment**
   - Falling Objects Quiz (Pre-Assessment)
   - Sticky Note Roller Coaster Faces

   Back Pocket Idea
   - *(If time is allocated) We are going to watch a video of what it would be like to ride on a roller coaster."* Play the simulation video.
   - *"Did it feel like you were riding the roller coaster? Do you think your face your face would look like the picture you drew?*

Resources/References

- More Picture Perfect Science Lessons: Using Children's Books to Guide Inquiry, K-4 By: Karen Rohrich Ansberry and Emily Morgan
- Website for simulation roller coaster: http://www.youtube.com/watch?v=K6oRz3Surtk&feature=pyv