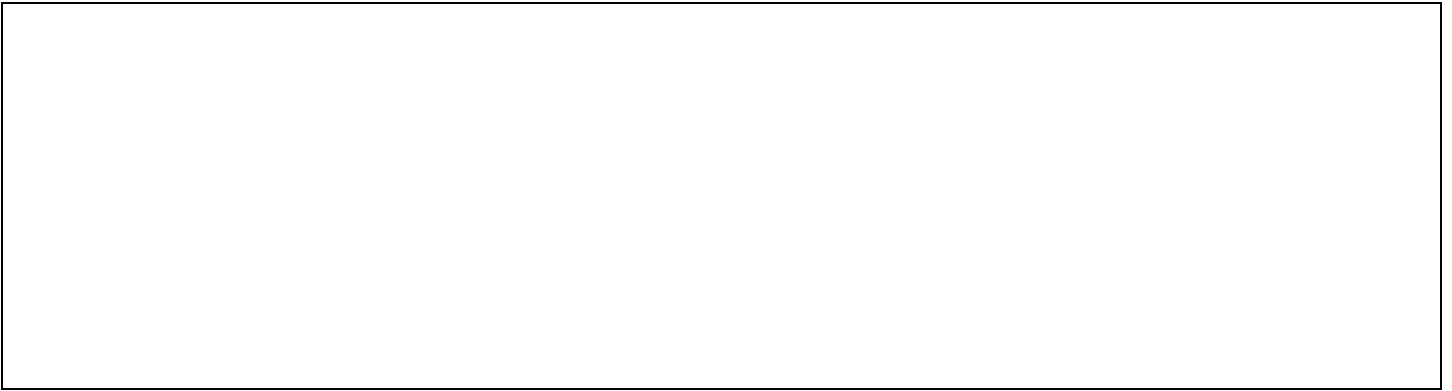# Lesson Plan Template (EXPLORE)

Grade: 2nd	Subject: Science
Materials: "Make It Balance" article and students' science books	Technology Needed: None

Instructional Strategies:	Guided Practices and Concrete Application:
☐ **Direct instruction** ☐ Peer teaching/collaboration/ cooperative learning ☐ Guided practice ☐ Visuals/Graphic organizers ☐ Socratic Seminar ☐ Learning Centers ☐ PBL ☐ Lecture ☐ Discussion/Debate ☐ Technology integration ☐ **Modeling** ☐ Other (list)	☐ **Large group activity** ☐ Hands-on ☐ Independent activity ☐ Technology integration ☐ Pairing/collaboration ☐ Imitation/Repeat/Mimic ☐ Simulations/Scenarios ☐ Other (list) Explain:

Standard(s)	Differentiation
K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	**Below Proficiency:** For students who are below proficiency, accommodations that help with the balance activity will make the learning experience easier for them. Allow these students to do only have of the balancing acts and give them visuals to see the balancing acts. **Above Proficiency:** For the students who are above proficiency, allow them to do more balancing acts followed with more discussion questions. **Approaching/Emerging Proficiency:** This lesson tailors to the students who are approaching/emerging proficiency. **Modalities/Learning Preferences:** **Visual:** Students that are visual learners will watch me model the balancing acts. **Auditory:** Students that are auditory learners will listen to me read the article and listen to me give the balancing act directions. **Kinesthetic:** For kinesthetic learners, there are opportunities throughout the lesson for them to move. The balancing acts will help these students.
Objective(s) By the end of this lesson the students will know what is needed to balance something and what a counterbalance is by demonstrating a model of balance of themselves. **Bloom's Taxonomy Cognitive Level:** Application	

Classroom Management- (grouping(s), movement/transitions, etc.)	Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules and expectations, etc.)
The students will sit in their desks as I go through the engage and explain section. When I am finished with the explain section, the students will stand up by their desks to do the balance activities. When we finish the balance exercise the students will sit back down in their seats. While I am reviewing with the students, they are expected to be sitting in their seats.	The students are expected to be good listeners when I am reading the article. They are to engage in discussion in an appropriate voice level. If they get too loud I will remind them what our voice level needs to be at. If the students are not doing what they are supposed to during the explore section of my lesson I will have them sit in their desk and write a paragraph on balance. The students are expected to raise their hands and respond to my questions at the end of the lesson.

Minutes	Procedures
3	**Set-up/Prep:** Have the big book ready and their articles ready to access.

3	**Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)**
	Access prior learning:
	In science we have been working on balancing.
	Think about the activities you guys have done with balancing.
	How can we make something balance?
	    • (putting weight below the balance point adds stability to the stable system)
	    • (remember how we put clothespins below the balancing point the on the arcs to make them stable enough to balance on the popsicle sticks)
	    • We can balance something by having the center of gravity directly above or below its base.

5	**Explain: (concepts, procedures, vocabulary, etc.)** Have students sit in their seats. Read "Make it balance" Have students follow along in their books as I read out of the big book. Ask questions at the end of the article Think of balancing on one foot. What can you do with your body to help you balance? • Hold your arms out to the side. Is it easier to balance a ball or a book on your head? Why?

		• A book, because it is flat and stable.

What does balance mean?
- Balance means stable, not falling over. There is an equal distribution of weight.

What dos counterbalance mean?
- Counterbalance means making a system balance by adding weight below the balance point.
- When something is counterbalanced it doesn't fall over.

Examples:
- Tightrope walkers a super balanced so they don't fall over.
- Do models of being balanced and not being balanced and have the students identify if you are balanced or not.

20 | **Explore: (independent, concreate practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)**
- Now we will get a chance to try some of the balancing systems in the article.
- We are going to practice them here in the classroom. If you can't act appropriately while we are doing them I will just have you sit down in your desk and have you write about the activity. So, let's be good listeners!

Independent:
- I want you guys to stand up by your desks.
- Then I want you to extend your arms in a T shape.
- Make sure you have enough room. You shouldn't be touching anyone. You guys can back up a little bit if you need to.
  o Stand with your feet together with your hands at your sides. Do you feel stable?
  o Spread yours arms away from your sides in an upside-down V. Are you wobbling less or more?
  o Now bring your arms way up near your ears in the form of a V. How stable are you now?
  o Shake out your arms and bring them back down by you side. Raise one leg (like a flamingo) and keep your arms down by your side. Do you feel stable?
  o Bring your arms way up to form a V. How stable are you now?
  o Shake out your arms and get ready for the final challenge. Put your body in the most stable position possible. What makes this position so stable?

Bring these students up to the front
Have the students figure out which student is more balanced.
Have students sit back down in their desks.

5 | **Review (wrap up and transition to next activity):**
Get everyone's attention.
Review the lesson with these questions:
What was the most stable position you could be in when you were standing up? Why do you think so?
When you were on one foot, did it help when you were wobbling to move your arms around a bit? Why does it help? (Yes, your arms acted as a counterbalance to help you balance.)
Why were you less stable when your arms were up in a V when you were on one foot? (You didn't have your arms acting to counterbalance right? More even weight helps you become balanced.)

Formative Assessment: (linked to objectives)
Progress monitoring throughout lesson- clarifying questions, check-
in strategies, etc.
For a formative assessment, at the end of the lesson, have the students do a think-pair-share. The students will discuss with a partner 3 things they didn't know before, 2 things that surprised them about balancing, and 1 thing they want to start doing with what they've learned. After the students discuss with their partner we will go around and share everyone's answers.

Summative Assessment (linked back to objectives)
End of lesson:
At the end of the lesson students will take a summative assessment on balance. There will be 3 essay questions and an individual activity to do. Each question will be worth 2 points and the activity will be worth 4. The students are to hand in the essay questions when they are finished completing them individually. I will grade the individual activity accordingly.

If applicable- overall unit, chapter, concept, etc.:

Reflection (What went well? What did the students learn? How do you know? What changes would you make?):
When reflecting upon this lesson, I wouldn't necessarily change a lot to it, but add more to make the lesson more engaging, longer, and thorough. I want to make sure every student is understanding the concept of balance to start off the lesson. I would go over some of the vocabulary we will find in the book while reading and write them on the board. I will discuss the terms and the definitions, so they have more of a background. When moving into the explain part I will use more examples and visuals. During the reading I will stop and have the students do some of the examples that are in the book, such as the ball and book. I will choose students to do the modeling in front of the class and generate discussion with the rest of the students. During the explore section I will do the actions with the students, so they have more of a guide. For the last challenge I will pick 2 or 3 students to come up in the front of the class and I will explain which one is more stable by stable by asking, "If I were to push one of them, which student is the most likely to fall over?" By doing this they will have a solid example of what balance is. For review I will add more questions regarding balance and do a wrap up involving examples on the smart board to make it more interactive using technology. Overall, I think the lesson went well and the students were very engaged. Improving my modeling and usage of visuals is something I will strive to do for the next time.

Lesson Plan Template (EXPLORE)