**Lesson 1 Plan Template**

**Lesson Topic:** Motion of objects on land (Are we there yet?)

**Grade level(s):** 1-2

**Instructor Names**

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| **Desired Results** |
| **Overarching Focus Question for the Session (***the phenomenon being explored across the 3-weeks***)*** How can science help us to design multi-functional vehicles?
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| **Central Focus/Topic for today:**Students will understand:* The idea of force and motion
* Balanced and unbalanced forces
* How both of these ideas affect how far a vehicle can travel on land.

Therefore, the guiding question for today’s learning is:* How can we design a vehicle that can travel the farthest on land?
* How does the length of the vehicle previously designed affect the balance of the vehicle?
 | **Relationship that this central focus has to the overarching big idea/question for the unit:**The relationship between this week’s central focus and our overarching question is that the students will understand that the ideas of force, motion, balanced, and unbalanced forces are related to how they want to make their multi-functional vehicles. These forces will help the students determine the best way to design their vehicles to go the fastest and move in the most effective/efficient way.  |
| **Student objectives (outcomes):***(Remember, this is like the performance expectation statement in the NGSS, so you need to be incorporating Science Practice in this/these statement(s).*Students will be able to:* Develop and use models to investigate how far their vehicle can travel on land.
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| **Timeline of Activities for the Day** |
| \**Provide a breakdown of how long each activity will take, who will lead the segments of the activities, when breaks will occur or other transition points, etc.**\*Identify by highlighting in blue the portion of the lesson you team wants video-recorded each week. This should be ~45 mins***9:30-9:45: Have the students decide what they want our classroom expectations to be. Write these expectations on a sheet and hang in front of the class so students can refer to them.****9:45-9:55: Icebreaker introductions****9:55-10:15: Introduce the topic of transportation and different types of vehicles on land, including what are the main parts of a car that help it move.****10:15-10:20: Students will explore the different materials they can use to build vehicles.****10:20-10:35: Teachers will model how to make a blueprint for a car. Students will then create the blueprint of their own car.****10:35-11:00: Students will create their vehicle using the materials provided.****11:00- 11:20: Snack break and bathroom break****11:20-11:30: Students will test how far their vehicles can travel using a ramp. The same ramp will be used for the whole class.****11:30-11:40: We will have a discussion about the vehicles we created.****11:40-11:50- Students will revise their blueprint using a different color. They will add/ alter one element to their vehicle to make it travel further.** **11:50-12:00- Students will make make one change to their vehicle using the revisions they made to their blueprint. Students will retest their revised models.** |
| **Learning Plan (First three E’s of the 5E model)***Any of these phases can be repeated should you have more than one activity to describe OR a complex activity with multiple iterations of some phases.* |
| **ENGAGE*** We will begin our lesson by setting up classroom norms with the students. We will let students come up with these norms so that they get to choose how the classroom is set up. Giving students this freedom will make them more likely to follow them throughout the three weeks. We will write the classroom norms on a large piece of white paper and post it up in the classroom.
* We will do an ice breaker activity so that we can get to know their names and a little about them. We will ask them:
	+ What is your name?
	+ Did you come to the first session of Saturday Science? If so, what was your favorite part?
	+ What is your favorite animal, food, etc.?
* We will then transition into introducing the topic of constructing vehicles on land.
* We will first have a discussion about cars. We will ask students:
	+ What are the parts of a car?
	+ What do these parts do?
	+ What makes a car go?
	+ \*\*\*We can also show them a picture of a car to help them describe a car
* We will first show an example on the doc camera of a blueprint land vehicle we drew. We want students to see an example of what they will be doing.
* We will then have the students draw a picture of a vehicle and label what materials they will be using that they will try to create.
	+ We will show students the materials that they will be using
* We will share examples of people’s models in front of the whole class.

 **EXPLORE*** Students will then construct their vehicle using the materials that they choose.
	+ As students construct their vehicles, we will ask them:
		- Why did you choose these materials?
		- What materials do you think will make the vehicle go fast? Why?
* Snack and bathroom break
* We will then have students test how far these vehicles go on a ramp. The factors of the ramp will be decided by the class so that everyone uses the same ramp for their test.
* Students will test their vehicles and we will mark with tape how far each students’ vehicle goes. We will have four of the exact same ramp so that we can split students up into four small groups to make the testing go more quickly. Each teacher will supervise one ramp.
	+ Within each small group, the teacher will ask the students:
		- Which vehicle do you think will go the furthest? Why do you think that?

 **EXPLAIN*** Students will compare models and results of their vehicles. We will come up with an overall theme about the relationship between the distance cars go and the different car models.
* A potential theme they could discover is that a heavier car will go slower than a lighter car. Another theme could be that a heavier car goes further.
	+ What materials that you used made your car heavy?
	+ What materials could you substitute to make your vehicle go faster?
	+ Why do you think this material would work better?

**EXPLORE*** Students will then go back and revise their blueprint using a different color. They will add/ alter **one** element of their vehicle to make it travel further.
* Redesigning their original models based on the revisions they put in the blueprint.
	+ We will ask students:
		- Why did you change this part of your vehicle?
		- Why do you think this (insert material they changed/altered) will make the vehicle go further?
		- If you could make another change to your vehicle, what would you revise? How do you think this change would affect your vehicle? Why?

 **ELABORATING/EXTENDING Understanding*** Making a vehicle that deals with balance and what balanced and unbalanced forces are in relation to how fast their vehicle model goes.
	+ Your car now has to carry cargo. How would you modify your vehicle in order for it to stay the same speed? (Draw out your modified vehicle.)
	+ What materials would you use and why?
	+ Where would you put the cargo on your vehicle so that the cargo is balanced?

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| **Assessment Evidence (\*This is the Evaluation Phase of the 5E approach)** |
| **Performance Task(s):*** Designing their vehicles blueprint and labeling the materials they used.
* Comparing models between peers and explaining what worked well and what did not.
* Revising the first blueprint of their vehicles and testing their altered vehicles with the new design.
 | **Other Evidence:*** Answering discussion questions and comments that come from discussion.
* After redesigning their vehicles and testing them, the students should have an idea of why their second design went faster or slower.
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| **Materials + Quantity:*** 2 sheets of chart paper with sticky back
* Tub of crayons
* Tub of markers
* 6 cups to hold the crayons/markers
* 25 pencils
* Cardboard
* Packing peanuts ALL OF THEM!
* 50 Straws
* 50 Bottle caps
* 100 Buttons
* Styrofoam
* 24 16-oz empty water bottles
* 24 scissors
* 24 glue sticks
* 5 Hot glue guns/hot glue
* 5 rolls of duct tape
* Ping pong balls
* 50 Washers
* 25 Sponges
* 50 Skewers
* 20 Styrofoam balls
* 25 Cardboard (toilet paper) tubes
* 5 Milk cartons
* 24 Plastic cups
* Tissue Boxes
* 4 large dry-erase boards
* Rubber bands
* Pipe cleaners
* 1 tub of Play-Doh
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| **Required Accommodations/Modifications:*** Gear up: challenge the students to build a car using the least amount of materials.
* Gear down: pair students who are struggling with students who are succeeding. We could also limit the amount of materials they can use. Some students may have a hard time deciding what materials they want to use, so it will help them if we narrow down the materials.
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| **Additional Modifications for Individual Students:*** N/A
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**Lesson 2 Plan Template**

**Lesson Topic:** Motions of Objects on Land, Air, and Water (Are we there yet?)

**Grade level(s):** 1-2

**Instructor Names:**

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| **Desired Results** |
| **Overarching Focus Question for the Session (***the phenomenon being explored across the 3-weeks***)*** How can science help us to design multi-functional vehicles?
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| **Central Focus/Topic for today:**Students will understand:Pt. 1: Students will understand how different materials work better than others for different types of vehicles and be able to explain why.Pt: 2 Students will understand how/why friction and gravity affect how far their multifunctional vehicles travel.Therefore, the guiding question for today’s learning is:Part one/part two* Pt. 1: How does the weight of your vehicle affect how far it can travel?
* Pt. 1: How does friction and gravity affect how far your vehicle can travel?
* Pt. 2: Why are some materials better than others for travel on water or travel on air?
 | **Relationship that this central focus has to the overarching big idea/question for the unit**The relationship that our central focus has to the overarching big question is that the students will need to think about why different materials are better to use to build their multi-functional vehicles. They will need to test out different materials in order to find the ones that make their vehicles go the farthest on land, air, and water. |
| **Student objectives (outcomes):***(Remember, this is like the performance expectation statement in the NGSS, so you need to be incorporating Science Practice in this/these statement(s).*Students will be able to:* Students will be able to revise their models of their vehicles based on the concepts of friction and gravity.
* Students will be able to investigate different materials and their durability for a vehicle on air or water based on the concepts of density (water), air resistance and gravity (air).
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| **Timeline of Activities for the Day** |
| \**Provide a breakdown of how long each activity will take, who will lead the segments of the activities, when breaks will occur or other transition points, etc.**\*Identify by highlighting in blue the portion of the lesson you team wants video-recorded each week. This should be ~45 mins*9:30-9:45: Review class expectations and add on the classroom expectations sheet that students should be respectful of their peers and their models. Recap what we did the week before.9:45-9:55: We will have a whole class discussion about gravity and friction. We will ask questions about how/why these concepts relate to how they will reconstruct their designs. 9:55-10:10: Have students revise their blueprint. Remind them that they must use a different color to show their revision and they are only allowed to change one thing about their car.10:10-10:25: Students will be redesigning their vehicles based on their revised blueprints.10:25-10:35: Students will retest their new designs. There will be two testing groups- one on carpet inside the classrooms and one in the hallway on the tile flooring. They will switch to the other group after they are done testing in one area. 10:35-10:40: Whole group discussion about how their vehicle moved on the tile flooring vs the carpet and how friction plays a part in this. 10:40-10:55: Snack and bathroom break.10:55-11:05: We will introduce the next activity which will be testing materials. We will have a discussion about which materials from last week they think will work best for air travel and which will work best on water.11:05-11:40- Stations with 4 different materials. This will include testing materials in water and in air.11:40-12:00- Report findings to the class. As a class, we will discuss which materials floated and took the longest time to reach the ground from the balcony. During this time we will also discuss as a class which materials would be best to use to build a plane and which would be best to use to build a boat.  |
| **Learning Plan (First three E’s of the 5E model)***Any of these phases can be repeated should you have more than one activity to describe OR a complex activity with multiple iterations of some phases.* |
| **Part 1: ENGAGE*** We will begin our lesson by going over the classroom norms again. We will add a new classroom norm where we emphasize the importance of being respectful to our peers when testing the vehicles. We want students to encourage one another and support each other’s unique designs.
* We will have students revise their vehicles. First we will tell introduce this activity by having a whole group discussion about force and motion (gravity and friction). We will say:
	+ Do you think the carpet had an effect on the distance that your car went?
	+ Do you think your car would have traveled farther if we tested them on a hard floor (concrete)?
	+ Based on this discussion, do you think that a heavier car or a light car will go farther? What makes you think this?
	+ What have you all heard about gravity and friction? How do you think these forces are acting on your vehicles?

**EXPLORE*** We will then have the students revise their vehicles based on the concept of force and motion. Students will only be allowed to change ONE thing about their original vehicle.
* When testing this week, we will split the students into two groups. One group will test their revised vehicle on the carpet, while the other group will test it in the hallway (hard/concrete floor). The students will switch locations when everyone has tested (students who were on the concrete test on the carpet and vice-versa).
* After testing in both locations, we will come back together as a group. We will ask:
	+ Can a few people tell us what changes they made to their car?
	+ Did this change make your vehicle go farther? Why do/don’t you think so?
	+ Did your vehicle test better on the concrete or on the carpet? Why do you think so?

**EXPLAIN*** We will relate the concept of gravity and friction to what they found when testing their cars. We will say:
	+ What did you notice about the cars on the concrete versus the cars on the carpet? (Ideally, we want them to notice that the cars on the carpet slow down quickly and don’t go as far).
		- Which surface has more friction?
	+ What effect did gravity have on your revised vehicle?

**Part 2: RE-ENGAGE*** We will transition into discussing water and air vehicles. We will ask them:
	+ Based on the materials you saw last week, what materials do you think would float in the water? Why?
	+ What materials would be best for flight? Why?
	+ What properties, if any, do these materials have in common? How do they differ?

**EXPLORE*** We will split the students up into groups of four (we will have five groups of four students).
* Each group will have different materials. We will assign 4 different materials to each group. The material groups are below:
* Material Groups:

1: Packing peanuts, bottle caps, buttons, & sponge2: Packing peanuts, styrofoam, toilet paper tubes, & plastic cups3: Packing peanuts, ping pong ball, pipe cleaners, & milk carton4: Packing peanuts, empty water bottle, playdough, & straws5: Packing peanuts, playdough, empty water bottle, & buttons* They will first test out the individual materials they were given in water first. To save time, Each group will keep their materials and then will report their findings to the class.
* Next, each group will test their given materials flight abilities by dropping them off the balcony. We will have a stopwatch and the students will record the amount of time each material took to hit the ground.
* Within each group, we will ask the students:
	+ Which material floated the best? Why would this material be used to make a good (or bad) boat?
	+ Which material fell the quickest? What does this tell you about how well (or not well) it would fly if you used this material to make an airplane?
	+ Which material fell the slowest? What does this tell you about how well (or not well) it would fly if you used this material to make an airplane?

**EXPLAIN*** Students will come back together in the classroom to discuss their results. We will ask them:
	+ Out of the materials your group was given, which did the best in water (which one’s floated the best)? Which ones did the worst (sunk)?
	+ How about in terms of flight? Which one fell to the ground the quickest/slowest?
	+ What about these materials made them best in water? Flying? (Think about the different properties).
* We will discuss trends in the data such as which materials sank/floated better and which materials flew quicker/more slowly. We will emphasize why these trends exist by bringing up the ideas of density (with water) and air resistance (with flight).
* We will also discuss why certain objects do better than other objects. For example, we will discuss the properties that make a boat float (no holes, light load, etc.). With airplanes, we will discuss the properties that make an airplane fly. For example, we will discuss the fact that in order to make a successful airplane, air must push the plane up harder than the air that is pushing it down, your plane should be light to overpower gravity, your plane should have little air resistance, the plane should glide, etc.)
* At the end of our discussion, we want our students to have a better understanding of what materials they should use next week to modify their cars to be a multipurpose vehicle (either a boat or an airplane).

 **ELABORATING/EXTENDING Understanding*** The student will make a blueprint based on their findings in today’s lesson about what materials they think will be better for air and water.
	+ What materials did you choose and why?
	+ If your vehicle had to carry heavy cargo, would you change your design? Why?
	+ What materials would you use to withstand the heavy cargo on your multi-functional vehicle?

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| **Assessment Evidence (\*This is the Evaluation Phase of the 5E approach)** |
| **Performance Task(s):*** Revising their original blueprint
* Comparing how different materials would work for a vehicle on land, in air, and on water.
* Collecting data about these materials and decide which would work best for their vehicle of choice.
 | **Other Evidence:*** Comments about the materials when they are testing them.
* Comments during the discussions that we will have as a whole class.
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| **Materials + Quantity:*** 2 sheets of chart paper with sticky back
* Tub of crayons
* Tub of markers
* 12 cups to hold the crayons/markers
* 25 pencils
* Cardboard
* Packing peanuts
* 50 Straws
* 50 Bottle caps
* 100 Buttons
* Styrofoam
* 24 16-oz empty water bottles
* 24 scissors
* 24 glue sticks
* 5 Hot glue guns/hot glue
* 5 rolls of duct tape
* Ping pong balls
* 50 Washers
* 25 Sponges
* 50 Skewers
* 20 Styrofoam balls
* 25 Cardboard (toilet paper) tubes
* 5 Milk cartons
* 24 Plastic cups
* Tissue Boxes
* 4 large dry-erase boards
* Rubber bands
* Pipe cleaners
* 1 tub of Play-Doh
* 2 Black erosion tables

Material Groups:1: Packing peanuts, bottle caps, buttons, & sponge2: Packing peanuts, styrofoam, toilet paper tubes, & plastic cups3: Packing peanuts, ping pong ball, pipe cleaners, & milk carton4: Packing peanuts, empty water bottle, playdough, & straws5: Packing peanuts, playdough, empty water bottle, & buttons |
| **Required Accommodations/Modifications:*** Gear up: challenge the students to build a vehicle using the least amount of materials.
* Gear down: pair students who are struggling with students who are succeeding. We could also limit the amount of materials they can use. Some students may have a hard time deciding what materials they want to use, so it will help them if we narrow down the materials.
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| **Additional Modifications for Individual Students:*** Make sure to include visual aids for ELL students.
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**Lesson 3 Plan Template**

**Lesson Topic:** Creating a vehicle that can float or fly

**Grade level(s):** 1-2

**Instructor Names:**

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| **Desired Results** |
| **Overarching Focus Question for the Session (***the phenomenon being explored across the 3-weeks***)*** How can science help us to design multi-functional vehicles?
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| **Central Focus/Topic for today:**Students will understand:* Some materials have properties that allow them to float better than other materials.
* Some materials have properties that allow them to travel better in air than other materials.

Therefore, the guiding question for today’s learning is:* How can we design/renovate our previous vehicle so that it can travel the farthest in the air or on water?
 | **Relationship that this central focus has to the overarching big idea/question for the unit**The central focus for this week relates to the overarching focus question for the whole unit because it focuses on redesigning a vehicle so that it can travel in air or on water instead of land. The student will use the data they collected last week about the materials ability to ‘fly’ or ‘float’ to design a vehicle that would work best on water or in air.  |
| **Student objectives (outcomes):***(Remember, this is like the performance expectation statement in the NGSS, so you need to be incorporating Science Practice in this/these statement(s).*Students will be able to:* Students will be able to use evidence to revise their car models into vehicles that float and/or fly out based on the concepts of gravity/air resistance and density/weight.
* Students will investigate how well their vehicle works on water or in air.
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| **Timeline of Activities for the Day** |
| \**Provide a breakdown of how long each activity will take, who will lead the segments of the activities, when breaks will occur or other transition points, etc.**\*Identify by highlighting in blue the portion of the lesson you team wants video-recorded each week. This should be ~45 mins***9:45-10:05-** Groups will share out what they learned about the materials that they tested. They will tell the rest of the class which materials floated, which ones sank, and how long each took to reach the ground. This discussion will also include, based on the information they collected, which materials do they think will work best for a plane or boat.**10:05-10:10-** We will go over guidelines for the vehicles to avoid students taking one material and using it as their vehicle. All boats must have a body and sails. All planes must have a body and wings. We will model blueprint of a boat and of a plane.**10:10-10:25-** The students will then make a choice about what vehicle they want to create next: airplane or boat. They will then make a blueprint of their chosen vehicle. Remind them that the blueprint must include all the guidelines and must be clearly labeled. Students must have a teacher sign off on their blueprint before they are allowed to start building. **10:25-10:40-** Snack and bathroom break.**10:40- 11:10**- Students will build their vehicles based on their blueprint.**11:10-11:20**- Students will test their vehicles either on water (erosion tables) or in air (off balcony). They will test how far/ well they travel.**11:20-11:30**- We will then come back together as a class and discuss what worked well with their vehicles and what didn’t. We will share as a class so students can give one other ideas. **11:30-11:40**- Students will have the chance to make one change to their vehicles, based on the discussion we just had as a class.**11:40-11:50**- Students will retest their vehicles now that they made a change.**11:50-12:00**- To end the class, we will come together for a class discussion about what they learned when testing their final vehicles. |
| **Learning Plan (First three E’s of the 5E model)***Any of these phases can be repeated should you have more than one activity to describe OR a complex activity with multiple iterations of some phases.* |
| **ENGAGE*** We will start our lesson by going over what they found when testing out the different materials in the water. We will ask our students:
	+ Which material(s) floated best in the water? Why do you think that is?
	+ Which material(s) sunk in water? Why do you think that is?
* We will then recap what they found when testing out which items they think would work best when making an airplane. We will ask our students:
	+ Which material(s) traveled better in air? How do you know this?
* We will emphasize the concepts of density (with floating vs. sinking) and air resistance (how well certain materials traveled in the air).
	+ If a material is more dense, it is likely to sink. If a material is less dense, it is likely to float.
	+ If a material has more air resistance, then it will stay in the air longer. If a material has less air resistance, it will hit the floor quicker.
* We will show the students a picture of a boat and a picture of an airplane. We will help them label the parts of each object so that they understand what parts to include when they make their own airplane or boat.

 **EXPLORE*** We will ask the students to revisit the cars that they revised last week.
* Students will choose to either make a boat or an airplane out of their car.
* We will model a blueprint of both a boat and an airplane that we made out of a car.
* Students will make a blueprint of their chosen vehicle (either boat or airplane).
	+ We will emphasize that they have the correct parts on their vehicles. A boat should have a body and a sail. An airplane should have body and wings. We want to avoid having students just use one single material.
* Students will then use their blueprint to create a vehicle from their car (either a boat or an airplane). We will walk around to individual students while they are constructing their vehicles and we will ask:
	+ Why are you using \_\_\_\_\_\_ (insert material)? What did we discover about \_\_\_\_\_\_\_(insert material) last week when we were testing materials?
	+ If the students made an airplane, we will ask them: Do you think \_\_\_\_\_\_\_(insert material) will create more or less air resistance? Why?
	+ If the students made a boat, we will ask them: Do you think \_\_\_\_\_\_\_\_(insert material) is a more dense or not very dense material? Why?
* After students have created their vehicles, they will test them (in water if they made a boat, or off the balcony if they made an airplane).
* If they made a boat, the goal is to make it across the whole water table. We will have a fan behind the water table to help push the boats forward.
* Students will record their results. They will have a sheet where they record either if their boat sunk or floated and if it made it to the finish line (with a fan), or the time it took their airplane to hit the floor.

 **EXPLAIN*** Students will explain which materials they used in making their boat or airplane and why they decided to use those specific materials. We will ask them:
	+ Why do you think these materials made your boat float/ go farther down the water table or made your airplane fly/dive?
	+ What properties make the boat float/go farther down the water table?
	+ What properties make the airplane fly/dive?
* We will have a discussion about the science concepts behind what makes a boat travel farther (we can talk about the weight of the boat and how a less dense object will likely float and move easier down the water table.) We will connect this to the specific properties of the materials they will be using to revise their boats.
* We will also have a discussion about the science concepts behind making an airplane fly better (take the longest to hit the ground). We can emphasize the idea of air resistance and how more air resistance will take the plane the longest to hit the ground.) We will connect this to the specific properties of the materials they will be using to revise their airplane.

 **EXPLORE*** Based off of the discussion we have with our students about the testing of their vehicles, we will allow them to revise their vehicles again, by only changing one aspect of it.
* During their revision process, we will walk around and ask questions in order to prompt their thinking about what they can change in order to improve their vehicle.
	+ Why are you using \_\_\_\_\_\_ (insert material) to change your vehicle? What did we discover about \_\_\_\_\_\_\_(insert material) last week when we were testing materials?
	+ If the students made an airplane, we will ask them: Do you think \_\_\_\_\_\_\_(insert material) will create more or less air resistance? Why?
	+ If the students made a boat, we will ask them: Do you think \_\_\_\_\_\_\_\_(insert material) is a more dense or not very dense material? Why?
* After students have revised their vehicles again, we will give them time to test their vehicles one last time, either off the balcony or in the erosion table with water depending on their vehicle, to see if their changes helped with floating or flying.

**ELABORATING/EXTENDING Understanding*** Students will reflect on the design process and understand what science properties they were thinking of when creating a boat or an airplane that could fly or float.
	+ What science properties were you thinking of when creating your boat?
	+ What science properties were you thinking of when creating your airplane?
	+ While building an airplane versus a boat, do we focus on different science properties on these vehicles or the same? Why or why not?
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| **Assessment Evidence (\*This is the Evaluation Phase of the 5E approach)** |
| **Performance Task(s):*** Comparing how different materials would work for a vehicle on land, in air, and on water.
* Creating a vehicle that will travel in the air.
* Creating a vehicle that will travel on water.
 | **Other Evidence:*** Comments during the discussion about the data they collected about last week’s materials.
* Comments during whole class discussion about the vehicles they made and what makes them travel in air or on water.
 |
| **Materials + Quantity:*** 2 sheets of chart paper with sticky back
* Tub of crayons
* Tub of markers
* 12 cups to hold the crayons/markers
* 25 pencils
* Cardboard
* Packing peanuts
* 50 Straws
* 50 Bottle caps
* 100 Buttons
* Styrofoam
* 24 16-oz empty water bottles
* 24 scissors
* 24 glue sticks
* 5 Hot glue guns/hot glue
* 4 rolls of duct tape
* Ping pong balls
* 50 Washers
* 25 Sponges
* 50 Skewers
* 20 Styrofoam balls
* 25 Cardboard (toilet paper) tubes
* 5 Milk cartons
* 24 Plastic cups
* Tissue Boxes
* 4 large dry-erase boards
* Rubber bands
* Pipe cleaners
* 2 Black erosion tables
* White paper
* 2 fans
 |
| **Required Accommodations/Modifications:*** Gear up: challenge students to build a vehicle with the least amount of materials while still making sure that the vehicle still includes the required parts.
* Gear down: pair students who are struggling with students who are succeeding. We could also limit the amount of materials they can use. Some students may have a hard time deciding what materials they want to use, so it will help them if we narrow down the materials.
 |
| **Additional Modifications for Individual Students:*** Include visual aids for ELL students
 |