



## ***Pre-Visit/Post-Visit Guide Mixture***

## ***Lesson Name: A Challenging***

### **Summary of Lesson:**

Students have been hired by RMSC Recycling Company! While on the job, they will learn how to recognize a mixture by its physical properties and then use methods such as filtration, sifting, magnetism, chromatography, and flotation to separate a mixture back into its original state. Working in teams, students will devise a plan and carry out the processes for separating a large mixture of common recyclable materials into their original components. At quitting time students will combine their efforts and total their earnings for a class paycheck!

**South Carolina Science Standards:** 5.P.2B.6

### **Pre-Visit Resources**

- **Teacher/Chaperone Expectations:** Please help us by letting us know of any special accommodations for your children prior to the lesson. Your assistance with classroom management and distribution of supplies will also be greatly appreciated.
- **Instructions for Teachers:** Students will work in groups of three. If you could have the students split into groups of three, it would help students get into the lesson quicker upon arrival to the lab. If your class size is not a multiple of three, one or two groups of two will work.
- **Key Vocabulary:** mixture, separation, chromatography, floatation, filtration, evaporation, magnetism, sifting, recycling
- **Discussion Questions:** What is a mixture? What are examples of mixtures? How can different processes be used to separate mixtures?
- **Content Preview Video:** This is a quick TEDed Video explaining mixtures through macaroni salad. <https://www.youtube.com/watch?v=Vt7IN4QPU0k>

### **Post-Visit Resources**

- **Writing Prompt:** At Roper Mountain Science Center, you and a group of other students worked to separate recyclable materials a part. Write detailed instructions about what you did there that someone else could use to do the same activity.
- **Possible Lesson Link:** This is a great and engaging lesson from TeachEngineering that can reinforce what students have learned about mixtures. [https://www.teachengineering.org/lessons/view/cub\\_mix\\_lesson3](https://www.teachengineering.org/lessons/view/cub_mix_lesson3)
- **Video Link:** This is a short, fun, and entertaining video lesson that reviews mixtures and solutions. <https://www.youtube.com/watch?v=jA0PzblYPUM>