



Dear Family,

Date: \_\_\_\_\_

We are beginning an engineering unit called *Liftoff: Engineering Rockets and Rovers*, which is part of the Engineering Adventures curriculum developed by the Museum of Science, Boston. Engineering Adventures is a curricular program that introduces children to engineering and the engineering design process. Throughout this unit, children will learn about aerospace engineering and work to engineer model rockets and rovers. The unit is set in a real-world context: children will learn about the International Space Station, the Jet Propulsion Lab, and some of the work NASA scientists and engineers do.

There are many reasons to introduce children to engineering:

- **Engineering projects reinforce topics children are learning in school.** Engaging students in hands-on, real-world engineering experiences can enliven math, science, and other content areas.
- **Engineering fosters problem-solving skills**, including problem formulation, creativity, planning, and testing alternative solutions.
- **Children are fascinated with building and with taking things apart to see how they work.** By encouraging these explorations, we can keep these interests alive. Describing their activities as “engineering” when children are engaged in the natural design process can help them develop positive associations with engineering, and increase their desire to pursue such activities in the future.
- **Engineering and technological literacy are necessary for the 21st century.** As our society increasingly depends on engineering and technology, our citizens need to understand these fields.

Because engineering projects are hands-on, materials are often required. Several materials necessary for this unit are listed below. If you have any of these materials available, please consider donating them to us.

If you have expertise about aerospace engineering or NASA, or if you have any general questions or comments about the engineering unit we are about to begin, please let me know.

Sincerely,

If you have any of the following materials available and would like to donate them, I would greatly appreciate having them by the following date: \_\_\_\_\_. Thank you!

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_____	_____