U46 ACADEMIC SUCCESS FOR ALL

OFFICE OF K-12
SCIENCE & PLANETARIUM

SCIENCE PARENT NEWSLETTER

SECOND GRADE | UNIT 1 | PHYSICAL SCIENCE

IN SCHOOL...

Students will explore to understand the observable properties of materials through analysis and classification of different materials. In the second grade performance expectations, students are expected to demonstrate grade appropriate proficiency in developing and using models, planning and carrying out investigations, analyzing and interpreting data, constructing explanations and designing solutions, engaging in argument from evidence, and obtaining, evaluating, and communicating information.

STUDENTS WILL KNOW...	**STUDENTS WILL BE ABLE TO...**
• Matter is made up of smaller units • Matter interacts with other matter to create change and some of these changes can be reversed and others cannot.	• Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question. • Analyze data from tests of an object or tool to determine if it works as intended. • Construct an argument with evidence to support a claim.

AT HOME...

ASK YOUR STUDENTS...	**ENGAGE YOUR STUDENTS...**
• What makes things different from each other? • How do engineers choose materials for certain purpose? How do people choose materials for a certain purpose? • How are materials similar and different from one another? • How do the properties of materials relate to their use?	• Test the absorption rates of different brand of paper towels. • Explore the heating and cooling rates of different coffee cups.

IN THE COMMUNITY…

- Select a material to solve a problem at home. For example what material could you use to cover a window to either cool a room or prevent the loss of heat?
- As you walk through your neighborhood look at the different materials used for different modes of transportation. Why are streets asphalt? Why sidewalks cement? Could you use a different material for either?
- Identify how different materials are used to reduce sound in public places.

U46 STEM EXPO...

Create a project that:

- Investigate how materials change according to being exposed to heat or cold. Is the change temporary or permanent?
- Select materials for a specific purpose like a lunch box.