

Teaching Guide: The Magic of Matter



Thank you for choosing The Magic of Matter! We invite you to watch a new magic show come to life as our scientists explore the magic of matter. Students will join in the show as our scientists look for new ways to explore how the addition and removal of heat energy effects the states of matter.

Pre Activities:

Vocabulary Review- solids, liquids, gases, melting, freezing, condensing, boiling, evaporating, burning, friction, and electricity

- The Magic of Matter Promo Video. This video will get the students geared up for our show.
 - <https://tinyurl.com/RMSCMagicOfMatter>

Before the Program Instructions:

- Talk with the students about the program- "Roper Mountain Science Center is getting ready for a new magic program on matter. They've asked classrooms to watch the program and provide suggestions."
- Play The Magic of Matter Promo video before the program.

Instructions for Day of the Program:

- Arrange students in 4 – 5 groups
- Each group and student will ideally be visible from the webcam.
- There are no materials needed during the program, but if the students would like notes or a notebook to write on that is fine.

Post Activity

- Complete The Magic of Matter Suggestions sheet.
 - Encourage students to support Professors Roper and Matter develop new ideas for their magic show on the changes of states of matter.
- Have students create their own magic with the transformation of matter (Flip grid works well). Have them explain how heat (thermal energy) effects matter.
- **Career Connection**
 - Scientist
 - Engineer
 - Magician



The Magic of Matter Suggestions



Matter is _____

Help Professors Roper and Mountain come up with new ideas for their show.

DIRECTIONS: Fill in the blanks from the word bank and write some examples for experiments that the professors could use for their show.

