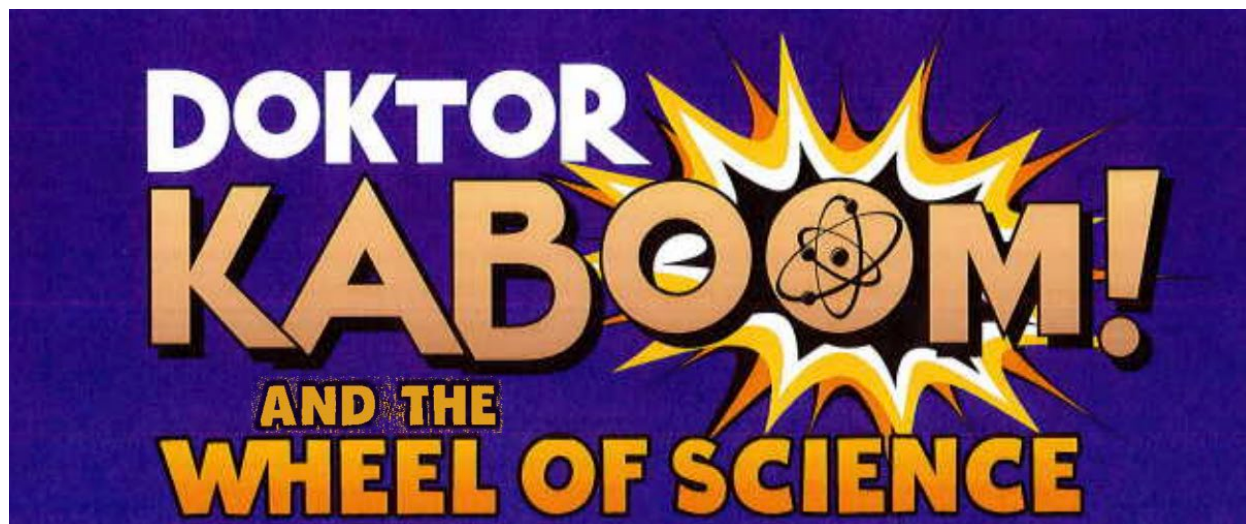


STUDY GUIDE



Plot Summary

Prepare yourself for a highly interactive and entertaining performance. Expect anything! There will likely be quite a few laughs while you are dazed and confused by the shenanigans of this talented fellow. His work may look magical, but it is all based on science – specifically the field of physics. You'll learn about energy, heat, force, motion, magnets, rockets and the like.

Doktor Kaboom uses a spinning wheel that lists his different experiments, so he may turn a water bottle into a rocket, electrocute a pickle, or create artificial gravity. No two shows are the same, but they are all guaranteed to amaze!

Before you go

1. Ask students to really ramp up their observation skills by watching closely and listening carefully to understand the science within the art.
2. Think about your science curriculum (particularly the strand of physics) – recent, present, and future and encourage students to look for key concepts (e.g. objects in motion, basic forms of energy, magnetic properties, ...)
3. Review critical vocabulary with the students.
4. Encourage students to pay close attention to the costumes, lighting, props, scenery, and sound to see how those elements support Doktor Kaboom's work.
5. Remind them that appropriate audience etiquette (listen carefully, no talking, applaud at the end, laughing if something is funny is okay but not too loudly so you don't miss any dialogue).

Florida Curriculum Standards – Sample of 1st grade / 4th grade

SC.1.P.12.1	Demonstrate and describe the various ways that objects can move, such as in a straight line, zigzag, back-and-forth, round-and-round, fast, and slow.	TH.1.O.2.1	Describe in words or by drawing a picture, the most exciting part in the story line of a play.
SC.1.P.13.1	Demonstrate that the way to change the motion of an object is by applying a push or a pull.	TH.1.S.1.1	Exhibit appropriate audience etiquette and response.
SC.1.P.8.1	Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light), texture, and whether objects sink or float.	DA.1.S.3.5	Explore, manipulate, and manage concepts of personal and general space by moving in different levels and directions.
SC.4.P.10.1	Observe and describe some basic forms of energy, including light, heat, sound, electrical, and the energy of motion.	TH.4.F.2.1	Identify the types of jobs related to putting on a theatre production and compare them with other arts-related and non-arts performances or events.
SC.4.P.11.2	Identify common materials that conduct heat well or poorly.	DA.4.H.3.2	Use improvisation and movement studies to explore concepts from other content areas.
SC.4.P.8.4	Investigate and describe that magnets can attract magnetic materials and attract and repel other magnets.	MU.4.H.3.1	Identify connections among music and other contexts, using correct music and other relevant content-area vocabulary, and explore how learning in one academic area can help with knowledge or skill acquisition in a different academic area.

Academic Vocabulary	Arts Vocabulary – Questions to consider
Experiment	<i>Artist - Doktor Kaboom is a professional performer who relies on his performance skills to teach science in an interesting way. Can you list other careers where confidence in the arts might help you?</i>
Distance	
Force	<i>Characterization – How does Doktor Kaboom’s character make science interesting and easy to understand?</i>
Gravity	
Measurement	<i>Costume – What parts of Doktor Kaboom’s costume help you understand his character? What parts of his costume help protect him during his experiments?</i>
Motion	
Precision	<i>Movement Patterns – Look for patterns in an object’s motion. What caused the object to move (e.g. magnet) Try to replicate the movement patterns in your body – even if you have to imagine the outside force – Is it difficult?</i>
Properties	

After the Show

Primary Grades (K-2) – Select 2 of your favorite experiments from the performance. In the top row, draw a picture that shows what you remember about those 2 experiments. On the bottom row, underneath each image, write a word or phrase that explains what you remember about the experiment.

Draw a picture – or write a simple description – of an idea you have for an experiment. Be ready to tell your teacher why you want to try this one.

Upper Elementary (3-5) – Review the vocabulary list (*Academic & Arts*) and add any terms you heard or thought of as you watched the performance. Imagine that you are the science reporter for the local news station assigned to do a story on Doktor Kaboom.

Write a one-minute monologue (use your vocabulary lists) that captures some of the highlights of his performance. Use the 5 W's (Who, What, When, Where, Why) to craft your story. Your time is limited so keep it interesting.

With an excited voice and eye contact to the 'camera' do your best to convey how entertaining it can be to learn science through the arts. Find a partner and practice your news story. Give each other feedback and make the appropriate revisions.

Now imagine that you and your partner are anchors for the news. Combine your stories for a 2-minute newscast that highlights the science and the artistry of the performance. 2-3 pairs of anchors should form a group, perform for each other and provide feedback addressing:

- Clear Communication of Performance Highlights
- Specific academic and arts vocabulary
- Energetic and confident presentation

Remember what Doktor Kaboom did as a character performer to engage his audience!