



## Choice Board #2

# 7<sup>th</sup> Grade Science

### A. Review & Quiz

Go to website:

[http://www.chem4kids.com/files/atom\\_intro.html](http://www.chem4kids.com/files/atom_intro.html)

Read all these pages:



- [Overview](#)
- [Structure](#)
- [Orbitals](#)
- [Electrons](#)
- [Ions](#)
- [Neutrons](#)
- [Isotopes](#)

Take the quiz:



**ATOMS**

- [Bonding](#)
- [Compounds](#)
- [Compound Names](#)
- [Advanced Ideas](#)

### B. Explore the Chem4Kids website

Dive into chemistry related topics beyond the scope of our 7<sup>th</sup> grade curriculum.

<http://www.chem4kids.com/map.html>

### C. Scholastic.com Study Jams

This website has 9 short modules that will review provide enrichment on the topic of matter.

For each module:

1. Watch the short video
2. Complete the quiz.

<https://www.scholastic.com/teachers/activities/teaching-content/matter-9-studyjams-interactive-science-activities/>

### D. Chemical/Physical Change Video and pre/post questions

1. Before watching the video, read and answer each "before video" discussion question. (these do not need to be written down.)

### E. Chemical/Physical Change Quiz

[https://www.quia.com/quiz/303980.html?AP\\_rand=455389090](https://www.quia.com/quiz/303980.html?AP_rand=455389090)

### F. Popping Popcorn Mystery

1. Watch: Popcorn Under a Microscope

<https://www.youtube.com/watch?v=uw29R7hU6No>

2. In your comp book create a model of popcorn before and after popping. Label:

<p>2. Do the same thing with the “after video” discussion questions.</p> <p><a href="https://www.generationgenius.com/videolessons/chemical-vs-physical-changes-video-for-kids/">https://www.generationgenius.com/videolessons/chemical-vs-physical-changes-video-for-kids/</a></p> <p>3. In your comp book, summarize one physical and one chemical change demonstrated in the video.</p>		<ul style="list-style-type: none"> <li>• The type of change you think has occurred (physical or chemical)</li> <li>• The type of energy applied to cause this change.</li> </ul> <p>*In model also include evidence &amp; explanations (reasoning) to support your claim (whether it’s a physical or chemical change)</p>
<p><b>G. Energy Transfers and Transformations</b></p> <p>Read through the article: Energy, time for a change.</p> <p><a href="https://www.solarschools.net/knowledge-bank/energy/conversion">https://www.solarschools.net/knowledge-bank/energy/conversion</a></p> <p>In your comp book:</p> <ol style="list-style-type: none"> <li>1. Define energy transfer and list examples from the article.</li> <li>2. Define energy transformation and list examples from the article.</li> </ol> <p>Next, open up canvas (science) Open up the module, “choice Board #2” Find the document titled “energy transfer images”</p> <p>For each image, do the following in your comp book.</p> <ol style="list-style-type: none"> <li>1. Briefly describe the image.</li> <li>2. Decide if the image best shows an energy transfer or an energy transformation.</li> <li>3. Draw a simple diagram showing the forms of energy involved in each example.</li> </ol>	<p><b>H. Applying energy transfers and transformations</b></p> <p>(Cautionary note... In this video, the creator uses the word kinetic energy in the context of just moving objects. Technically, it is a broad category that also includes heat (moving particles, electricity (moving electrons, light (moving photons) and sound (wave-like movement of molecules.)</p> <p>Watch the video below: <a href="https://www.youtube.com/watch?v=9qvZ-LfKPBO">https://www.youtube.com/watch?v=9qvZ-LfKPBO</a></p> <p>In your comp book, write down 5 energy transfers and 5 energy transformations shown in the video. (Use the format he provides for each one.)</p> <p>For your bonus scientific pleasure, watch as many of these Rube Goldberg machines as you wish. Be careful, they can be addicting... <a href="https://www.digitaltrends.com/cool-tech/best-rube-goldberg-machines/">https://www.digitaltrends.com/cool-tech/best-rube-goldberg-machines/</a></p> <p>For your extra bonus scientific pleasure... MAKE a simple Rube Goldberg device... and send me the video :)</p>	<p><b>I. The Chemistry of Marshmallows</b></p> <p><a href="https://soufflebombay.com/chemistry-of-food-marshmallows/">https://soufflebombay.com/chemistry-of-food-marshmallows/</a></p> <p>Follow the recipe in the link above to make marshmallows.</p> <ol style="list-style-type: none"> <li>1. Does the process of making marshmallows mostly chemical or physical changes?</li> <li>2. Draw a model to support the type of change it is.</li> </ol> <p>Next, open canvas (science) Open the module “choice Board #2” Read through the documents on the “chemistry of marshmallows”.</p> <p>With parental supervision, roast/burn a marshmallow (perhaps even the ones you just made.)</p> <ol style="list-style-type: none"> <li>1. Is burning a marshmallow a chemical or a physical change?</li> <li>2. Draw a model in your comp book to support the type of change it is.</li> </ol> <p>Watch video... because it amuses me... <a href="https://www.youtube.com/watch?v=FINYaq2fHOI">https://www.youtube.com/watch?v=FINYaq2fHOI</a></p>