

## Project Title: States of Matter

<b>Teachers/Team:</b> Reece, Trapp, Crews, Jordan, Luther, Smith
<b>Grade Level:</b> 1st
<b>Curriculum Area(s):</b> Science, Math, Language Arts, Technology
<b>Science</b> <b>Curriculum Goal 3:</b> The learner will make observations and conduct investigations to build an understanding of the properties and relationship of objects. <b>Essential Question:</b> How are solids and liquids different and where do I see them in the world around me?
3.01 Describe the differences in the properties of solids and liquids. 3.02 Investigate several ways in which objects can be described, sorted or classified. 3.03 Classify solids according to their properties: <ul style="list-style-type: none"><li>•Color.</li><li>•Texture.</li><li>•Shape (ability to roll or stack).</li><li>•Ability to float or sink in water.</li></ul> 3.04 Determine the properties of liquids: <ul style="list-style-type: none"><li>•Color.</li><li>•Ability to float or sink in water.</li><li>•Tendency to flow.</li></ul> 3.05 Observe mixtures including: <ul style="list-style-type: none"><li>•Solids with solids.</li><li>•Liquids with liquids.</li><li>•Solids with liquids.</li></ul> <b>Focus Question/Statement:</b> In what ways can I sort objects into solids, liquids, and gases?
<b>Math:</b> 5.01 <i>Sort and classify objects by two attributes.</i>

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### ***Language Arts:***

2.03 Read and comprehend both fiction and nonfiction text appropriate for grade one using:

- prior knowledge.
- summary.
- questions.
- graphic organizers

5.01 Use phonic knowledge and basic patterns (e.g., an, ee, ake) to spell correctly three-and four-letter words.

5.02 Apply phonics to write independently, using temporary and/or conventional spelling.

5.03 Write all upper and lower case letters of the alphabet, using correct letter formation.

5.04 Use complete sentences to write simple texts.

5.05 Use basic capitalization and punctuation:

- first word in a sentence.
- proper names.
- period to end declarative sentence.
- question mark to end interrogative sentence.

5.06 Self-monitor composition by using one or two strategies (e.g., rereading, peer conferences).

5.07 Use legible manuscript handwriting.

### ***Technology:***

1.09 Identify and discuss multimedia terms/concepts ( e.g., slide/card, link/button, text box, navigate, transition) as a class/group activity.

1.10 Recognize and discuss responsible use of multimedia resources.

1.11 Recognize, discuss, and cite various types of resources as a class.

2.07 Use multimedia software to illustrate words/phrases/concepts.

**Proposed Learning Activities** (Briefly state the activities students will do to complete this project.)

- Kidspiration File -- Matter Activity
- “2nd Grade Matter” Flipchart -- Introduction to Unit
- Have students take pictures of Solids, Liquids, and Gases around the school with Digital Cameras. Create a Keynote slideshow using pictures and identifying solids, liquids, and gases on each slide.
- “SolidsLiquids” Flipchart -- Sorting
- Website: [http://www.bbc.co.uk/schools/ks2bitesize/science/materials/gases\\_liquids\\_solids/play.shtml](http://www.bbc.co.uk/schools/ks2bitesize/science/materials/gases_liquids_solids/play.shtml)
- Make Jello -solids with liquids
- Cheerwine Floats - solids with liquids
- Make Chocolate Milk - liquid with liquids
- Rice Crisp Treats - solids with solids

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<b>Description of Culminating Task:</b> Students will make pictures of Solids, Liquids, and Gases around the school and create a Keynote identifying their pictures.
<b>Assessment:</b> Rubric for Keynote.
<b>Responsibilities (Teacher):</b> Each teacher will gather items for experiments and conduct them in his/her classroom. Take students to the computer lab to do Kidspiration File.
<b>Responsibilities (Media Coordinator):</b>
<b>Responsibilities (Technology Facilitator):</b> Template for Keynote Load pictures from each class and teach Keynote to all classes Schedule computer lab
<b>Planning Time:</b> Tuesday, February 16 11:30-3:00
<b>Start/Ending Dates for Project</b> March 1-March 17

### Schedule:

- Day 1 -- Introduce unit with "2nd Grade Matter" Flipchart
- Day 2 -- "Sorting/Liquids" Flipchart on Promethean Board
- Day 3 -- Experiment mixing liquids with liquids -- Making Chocolate Milk
- Day 4 -- Experiment mixing solids with liquids -- Cheerwine Floats
- Day 5 -- Experiment mixing solids with liquids -- Making Jello
- Day 6 -- Experimenting mixing solids with solids -- Rice Krispy Treats
- Day 7 -- Kidspiration File Matter Activity
- Day 8 -- Students take digital pictures of the 3 states of matter around the school
- Days 9-11 Students create a Keynote Slideshow with pictures and identify the states of matter in their pictures.