**Science B: Characteristic Properties**

**Parent Lesson**

**Idaho Content Standards- Science (ICSS):**

* PS1-5-3 Make observations and measurements to identify materials based on their properties.

**Math Common Core State Standards (Math-CCSS):**

* n/a

**Next Generation Science Standards (NGSS):**

* 5-PS1-3 Make observations and measurements to identify materials based on their properties.

**English Language Arts Common Core State Standards (ELA-CCSS):**

* SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
* SL.5.1.D Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

**Fluid Characteristics**

**ICSS:**

* PS1-5-3 Make observations and measurements to identify materials based on their properties.

**Math-CCSS:**

* n/a

**NGSS:**

* 5-PS1-3 Make observations and measurements to identify materials based on their properties.

**ELA-CCSS:**

* RF.5.3 Know and apply grade-level phonics and word analysis skills in decoding words.
* RF.5.3.A Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
* RF.5.4.A Read on-level text with purpose and understanding.
* SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-lead) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
* SL.5.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
* SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
* SL.5.1.D Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
* L.5.4 Determine or clarify the meaning of unknown and multiple-meaning words, and phrases choosing flexibly from a range of strategies.

**Buoyancy**

**ICSS:**

* PS1-5-3 Make observations and measurements to identify materials based on their properties.
* PS2-MS-2 Plan an investigation to provide evidence that the change in an object’s motion depends on the sum of the forces on the object and the mass of the object.

**Math CCSS:** n/a

**NGSS:**

* 5-PS1-3 Make observations and measurements to identify materials based on their properties.
* MS-PS2-2 Plan an investigation to provide evidence that the change in an object’s motion depends on the sum of the forces on the object and the mass of the object.

**ELA-CCSS:**

* RF.5.4.A Read on-level text with purpose and understanding.
* SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-lead) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
* SL.5.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
* SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
* SL.5.1.D Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.

**Bernoulli’s Principle**

**ICSS:**

* PS2-MS-2 Plan an investigation to provide evidence that the change in an object’s motion depends on the sum of the forces on the object and the mass of the object.

**Math CCSS:**

* n/a

**NGSS:**

* MS-PS2-2 Plan an investigation to provide evidence that the change in an object’s motion depends on the sum of the forces on the object and the mass of the object.

**ELA-CCSS:**

* RF.5.3 Know and apply grade-level phonics and word analysis skills in decoding words.
* RF.5.3.A Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
* RF.5.4 Read with sufficient accuracy and fluency to support comprehension.
* RF.5.4.A Read on-level text with purpose and understanding.
* SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-lead) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
* SL.5.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
* SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
* SL.5.1.D Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
* SL.5.4 Report on a topic or text or present an opinion sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

**Chromatography**

**ICSS:**

* PS1-5-3 Make observations and measurements to identify materials based on their properties.

**Math-CCSS:**

* n/a

**NGSS:**

* 5-PS1-3 Make observations and measurements to identify materials based on their properties.

**ELA-CCSS:**

* SL.5.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-lead) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.
* SL.5.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
* SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
* SL.5.1.D Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
* SL.5.4 Report on a topic or text or present an opinion sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
* L.5.4.B Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis).

**Characteristic Properties**

**ICSS:**

* PS1-5-3 Make observations and measurements to identify materials based on their properties.

**Math-CCSS:**

* n/a

**NGSS:**

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**ELA-CCSS:**

* RF.5.3 Know and apply grade-level phonics and word analysis skills in decoding words.
* RF.5.3.A Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
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* SL.5.1.B Follow agreed-upon rules for discussions and carry out assigned roles.
* SL.5.1.C Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others.
* SL.5.1.D Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
* L.5.4 Determine or clarify the meaning of unknown and multiple-meaning words, and phrases choosing flexibly from a range of strategies.

**What’s the Solution?**

**ICSS:**

* PS1-5-3 Make observations and measurements to identify materials based on their properties.

**Math-CCSS:**

* n/a

**NGSS:**

* 5-PS1-3 Make observations and measurements to identify materials based on their properties.

**ELA-CCSS:**

* RF.5.3 Know and apply grade-level phonics and word analysis skills in decoding words.
* RF.5.3.A Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.
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