# Grade 2 Science

Lesson: 2-1  
Unit: Properties of Solids & Liquids  
Topic: Quiz

## Lesson

- Inform students that today is a catch-up period, they need to finish:
  - all work up to `Solids in Liquids`
  - `Liquids in Liquids`
- When all are finished, students may do crossword
- Also inform students that they will come see me, 1 on 1, to answer some questions
- Pull students throughout class, ask questions on rubric, score answers

## Reminders

- Hand out review note
- Explode Quiz
- Student take work home

## Supplies Needed

- Word searches
- Rubrics
- Safety symbols
- Review Note
- Stapler

## Homework


## Notes

As students finish, have them bring me work/check through it; staple it; record a grade mark for work.

If possible, if not, mail it when they bring it back.

*Put quiz date in agenda*
### Lesson

- **Surface activity to introduce**
  - had out workbooks
  - in pairs students fill up 2 water bottles half way with water
  - one student from each pair brings me bottle and gets 2 drops of food colour in it. DO NOT SHAKE - note web-like look of food colour in it.
  - other student gets jar up with spoonful of oil in it, combine with water
  - students shake bottles, then immediately draw results
  - wait 5 minutes to discuss initial look of fluids in now
  - re-draw

- **Clean-up**
  - next have student volunteers help mix ketchup, vinegar, milk, juice and colored water with water - shake
  - discuss vinegar/water - can't see, have to taste top & bottom to know

### Reminders

![Reminders]

### Supplies Needed

<table>
<thead>
<tr>
<th>Water bottle</th>
<th>Ketchup</th>
<th>Juice</th>
<th>Milk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food colouring</td>
<td>Vinegar</td>
<td>Review sheet</td>
<td></td>
</tr>
<tr>
<td>Cooking oil</td>
<td>Milk</td>
<td>Work sheets</td>
<td></td>
</tr>
</tbody>
</table>

### Homework

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### Notes

- set everything up ahead of time if possible

- remind students to use colour properly in their observations
Lesson: 2-15  Unit: Solids and Liquids  Topic: Gases

Lesson
- Review Matter, Solids and Liquids
- Explain that there is one more type of matter — Gases
- Take students outside (bring bucket of water, soap and pipe cleaners)
- Mix soap solution (liquid in liquid)
- Each student gets pipe cleaner to bend into loop —
- Have students experiment with making bubbles: big small, use wind and mouth
* While students playing, make large bubble wand, show off
- Students return inside to complete worksheet
* May keep bubble wand, but only in backpack

Reminders

Supplies Needed
Pipe Cleaners
Bucket
Soap

Homework

Notes
Lesson:
- Students use period to finish:
  - Solids in liquids
  - Liquids in liquids
  - Gases
  - Math wordsearch

- Also inform students that they will come see me, 1 on 1, to answer their quiz questions.
- Poll students throughout class, ask questions on, score answers

Reminders

Supplies Needed
- Quiz 2.5

Homework

Notes
Lesson: 2-15  
Unit: Properties of Solids and Liquids  
Topic: Floating

Lesson

- Before class place a variety of objects on the desk.
- Discuss that they weigh different amounts.
- Ask "Will the heavier objects always sink and the lighter objects always float?"
- Volunteer students put the objects in bucket of water to test.
- Explain challenge to students: (For next class)
  - Each student gets one piece of aluminum foil
  - Build a boat to carry pennies
  - Competition to see who can hold the most
- Students have rest of period to work, boats tested next class.

Reminders

Supplies Needed

- Objects to float/sink
- Bucket
- Water
- Aluminum Foil
- Pennies

Homework

Notes

* Inform students that Al foil will tear if played with too much
Grade 2 Science

Lesson: 2-14c + 2-14d

Unit: Solids and Liquids
Topic: Floating / States of Water

<table>
<thead>
<tr>
<th>Lesson</th>
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<tbody>
<tr>
<td>- Test boats from last class (give 5 minutes to tweak if necessary)</td>
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<tr>
<td>- Boil kettle, have beaker of water and a separate beaker of ice</td>
</tr>
<tr>
<td>- Discuss similarities and differences</td>
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<td>- Discuss ways of changing from one to another (changes to look and feel)</td>
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<tr>
<td>- Give each student a baggie with ice</td>
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<tr>
<td>- Place one baggie with ice on counter</td>
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<tr>
<td>- Tell students they are to have a &quot;melt race,&quot; students try to melt their ice first</td>
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<tr>
<td>- Label each bag, place in freezer (to show it can be reversed)</td>
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<tr>
<td>- Collect steam in bag, label, place in freezer</td>
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</tbody>
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<table>
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<tr>
<td>* Inform students that if they break their bag, then the experiment is over... be careful!</td>
</tr>
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<tbody>
<tr>
<td>- Kettle</td>
</tr>
<tr>
<td>- Ice</td>
</tr>
<tr>
<td>- Baggies</td>
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<tr>
<td>- Beakers</td>
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<tr>
<td>* Use hair dryer to melt ice, then put into kettle to boil?</td>
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Lesson 2 - Science

Lesson:

Before class:
- Show baggies from previous class
- Put vinegar into Dixie cups
- Put baking soda in balloons

During class:
- Instruct pairs of students to:
  - Carefully pour vinegar into bottle
  - Twist balloon, then stretch over bottle opening
  - Untwist balloon and dump baking soda into bottle
  - Observe
- Discuss solid + liquid → gas
- Discuss changes in matter, how some can be reversed, but others can't
- (If time and supplies) Try an egg: Discuss...

Begin worksheet

Reminders

Supplies Needed
- Pop bottles
- Baking Soda
- Balloons
- Vinegar
- Worksheet

Homework

Notes

Many had difficulties with performing experiment
**Grade 2 Science**

**Lesson: 2-7**  
**Unit:** Properties of Solids and Liquids  
**Topic:** Change of State

### Lesson

- Review: States of Matter  
  - Changes of State  
  - Combining to make new matter
- Talk about what makes a solid, liquid, or gas  
  - Particles (close or far apart)  
  - Speed (fast or slow)
- Hand out worksheet
- Take up at end of class

### Reminders

### Supplies Needed

*Worksheets*

### Homework

### Notes