

Grade 2 Science

Lesson: 2-1

Unit: Properties of Solids & Liquids

Topic: Quiz ^{work period}

Lesson

- Inform students that today is a catch-up period, they need to finish:

all work up to → Safety Symbols
→ Solids in Liquids
Then → ~~Liquids in Liquids~~
→ ~~Gases~~

- When all are finished students may do ^{word search} crossword
- Also inform students that they will come see me, 1 on 1, to answer some questions
- PSH students throughout class, ask questions on rubric, score answers

Do this
another
lesson

Reminders

- Hand out review note
- Explain Quiz
- ~~Students take work home~~

~~Copy to safety symbols~~ * need to bring back

Supplies Needed

- Word searches
- ~~Rubrics~~
- ~~Safety Symbols~~
- Review Note
- Staples

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 mark it when they bring it back

* put quiz date in agenda

~~* 2-12 - work period~~
~~→ find art quiz note~~

Grade 2 Science

Lesson: ¹³~~2-12~~

Unit: Solids and Liquids

Topic: Liquids in Liquids

Lesson

- ~~Explain activity to students~~
- ~~had art worksheets~~
- 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 coloring in it. DO NOT SHAKE → Note what like look
- Other student gets Dixie cup with spoonful of oil in it, combine with water
- Students shake bottles, then immediately draw results
- Wait 5 minutes → discuss initial look at fluids vs now
- Re-draw
- ~~Next~~ 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

~~* Had at period, explain test~~
~~give note, explain quiz activity~~

Supplies Needed

Water bottles
Food coloring
Cooking oil

Ketchup
Vinegar
Milk

Juice
Worksheets

Review sheet

Homework

Notes

Set everything up ahead of time if possible

* remind students to use colour properly in their observations

Grade 2 Science

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 pipecleaners)
- Mix soap solution (liquid in liquid)
- Each student gets pipecleaner 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

Worksheets

Homework

Notes

Grade 2 Science

Lesson: ⁵2-1

Unit: Solids and Liquids

Topic: Work Period/Quiz

Lesson

- Students use period to finish:
 - Solids in liquids
 - liquids in liquids
 - gases
 - matter wordsearch
- Also inform student that they will come see me, 1 on 1, to answer their quiz questions.
- poll student throughout class, ask questions ~~on~~, score answers.

Reminders

Supplies Needed

- Quizzes

Homework

Notes

Grade 2 Science

Lesson: 2-13

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.

* Ask each object why it floats or sinks before
* Discuss why - trapped air - weight spread out

Show Al foil floating and sinking

* only had 5 minutes

Reminders

Supplies Needed

- Objects to Float/sink
- Bucket
- Water

- Aluminum Foil
- Pennies

Pencil, Pipe Cleaner, Pin, Paper-clip, Rock, Aluminum Foil, Penny, Kelp, Tupperware, Pie plate (Al), Ball, mug, Paper, straw

Homework

Notes

- * Inform students that Al foil will tear if played with too much

Grade 2 Science

Lesson: 2-146 +
2-128

Unit: Solids and Liquids

Topic: Floating / States of Water

Lesson

- Build bonds

- Test boats from last class (give 5 minutes to tweak if necessary)

** Make some kind of marking scheme*

- Boil kettle, have beaker of water and a separate beaker of ice

- Discuss similarities and differences

- Discuss ways of changing from one to another ** Catch steam in 3rd beaker (clings to walls to water)*

Discuss what causes change

- Give each student a baggie with ice

- Place one baggie with ice on counter

- Tell students they are to have a "melt race", students try to melt their ice first

** If frozen in bag* ** Teach "State of Matter"*
- Label each bag, place in freezer (to show it can be reversed)

- *Collect steam in bag, label, place in freezer*

** Skip melt race if no time*

Reminders

* Inform students that if they break their bag, then the experiment is over ... be careful

Supplies Needed

- kettle
- baggies

- ice
not water

beakers

Homework

Notes

* Use hair dryer to melt ice, then put water in kettle to boil?

Lesson: 2-15

Unit: _____

Topic: _____

Lesson
<i>see 2 17</i>
Reminders
Supplies Needed
Homework
Notes

Grade 2 Science

Lesson: 2-18⁹

Unit: Solids and Liquids

Topic: Make different matter

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~~ - *Start worksheet*

Reminders

Supplies Needed

Pop bottles
Balloons
Vinegar

Baking Soda
~~Real Eggs~~

- Worksheet

Homework

Notes

Many had difficulties with performing experiment

Grade 2 Science

Lesson: ²⁰2-17

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 + gas
 - Particles (close vs far apart)
 - Speed (fast vs slow)
- Hand out worksheet
- Take up at end of class



Reminders

Supplies Needed

Worksheets

Homework

Notes