

# Lab

# KIDZ

Fourth Grade



# 1.Fishing an ice?

**Theme:** Temperature

**Objective:** The student will observe the effect of salt on ice, as well as the property of the salt to prevent the ice from becoming water, on the other hand will also learn that the ice is formed by layers of water which form on top of the thread making it able to lift.

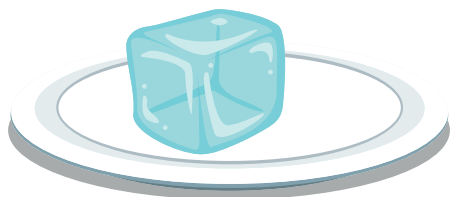
**Vocabulary:** float, prevent, thread, layers

## Material:

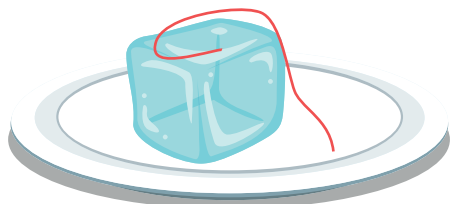
- Ice cubes
- 4 tablespoons of salt
- Thread
- 1 spoon
- 1 flat plate

## Development:

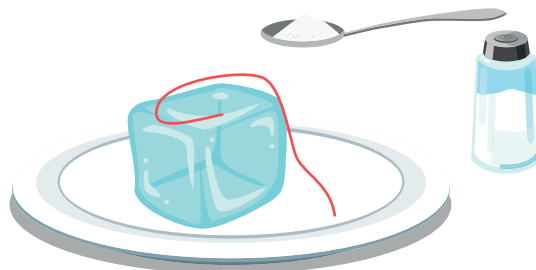
1. Put the ice on a plate.



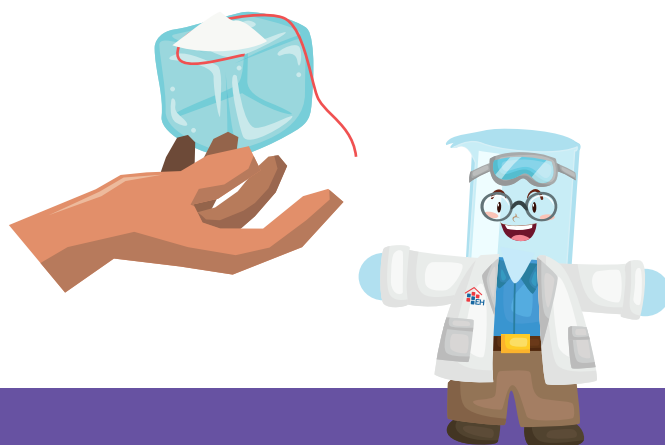
2. Put the thread on the ice.



3. Then put a spoonful of salt.



4. Wait a few seconds and lift the thread. Describe the observed and comment with your classmates.



Look and read. Choose the correct words and write them on the lines.



Ice cubes



Thread



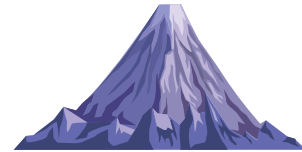
Plate



Salt



spoon



top

**Example:**

0. This is one of the four basic elements for life,  
and it has a liquid state.

**Water**

**Questions**

- 1 It is an object that people use to eat their soup.
- 2 This are usually used to cool the beverages in hot days.
- 3 We can serve our meals on this, they come in many different sizes.
- 4 This material is very thin and is used for sewing.
- 5 This is something that we use to give our food more flavor.
- 6 This noun is used for naming the highest point of something.



## 2. Magnetic fields

**Theme:** Magnetism

**Objective:** The student will learn about magnetism and we can find it inside everyday objects.

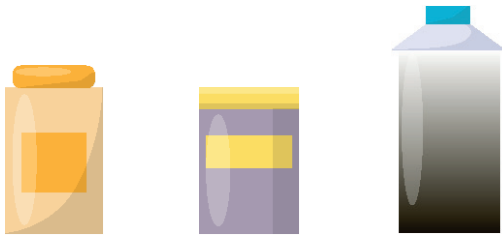
**Vocabulary:** Magnetism, printer toner, drag, fill

### **Material:**

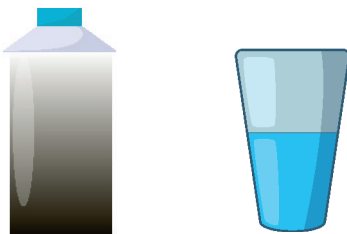
- 1 photocopier or printer toner
- A powerful magnet
- Kitchen oil
- Water
- 1 jar with lid
- A spoon

### **Development:**

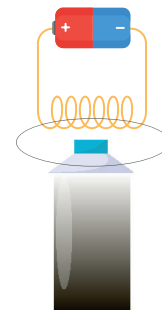
1. In the jar mix the toner with two or three tablespoons of oil.
3. Once the ink is on the top, put the magnet close and drag it.



2. Fill the rest of the bottle with water.



4. Describe what happened and discuss it with your classmates.



## Tell us...

Read and answer. Write yes or no.

1. You have to use paint. \_\_\_\_\_
2. For this experiment you needed a small magnet. \_\_\_\_\_
3. You need to use oil and water in the bottle. \_\_\_\_\_
4. For the experiment you need more water than oil. \_\_\_\_\_
5. The experiment was about magnetism. \_\_\_\_\_

**Stick a picture of your process  
or result!**



**Did you like it?**



### 3. Incompatible foods

**Topic:** Food, incompatibility of food substances. (Acids and proteins)

**Objective:** The student will identify which foods should not be mixed with each other since he will be able to observe their decomposition and / or the reactions they may have in the human body.

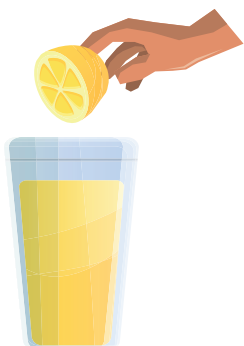
**Vocabulary:** reactions, incompatibility, squeeze, decomposition

#### **Material:**

- 4 lemons cut in two
- 1 glass of milk
- 2 glass cups

#### **Development:**

1. Squeeze the lemons into one of the glasses.
3. Add the lemon juice to the milk.



2. In the other glass put the milk.



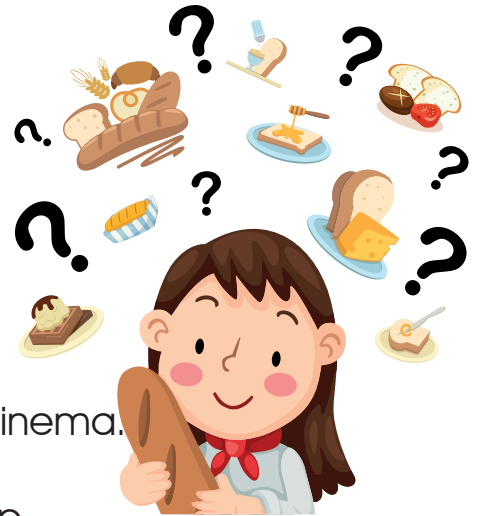
4. Let stand for two hours. Write down what you observe and discuss with your classmates if these foods can be combined and what would happen in your stomach.



Read the text and choose the best answer. May is talking to her friend Nick.

### Example

- May: Are you hungry, Nick?  
Freddy: A. Yes, I'd like to go to the cinema.  
B. Yes, and you?  
C. No, but thanks for the help.



### Questions

1. May: Would you like to eat Spaghetti?  
Nick: A. I don't really like it.  
B. I think we should eat something else.  
C. I ate that yesterday.
2. May: So, what do you want to eat?  
Nick: A. My mom ate Broccoli.  
B. I'd like a pizza.  
C. Do you eat spicy food?
3. May: Do you like vegetables on it?  
Nick: A. If it has a lot of cheese, yes.  
B. No, I'm not vegetarian.  
C. Yes, we love meat.



4. May: Do you often eat Pizza?  
Nick: A. Yes, I usually eat fruit.  
B. No, my family doesn't eat it so often.  
C. Yes, we buy it very cheap.
5. May: And what's your favourite food?  
Nick: A. I like all type of food.  
B. Her favourite food are hot-dogs.  
C. I enjoy eating candy.
6. May: Is chocolate Ice cream okay?  
Nick: A. What flavor did you choose?  
B. Is there strawberry?  
C. Yes, It's the best flavor.





## 4. Creating a flute

**Topic:** Sound

**Objective:** The student will learn how wind musical instruments work since students will observe and experience how air becomes sound.

**Vocabulary:** sound, Straw, flatten, pin

### Material:

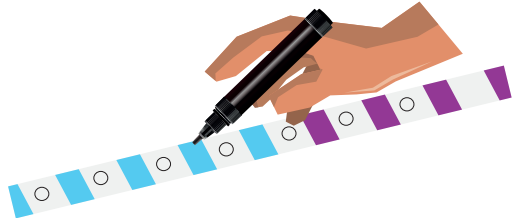
- 1 candle
- Matches
- 1 pin
- straws
- A permanent marker
- Scissors

### Development:

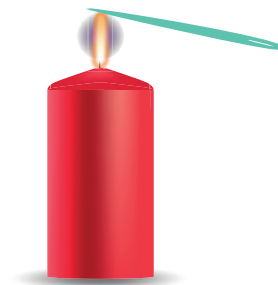
1. Ask your teacher for help and light the candle.



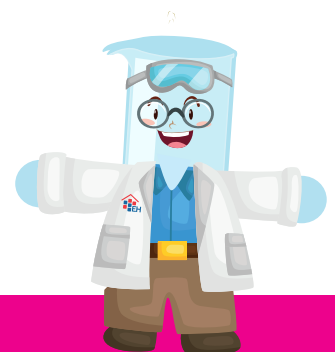
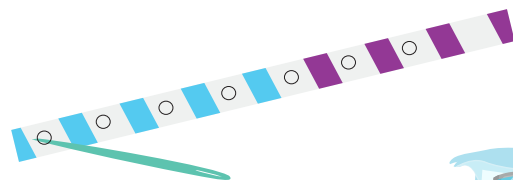
2. Place your three fingers of the right hand on the straw and the four of the left hand to mark with the permanent marker where the holes will go. (In total there should be seven, six up and one on the back)



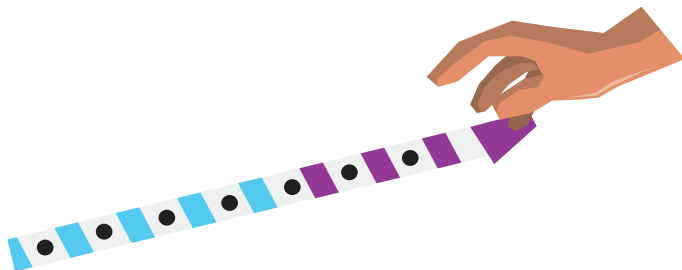
3. Being careful not to burn yourself, heat the pin a little.



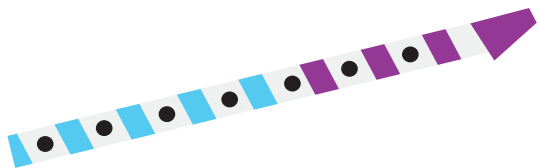
4. Where the holes are marked, perforate the straw with the hot pin taking care not to burn.



5. Flatten the mouthpiece with your hands or with your teeth, so that it is flat in the direction of the 6 holes.



6. Cut the tab, so that there is a sharp point. Continue flattening until the tips open.



7. Now it's ready, test it by blowing and write notes of how it worked.



**Read the story. Choose a word from the box. Write the correct word next to numbers 1–6. There is one example.**

At school we did an experiment that was very awesome! It was a sciences experiment so we had to ask our teacher for help in some occasions.

For example, we had to light a (1)\_\_\_\_\_ using a match.

Our experiment was about wind (2)\_\_\_\_\_ instruments.

We used a (3)\_\_\_\_\_ and on it we had to place our three fingers of the right hand and the four of the left hand to mark with (4)\_\_\_\_\_ where the holes would go. Then to make the holes we had to heat the (5)\_\_\_\_\_. Where the holes were marked, we perforated the straw taking care not to burn.

One step was to flatten the (6)\_\_\_\_\_ with our hands or with our teeth, so that it was flat in the direction of the six holes. And it was ready to be played.



**candle**



**mouthpiece**



**permanent marker**



**pin**



**wind**



**straw**



## 5. Make it invisible

**Theme:** Refraction of light

**Objective:** The student will observe the effect of refraction of light and how light has different intensities in water and oil.

**Vocabulary:** refraction, intensity, glass pipette, effect

### **Material:**

- 1 cup of oil
- 1 cup of water
- 2 equal wide glass cups
- 2 smooth glass pipettes (nothing written on it)

### **Development:**

1. Put oil in one of the glasses, fill up to  $\frac{3}{4}$  of capacity.
3. Place the pipettes in each of the glasses without moving.



2. Stick some tape on the outside of the bottle, starting from the top to the bottom. Make sure that the tape sticks as straight as possible.
4. Observe and write what happens with each of the pipettes and how it looks in each of the glasses.



## Invisibility

**Example** Since long time ago, superheroes have been very  
 1 ..... all around the world. There are many  
 2 different kinds of superheroes ..... each  
 one has different superpowers, such as flying, X-ray  
 vision, super strength, super speed, invisibility and  
 3 more. I think it would be incredible to .....  
 4 able to fly, I would arrive on time ..... school  
 5 every day. With super ..... I could win many  
 races with my friends, but being invisible would be the  
 best, being able to disappear at any time and sneaking  
 around would be so fun!

Example:	superheroes	Superhero	Super heroic
1	famous	Fame	Fantastic
2	an	And	a
3	bee	Bees	be
4	in	To	too
5	speeds	Speeding	speed

