

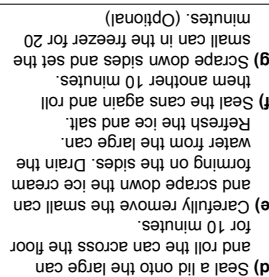
EXPANDS
when frozen.

Materials:

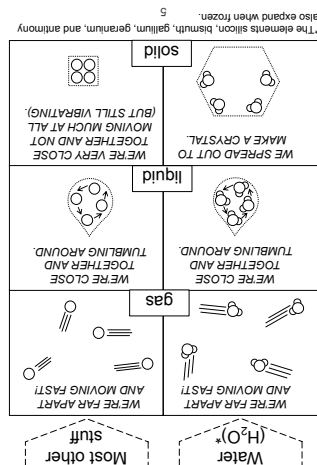
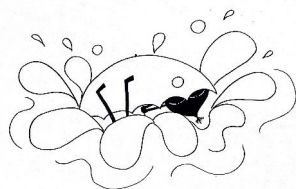
- Water
- Oil
- 2 identical containers
- Plaster of Paris or gypsum
- Balloons
- Freezer

Method:

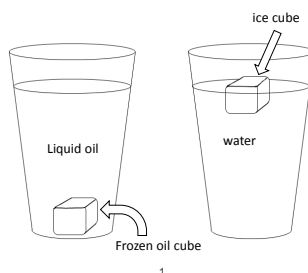
- Fill one balloon with water and one balloon with oil (optional).
- Prepare containers for plaster, for example, by cutting a small cardboard container in half.
- Place balloons in containers.
- Mix plaster & water according to directions and pour it in the containers around the balloons.
- Let dry and then freeze. Remove containers and observe.



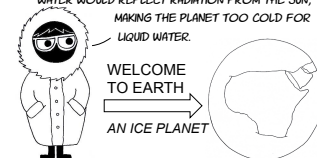
Splash!



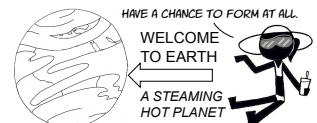
To see the “regular” way solids behave, place a frozen cube of oil into a cup of liquid oil. It will sink straight to the bottom.



IF ICE SANK, ALL THE OCEANS AND LAKES WOULD FREEZE FROM THE BOTTOM UP! THEN THAT FROZEN WATER WOULD REFLECT RADIATION FROM THE SUN, MAKING THE PLANET TOO COLD FOR LIQUID WATER

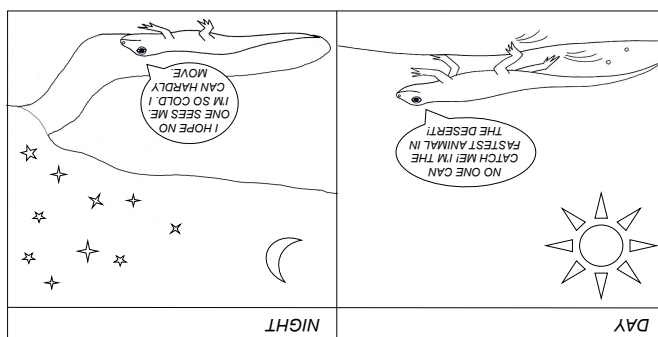


IF ICE SANK, WE WOULD LOSE THE REFLECTIVE
FLOATING SEA ICE AT THE POLES! THEN THE PLANET
WOULD HEAT UP SO MUCH THAT NEW ICE WOULDN'T



*Scientists don't agree on what would happen.

MOLECULES BEHAVE THE SAME WAY.
Turn down the temperature, and you turn down the speed.



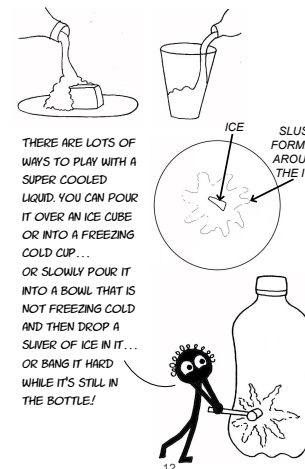
To understand how liquids turn into soils, it helps to remember something about reptiles: They move fast when they're warm, and are sluggish and slow when cold.

Materials:

- Bottles of carbonated soda
- Freezer
- Cup and spoon

Method:

- a) Place the bottle of soda in the freezer for 3 hours. (YOU MAY WANT TO PLACE SEVERAL IN THE FREEZER AND TAKE THEM OUT AT 30 MINUTE INTERVALS ONCE THEY'VE BEEN IN THE FREEZER FOR AN HOUR. THE CORRECT TIME TO REACH THE "SUPER COOLED" STATE WILL VARY BY FREEZER.)
- b) Remove soda and be careful not to bump or jar it too hard. Open lid *slowly* and pour soda into an ice-cold cup. If it is super-cooled, it will freeze into a slushy as it is poured.



3. Lift Ice with Salt

- Water
- Ice cubes
- Salt
- Matches, toothpicks, or yarn

Method:

- Get the yarn or wood wet and place it on top of the ice cube.
- Sprinkle with salt.
- Wait for about 15 seconds.
- Lift the ice!

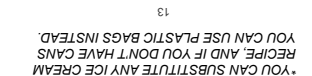


4. Ice Cream in a Can

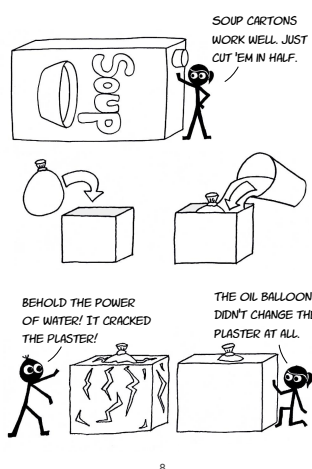
- 1 can lite coconut milk
- 7 to 10 fresh pitted dates
- 1 to 2 Tbsp cocoa powder
- ½ c rock salt and ice
- 2 metal cans of different sizes

Method:

- Mix ingredients for ice cream together and place the mixture in the small can.
- Seal the small can well and place it in the large can.
- Fill the space around the small can with ice and the salt.



2. Magic Slushy



1. Frost Wedging

B

A

A

X

B

C

C

D

F

E

E

D

E

G

G

X