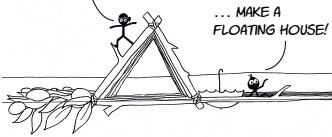


LOOK! AN
ISLAND! LET'S
GO EXPLORE!**SCIENCE MOM**

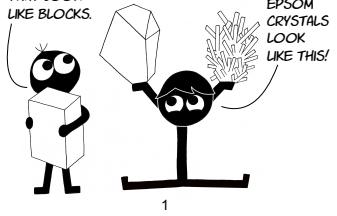
— JENNYBALLIF.COM —

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**SCIENCE MOM'S
Guide to WATER, Part 6**WHEN LIFE GIVES
YOU DRIFTWOOD...... MAKE A
FLOATING HOUSE!

When water freezes, it forms a crystal. But water's not the only thing that can make crystals. Most minerals and salts can form crystals, especially if they are in a solution with water and the water evaporates.

TABLE SALT
MAKES
CRYSTALS
THAT LOOK
LIKE BLOCKSALUM AND
EPSOM
CRYSTALS
LOOK
LIKE THIS!

1

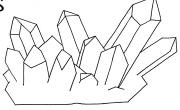
WHAT IS THIS**CRYSTAL****MADE OF?****Name Chemical Formula**

Table Salt	Sodium Chloride (NaCl)
Alum	Hydrated potassium aluminum sulfate ($KAl(SO_4)_2 \cdot 12H_2O$)
Borax	Sodium tetraborate ($Na_2B_4O_7 \cdot 10H_2O$)
Sugar	Sucrose ($C_{12}H_{22}O_{11}$)
Epsom Salt	Magnesium sulfate ($MgSO_4$)
Quartz	Silicon dioxide (SiO_2)
Diamond	Carbon (C)

2



- Tip: Make sure the salt water and plain water are the same temperature and then pour the water into a spoon held by the side of the cup just above the salt water — don't pour it directly into the salt water.
- a) Prepare salt water and then pour the water into jars and layerng the tap water on top.
- b) Fill 3 jars or cups. One with plain water, one with salt water, and one by carefully filling it half way with salt water. And then layerng the tap water on top.
- c) Place the eggs in the jars and observe if they sink or float.
- d) Fill 3 jars or cups. One with plain water, one with salt water, and one by carefully filling it half way with salt water. And then layerng the tap water on top.
- e) Make sure the salt water is different amounts of salt.

Method:

- Tap Water
- Salt or cups
- Eggs

2. Halocline plus Eggs**3. Eggshell Geodes****Materials:**

- Water
- Alum
- Eggshell
- Jars or cups
- Food coloring
- White glue

Method:

- a) Heat 2 2/3 cups of water and add 1/2 tsp food coloring and 1 1/3 cup of alum powder.
- b) Stir until dissolved, and then carefully transfer the solution to two heat proof jars. Hotter water makes larger the crystals. Cooler water makes smaller sized crystals.
- c) Optional: Seed the inside of the eggshell with glue and sprinkle alum powder over surface.
- d) Place eggshell in alum solution and let sit for 12-24 hours.

7



ONE DAY LATER...

WAHOO!
IT'S SO BEAUTIFUL!

4. Borax Snowflakes

Materials:

- Water
- String
- Jars or cups
- Food coloring
- Pencil or piece of cardboard

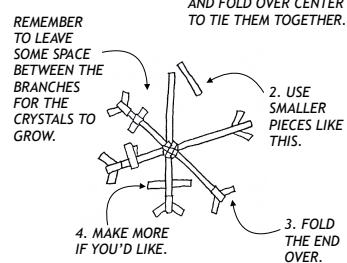
Method:

- a) Heat 4 cups of water and add 1 cup Borax. Stir well.
- b) Take three pipe cleaners and fold into a snowflake shape.
- c) Suspend the snowflake in the borax solution using the string and cardboard or pencil.
- d) Wait 12 to 24 hours and then remove from solution. To preserve the crystal, coat it with clear nail polish.

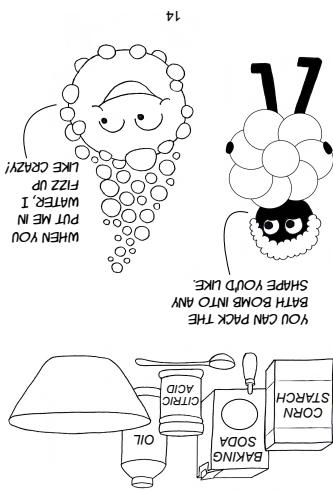
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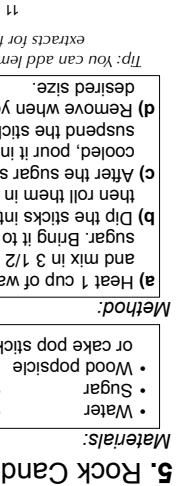
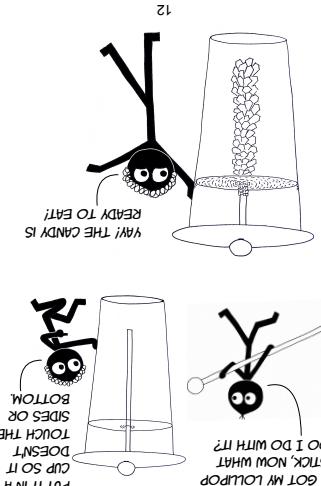
1. START WITH 3 PIECES
AND FOLD OVER CENTER
TO TIE THEM TOGETHER.



10



- 6. Bath Bombs**
- Materials:**
- 1/2 C baking soda
 - 1 Tbsp cornstarch
 - 1/3 C citric acid
 - 1/4 C epsom salt
 - 1/4 C oil
 - 1/4 C essential oil
 - Plastic molds
 - Colorants
 - 1/4 C epsom salt
 - Food coloring
 - 1 Tbsp oil
 - 1/4 C baking soda
 - 1 Tbsp cornstarch
 - 1/3 C citric acid
 - 1/4 C epsom salt
 - Oil
 - Water
 - Sugar
 - Carboard
 - Wood popsicle
 - or cake pop stick.



11

5. Rock Candy

Materials:

- (a) Heat 1 cup of water to boiling and mix in 3 1/2 cups of white sugar. Bring it to a boil. Dip the sticks into the syrup and suspend them in sugar solution has cooled, pour it into cups and let dry. Then roll them in sugar solution has suspended the sticks inside.
- (b) Dip the sticks into the syrup and sugar. Bring it to a boil. Remove when your candy is the desired size.
- (c) After the sugar solution has cooled, pour it into cups and let dry. Then roll them in sugar solution has suspended the sticks inside.
- (d) Remove when your candy is the desired size.

B

A

A

X

B

C

C

D

F

E

E

D

E

G

G

X