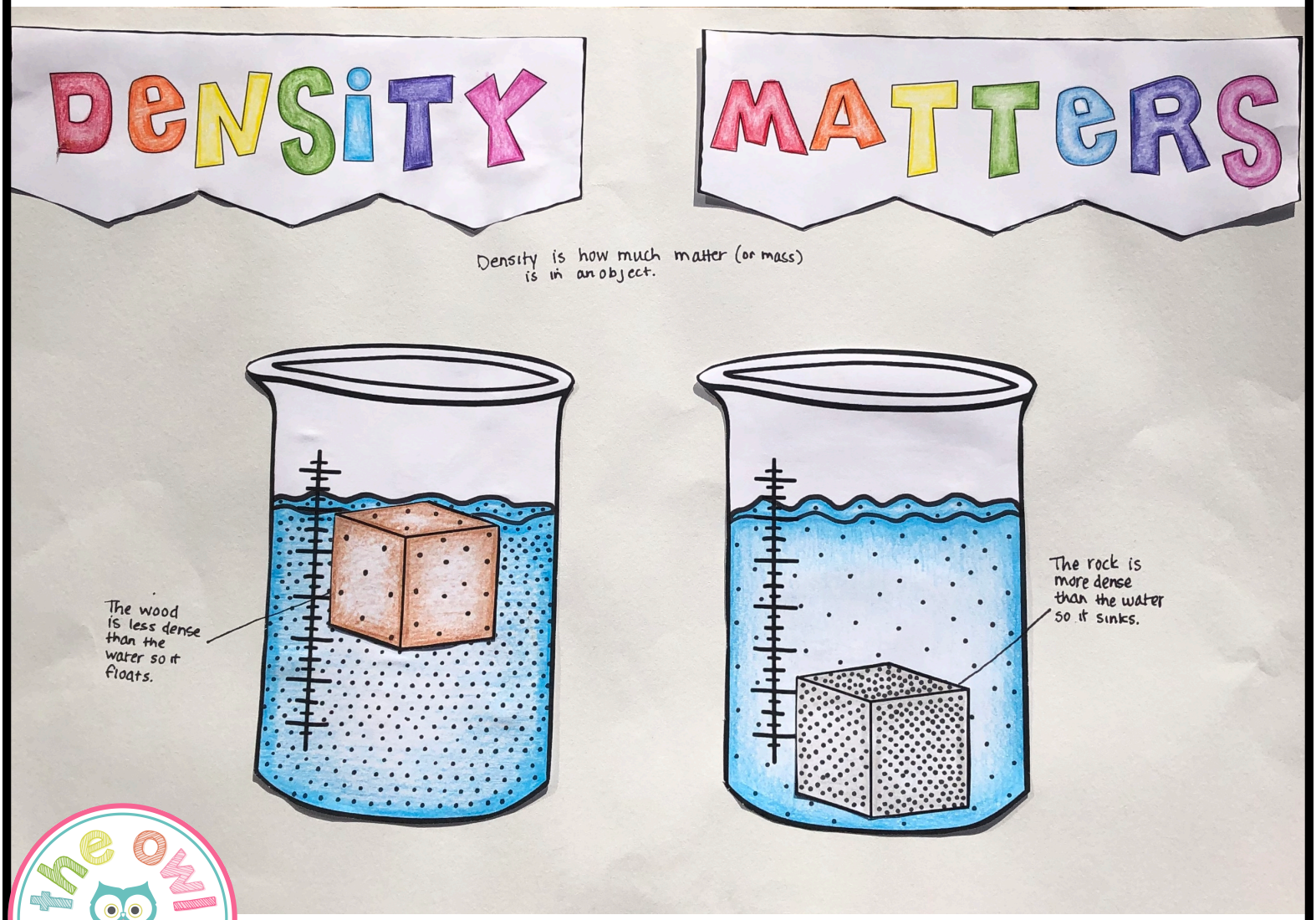
Craftivity Learning

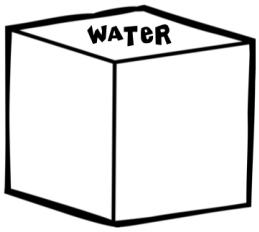
UNDERSTANDING DENSITY



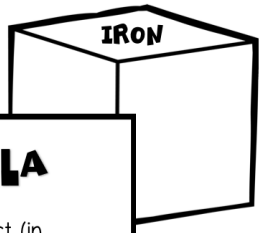
created by the owl teacher

Dots of Density

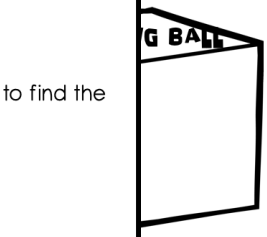
Density is about how much matter (or mass) is in an object. Below we have two objects. One represents water and the other represents syrup. Syrup is denser than water. This means it has more mass in the same amount of space (or volume) ...encil, create dots in the boxes to show the different



...an iron cube is denser than a wood cube because iron has ...e amount of space as a wood cube. Demonstrate that in the



...en though they ...e dense.



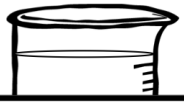
Does it Sink or Float?

If a liquid is denser than an object, the object will float in the liquid. If an object is denser than the liquid, it will sink in it. If they are the same, then it will be suspended in the middle.

The egg is more dense than the water.

The egg is less dense than the water when salt is added to the

In the image below, the golf ball is more ... to the water, the golf ball becomes less d... ball in the beaker. Then create dots to re... and water in both images.



Th...

th...

Finding Density with a Formula

To find the density of an object, we must first know the mass of the object (in grams) and the volume (1 cm^3 = 1 ml). To find the mass of an object, we place it on a pan balance or a triple beam balance. To find the volume, we place it in a container of water and find the difference when the water rises.

Next, we use the formula → density = mass ÷ volume.

Our answer is then written in g/cm^3.

..., we would first need to find the

Density= _____

Density= _____

Density=_____

Density= 2 g/mL

_____ Density= 3 g/mL

1.) Now pick three different objects. Write them below and describe them.

Object	Observations/Description

2.) Of those objects above, which do you predict will be the most dense? Why?

_____

_____

_____

_____

_____

3.) Of those objects above, which do you predict will be the least dense? Why?

_____

_____

_____

Density Craftivity Directions

1.) Complete the worksheets provided.

2.) Color the banner labeled "Density Matters."

3.) Decide what your two blocks will be. For example, one may be wood while the other is a rock.
- Add density dots to represent how dense it is compared to each other. For instance, wood is less dense than a rock, so it would have less dots than the rock block.
- Color them the color of the material you have chosen for
lightly so you can still see the density dots.

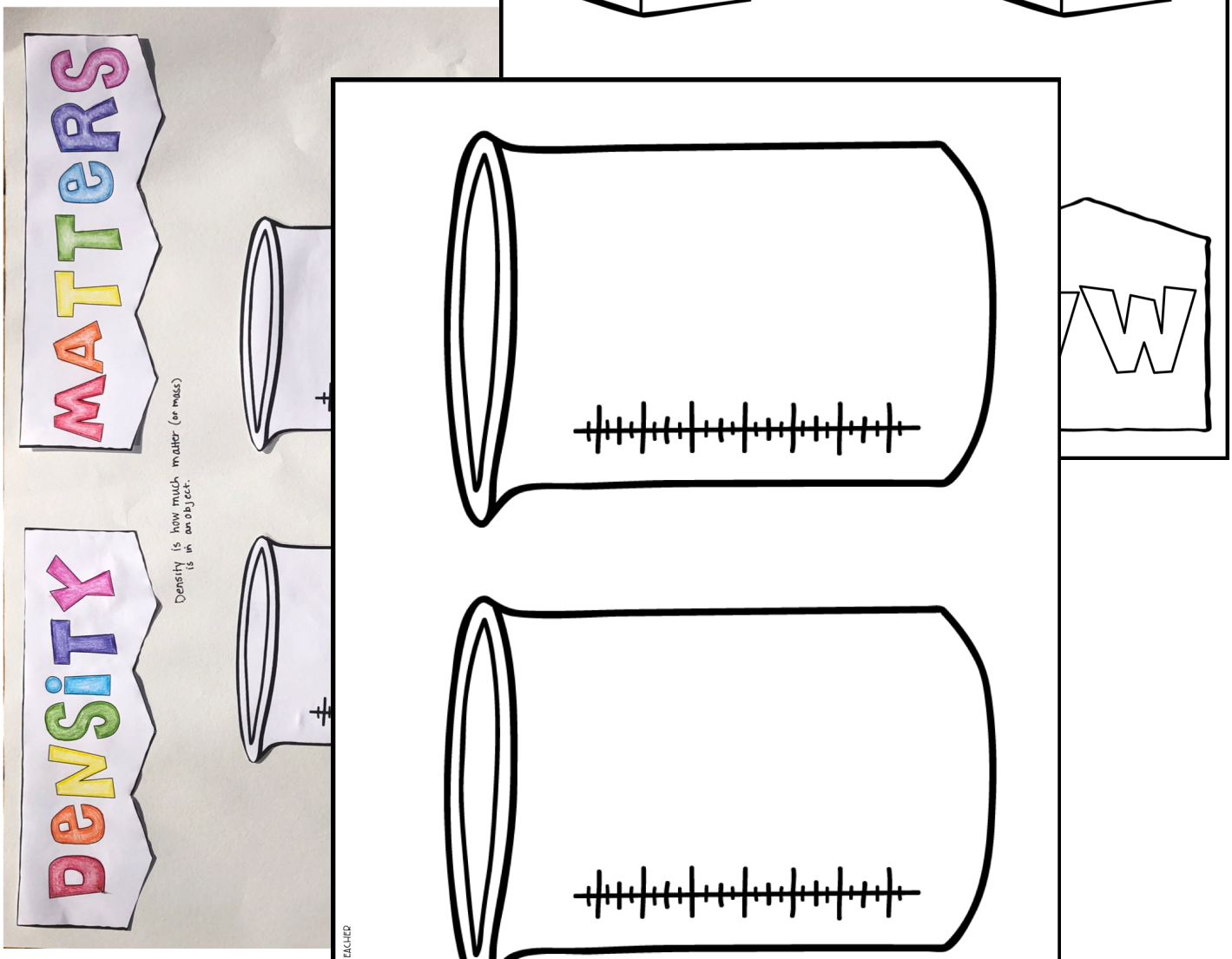
4.) Cut out the blocks, banner, and beakers.

5.) Draw water in your beakers.
- Add one of your blocks to one of your beakers and the o
other.
- Consider what the density of the water would look like co
block.
- Place the block near the top (if it would float in the water
bottom (if it would sink).
- Add density dots to represent how dense the water is co
block you just added to the beaker. Then color the water
still see the dots.
- Glue the block where it belongs in the beaker (near the t

6.) Get a large (12" x 18") piece of construction paper.

7.) Near the top glue down your banner with the word "density" f
"matters" after it.

8.) In the center, glue the two beakers side-by-side.



A Completed Example