Ready-Ed Publications

mini e-book

PHOTOCOPY MASTERS

Science

Materials

For Junior Primary

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mini e-book

PHOTOCOPY MASTERS

Contents

Title: **Materials** For Junior Primary
Published by **Ready-Ed Publications** © 2019
Taken from: Junior Scientists Book 2
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Local Materials 1

❍ In the illustration below, colour and label as many materials as you can.

❍ Add two materials that aren't shown in the picture that you see in your own environment.

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Local Materials 2

❍ Complete the chart. Add another material to the list and share your idea with the class.

Material	How It Is Used In My Environment
Wood	
Colorbond®	
Concrete	
Plastic	
Brick	
Glass	
Ceramic	
Fabric	

❍ Choose one material from the chart and describe its properties.

Material: _____

Properties:_____

Local Materials 3

Draw your item.

- What material(s) is it made from?

_____

- Why has this material been used? Think about its properties.

_____

Draw your item.

- What material(s) is it made from?

_____

- Why has this material been used? Think about its properties.

_____

Local Materials 4

Draw or write the names of four items.

Describe the material that each item is made of by cutting out and pasting the scientific words below.

Item 1	Item 2
Item 3	**Item 4**

Scientific Words

hard	blunt
soft	bendy
sticky	see-through
rough	squeezable
smooth	durable
sharp	stretchy

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Mixing Materials 1

Experiment:

How solids can dissolve into liquids and create a new solid.

Materials:

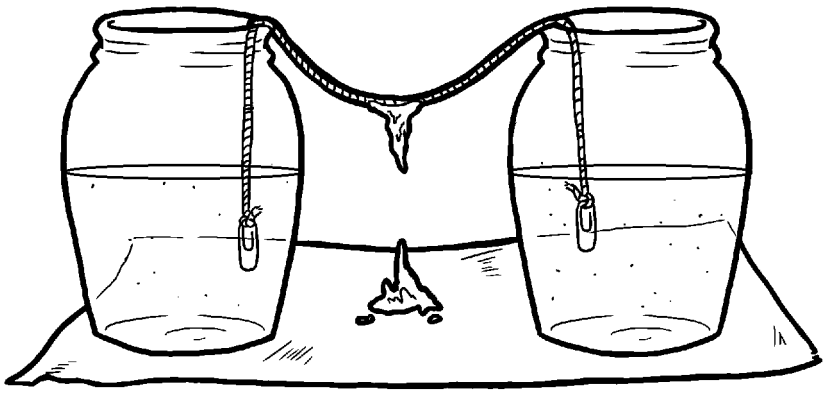
- **½ cup Epsom salts**
- **1cup hot water**
- **25cm wool/yarn**
- **two paper clips**
- **two glass jars**
- **30cm aluminum foil**

Process:

1. Place the two jars on the aluminum foil, with a space in the middle, in a warm place.
2. Half fill the two jars with hot water.
3. Mix Epsom salts evenly into jars and stir until they dissolve.
4. Wet the string and tie paper clips to each end.
5. Drop the string ends into each jar until the middle hangs over the aluminum foil.
6. Leave and watch the crystals form.
7. If the crystals are dripping too fast you can pull the jars apart to slow it down or push the jars together if it is going too slow.

Test:

- *After 30 minutes check to see if you have made any stalagmites and/or stalactites (some solution will be dripping off the string).*
- *Check again in one hour, in one day and in a couple of days.*
- *Photograph your findings and present as a poster.*



Mixing Materials 2

❍ Record your findings from the experiment.

Time	Appearance of Stalagmites/ Stalactites	Growth of Stalagmites/ Stalactites (cm)
after 30 minutes		
after 1 hour		
after 2 hours		
after 1 day		
after ____ days		

❍ How can other solids be dissolved into liquids?

_____

❍ What happens to the solids in this experiment?

_____

Mixing Materials 3

Experiment:

How mixing materials creates a chemical reaction.

Materials:

- **bowl**
- **measuring cup**
- **3/4 cup cornstarch**
- **1/3 cup water**
- **food colouring drops (optional)**
- **gloves**
- **resealable plastic container**

Process:

1. Place cornstarch into bowl.

2. Add food colour now if you want.

3. Put gloves on and add water slowly to cornstarch and mix well. Let it sit for five minutes.

4. Reach your hand into the bowl and grab your concoction.

5. Press into a ball and watch it go hard.

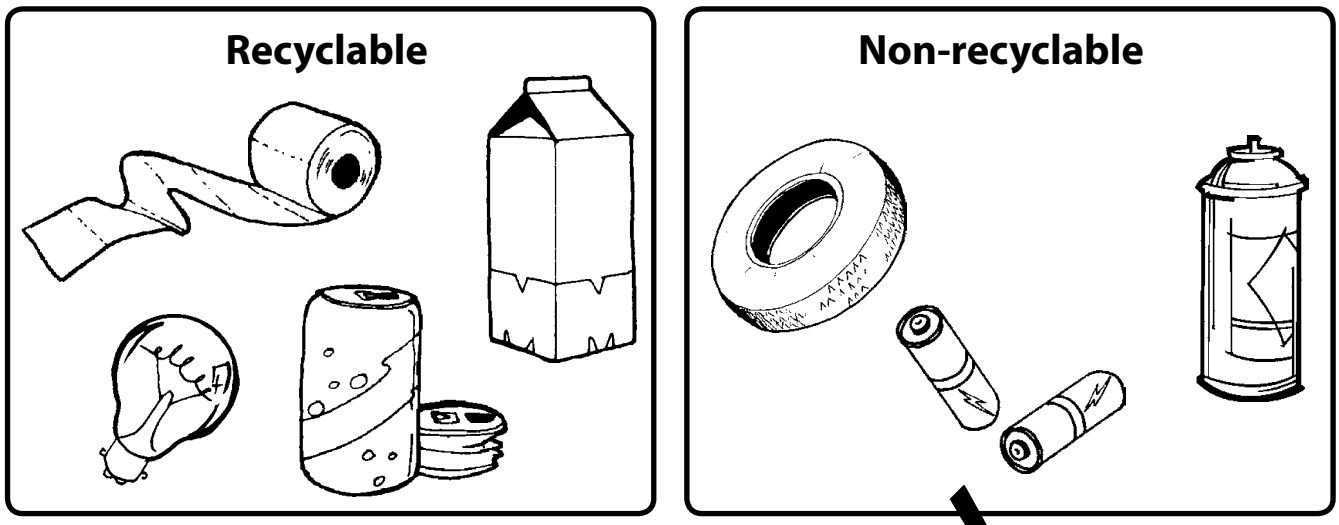
6. Open your hand and watch it become a liquid again.

7. Store your slime in a resealable plastic container.

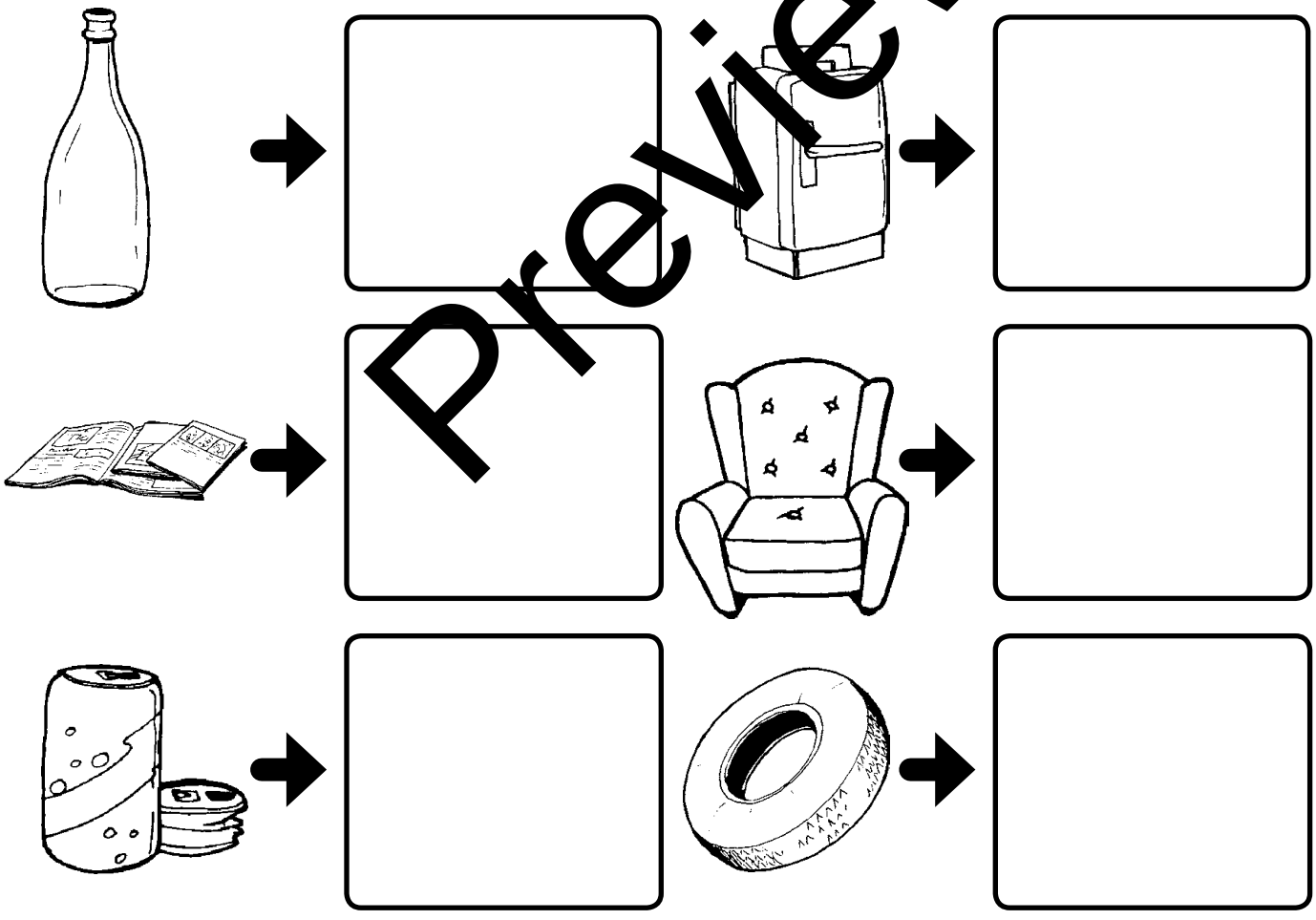
IMPORTANT to dispose of your slime, don't pour it down the sink, throw it into the rubbish bin in a plastic bag.

Recycling Materials 1

❍ Look at each item. Colour the item in each box which does not belong.



❍ Research and draw what each item can be recycled into.



❍ Extra: During the week make a list of things that your family uses which are recyclable or non-recyclable.

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Recycling Materials 2

Many everyday items have been made from recycled materials.

❑ Colour the things below using the Resource Key.

Resource Key			
Metal =	red	**Plastic =**	yellow
Wood =	brown	**Glass =**	blue

❑ Draw another item that has been made from recycled plastic on the back of this page.

Answers

Page 3
Wood: door, trees and fence
Brick: wall around pond
Plastic: watering can
Metal: bench, guttering, gardening fork, outdoor lamp and door knob
Fabric: clothes, blind, shoelaces
Rock: path
Ceramic: roof tiles
Concrete: path around house
Leather: shoes, basketball
Wool: slippers
Glass: lamp, windows

Page 8

Solids can be dissolved into liquids by heating them.

What happens to the solids in this experiment?

The solid (Epsom salts) when mixed together with the liquid (water), dissolves, and this interaction creates a new solid (crystals).

Page 10
Recyclable: students should colour the light bulb.
Non-recyclable: students should colour the plastic container.

Glass bottle: windows
Magazine: newspaper, magazines, writing paper, wrapping paper
Aluminum can: cans, bottle tops
Fridge: copper wiring for electricity, metal, motor parts
Chair: wood, metal, fabric
Tyre: shoe soles, tubing

Page 11
metal – coat hanger, can, paper clip, showerhead, fork
wood – barrel, fence, pencil, peg, table
plastic – bag, bucket, peg, switch
glass – jar, bottle, vase