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SCIENCE NOTEBOOK

FOSS

SOLIDS AND LIQUIDS

2ND GRADE

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SCIENCE NOTEBOOK

FOSS

SOLIDS AND LIQUIDS

2ND GRADE

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Focus Question How can solid objects be described?	Focus Question How can solid objects be described?

Object Materials

What are solid objects made of?

Object	Material
Cylinder 	
Triangle 	
Tube 	
Cloth 	
Stick 	
Wire 	
Screw 	

Object Materials

What are solid objects made of?

Object	Material
Cylinder 	
Triangle 	
Tube 	
Cloth 	
Stick 	
Wire 	
Screw 	

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Solids and Liquids Module
Investigation 1: Solids
No. 1—Notebook Master

Properties of Solid Objects

Object / Property	Cylinder	Triangle	Tube	Cloth	Stick	Wire	Screw
							
Round							
Pointy							
Flexible							
Rigid							
Soft							
Hard							
Transparent							

Properties of Solid Objects

Object / Property	Cylinder	Triangle	Tube	Cloth	Stick	Wire	Screw
							
Round							
Pointy							
Flexible							
Rigid							
Soft							
Hard							
Transparent							

Solids and Liquids Module
Investigation 1: Solids
No. 2—Notebook Master

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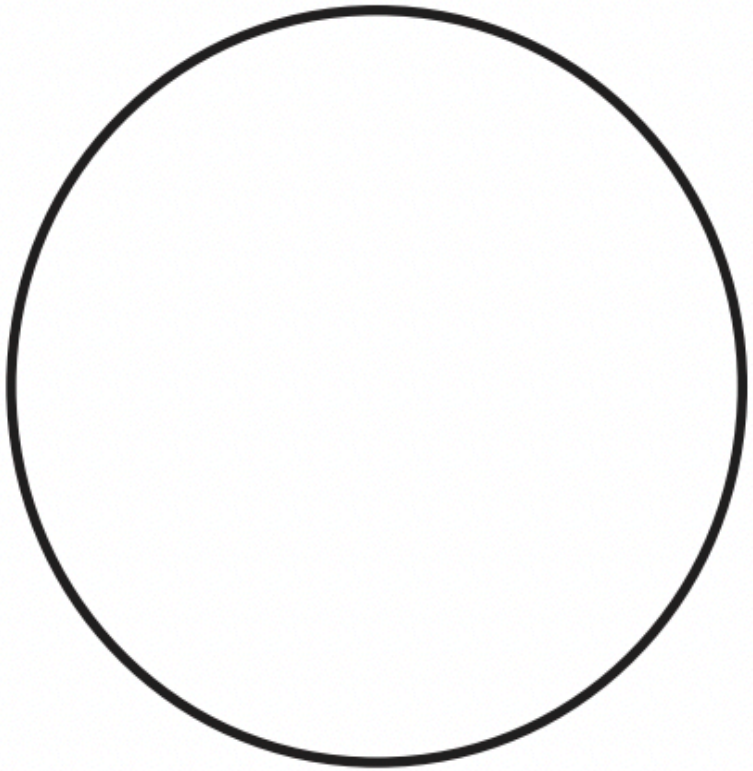
Focus Question What are solid objects made of?	Focus Question What are solid objects made of?

Object Grouping

Can two or more objects have
the same property?



These objects share the property of

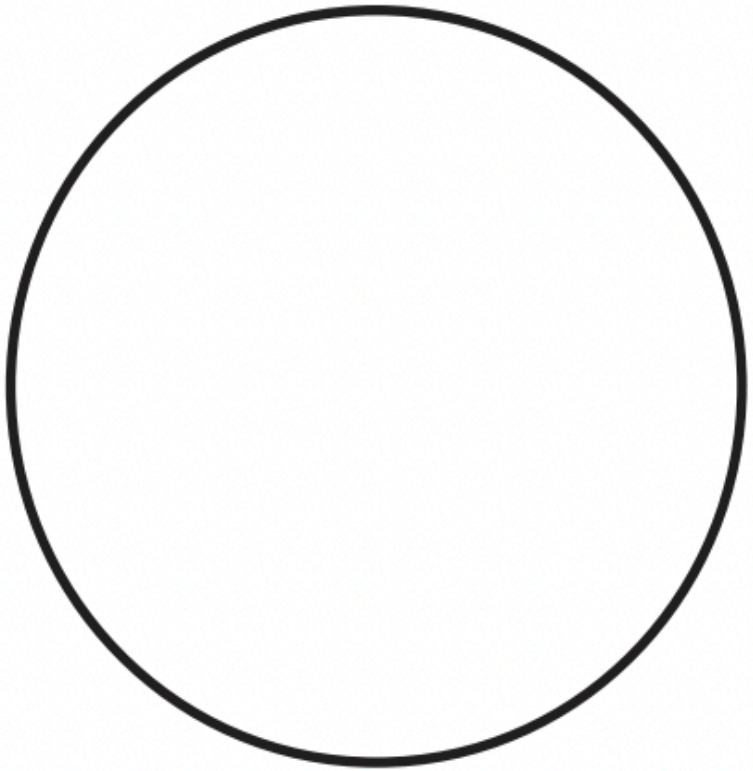
_____ •

Objects that have this property can be used for

_____ •

Object Grouping

Can two or more objects have
the same property?



These objects share the property of

_____ •

Objects that have this property can be used for

_____ •

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Solids and Liquids Module
Investigation 1: Solids
No. 3—Notebook Master

Focus Question Can two or more objects have the same property?	Focus Question Can two or more objects have the same property?

Towers

What are the properties of successful towers?

a. Draw a picture of your tower and label the parts.

b. Write about the properties of the top of your tower.

c. Write about the properties of the base of your tower.

d. Write about one part of your tower that was very important to its success in the wind.

Towers

What are the properties of successful towers?

a. Draw a picture of your tower and label the parts.

b. Write about the properties of the top of your tower.

c. Write about the properties of the base of your tower.

d. Write about one part of your tower that was very important to its success in the wind.

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Solids and Liquids Module
Investigation 1: Solids
No. 4—Notebook Master

Focus Question What are the properties of successful towers?	Focus Question What are the properties of successful towers?

Updated 9/2017

Outdoor Solids

What solid objects are outdoors?

Object / Property	Twig	Paper			
Smooth					
Rough					
Flat					

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Solids and Liquids Module
Investigation 1: Solids
No. 5—Notebook Master

Outdoor Solids

What solid objects are outdoors?

Object / Property	Twig	Paper			
Smooth					
Rough					
Flat					

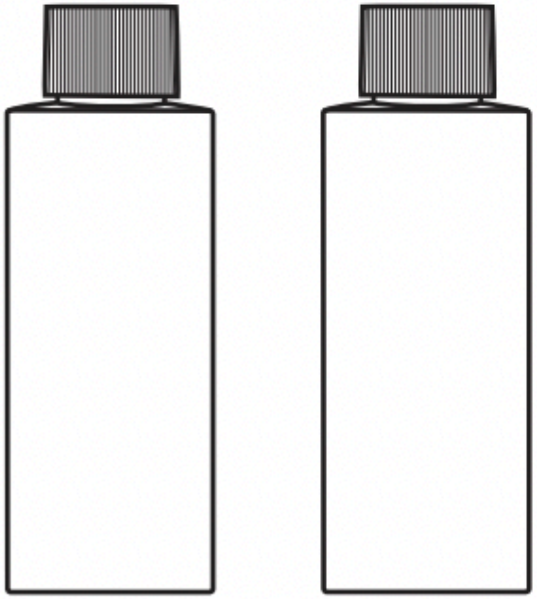
Focus Question What solid objects are outdoors?	Focus Question What solid objects are outdoors?

Liquid Exploration

How are liquids different from each other?

Some liquids are _____ , but

other liquids are _____ .

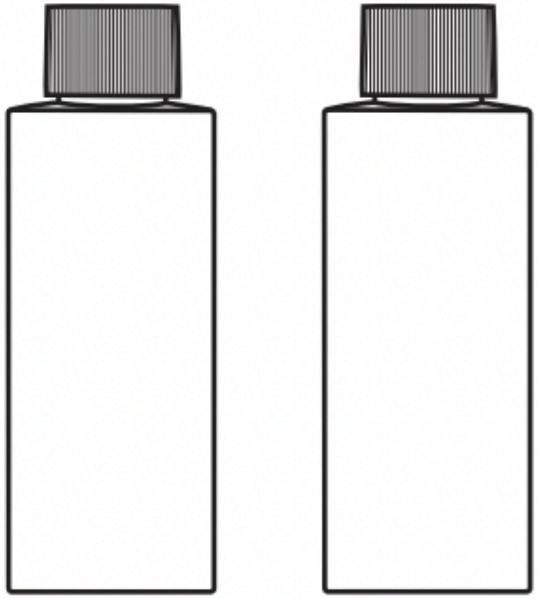


Liquid Exploration

How are liquids different from each other?

Some liquids are _____ , but

other liquids are _____ .



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Solids and Liquids Module
Investigation 2: Liquids
No. 6—Notebook Master

Focus Question How are liquids different from each other?	Focus Question How are liquids different from each other?

`

Liquid Properties

How can liquids be described?

Object / Property	Water	Hand soap	Oil	Corn syrup	Water with color	Dish soap	Starch
Transparent							
Translucent							
Has color							
Viscous							
Bubbly							
Foamy							

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Liquid Properties

How can liquids be described?

Object / Property	Water	Hand soap	Oil	Corn syrup	Water with color	Dish soap	Starch
Transparent							
Translucent							
Has color							
Viscous							
Bubbly							
Foamy							

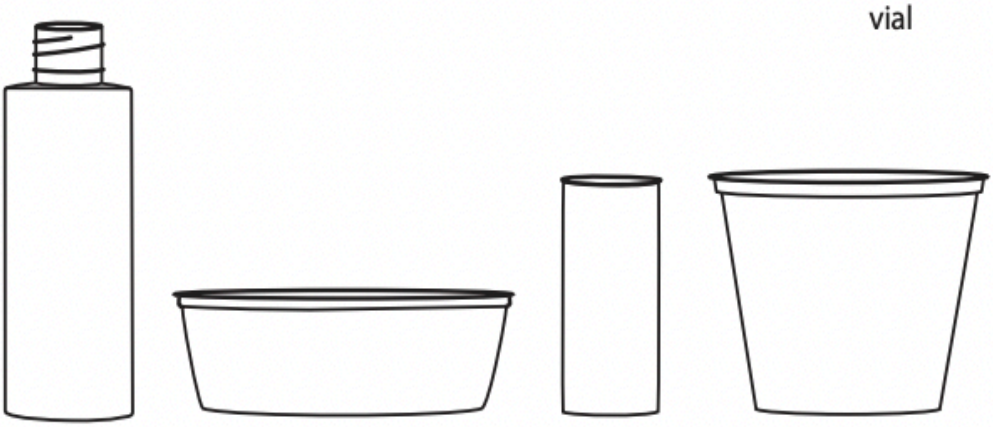
Solids and Liquids Module
Investigation 2: Liquids
No. 7—Notebook Master

Focus Question How can liquids be described?	Focus Question How can liquids be described?

Liquids in Containers

1. Put one small vial of water in each container.
2. Draw the level of the water in each container.

Small vial

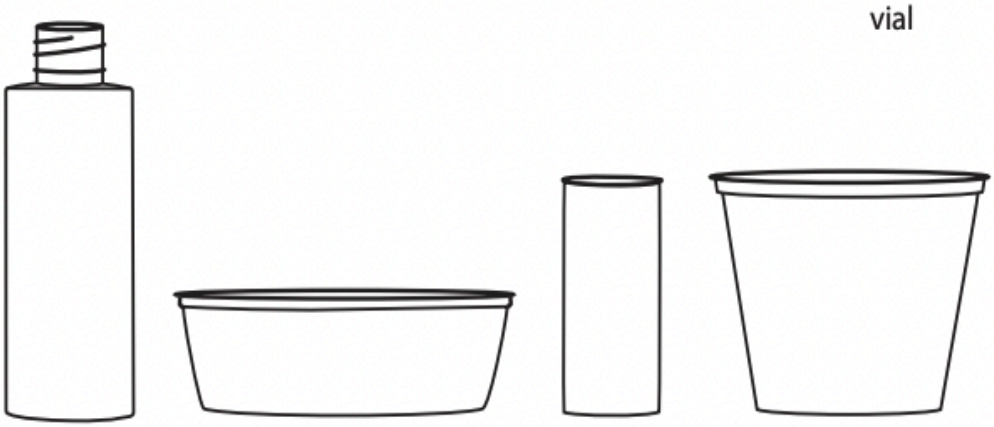


Solids and Liquids Module
Investigation 2: Liquids
No. 8—Notebook Master

Liquids in Containers

1. Put one small vial of water in each container.
2. Draw the level of the water in each container.

Small vial



Solids and Liquids Module
Investigation 2: Liquids
No. 8—Notebook Master

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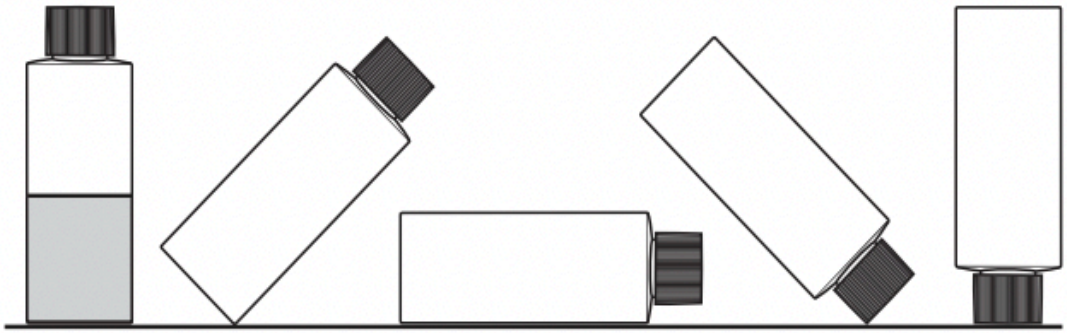
Liquid Level in a Bottle

How does the liquid change when the bottle tips?



Draw what the liquid looks like in each picture as the bottle turns upside down.

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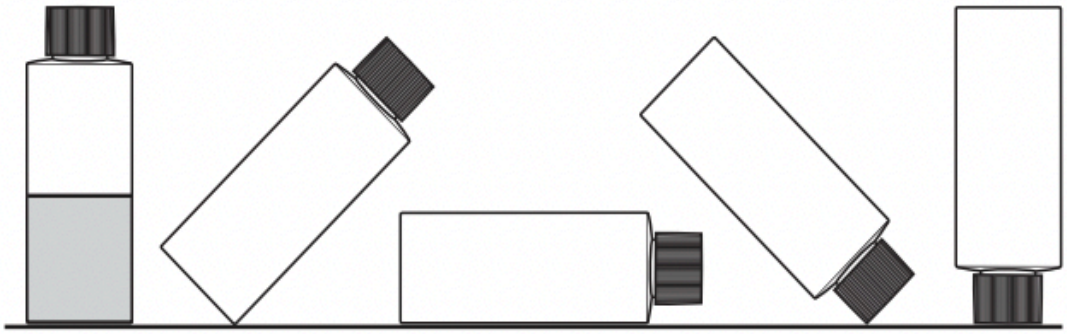
Liquid Level in a Bottle

How does the liquid change when the bottle tips?



Draw what the liquid looks like in each picture as the bottle turns upside down.

Solids and Liquids Module
Investigation 2: Liquids
No. 9—Notebook Master

Focus Question How do liquids change in containers?	Focus Question How do liquids change in containers?

Falling-Bottle Puzzle

How do liquids change in containers?

When liquids are in containers, the liquids _____

_____

_____

Falling-Bottle Puzzle

How do liquids change in containers?

When liquids are in containers, the liquids _____

_____

_____

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Solids and Liquids Module
Investigation 2: Liquids
No. 10—Notebook Master

Focus Question Where are liquids outdoors?	Focus Question Where are liquids outdoors?

Focus Question Are these materials solid or liquid?	Focus Question Are these materials solid or liquid?

Focus Question How can mixtures of particles be separated?	Focus Question How can mixtures of particles be separated?

Soup Mix

How can mixtures of particles
be separated?

Mixtures of particles can be separated by

_____

_____

_____

_____

_____

Soup Mix

How can mixtures of particles
be separated?

Mixtures of particles can be separated by

_____

_____

_____

_____

_____

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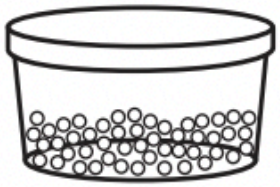
Solids and Liquids Module
Investigation 3: Bits and Pieces
No. 11—Notebook Master

Focus Question How particles of solids move in bottles?	Focus Question How particles of solids move in bottles?

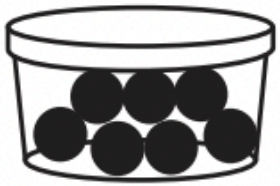
Bead Mix A

Which screens can separate beads?



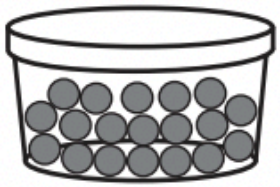
Which screens can these beads go through?

_____



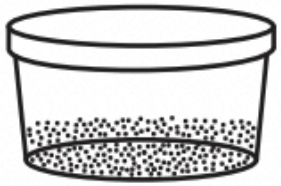
Which screens can these beads go through?

_____



Which screens can these beads go through?

_____

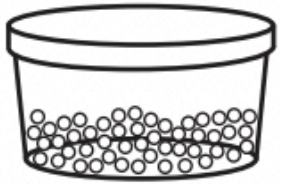


Which screens can these beads go through?

_____

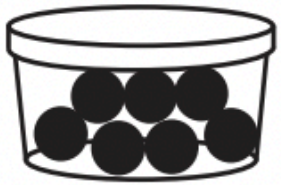
Bead Mix A

Which screens can separate beads?



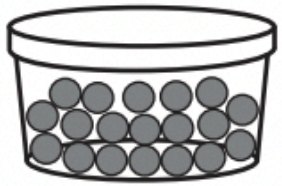
Which screens can these beads go through?

_____



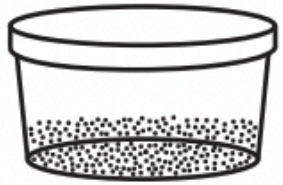
Which screens can these beads go through?

_____



Which screens can these beads go through?

_____



Which screens can these beads go through?

_____

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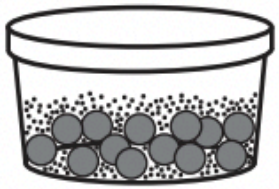
Bead Mix B

Which screens can separate beads?

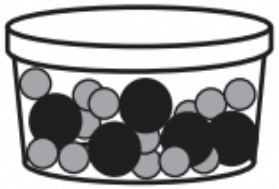


Which screens can separate this mixture?

_____

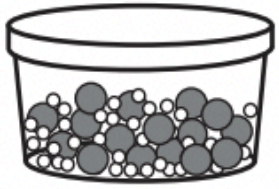
Which screens can separate this mixture?

_____



Which screens can separate this mixture?

_____

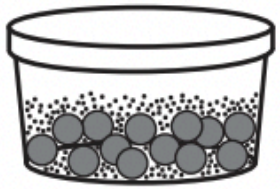


Which screens can separate this mixture?

_____

Bead Mix B

Which screens can separate beads?

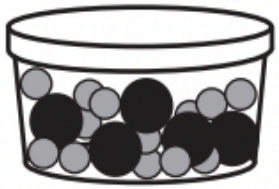


Which screens can separate this mixture?

_____

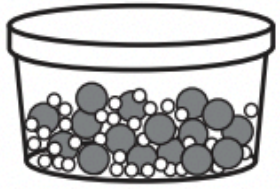
Which screens can separate this mixture?

_____



Which screens can separate this mixture?

_____



Which screens can separate this mixture?

_____

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Solids and Liquids Module
Investigation 3: Bits and Pieces
No. 13—Notebook Master

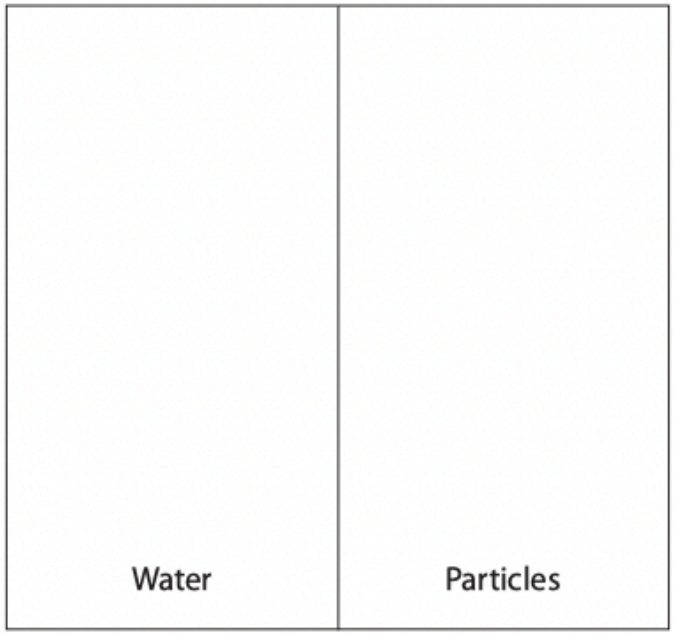
Focus Question What is a general rule for using screens to separate a mixture of small objects?	Focus Question What is a general rule for using screens to separate a mixture of small objects?

Particles Outdoors

Are there little pieces of solid material outdoors?

We found _____ outdoors.

We poured _____ and water on the ground.
This is what we saw.

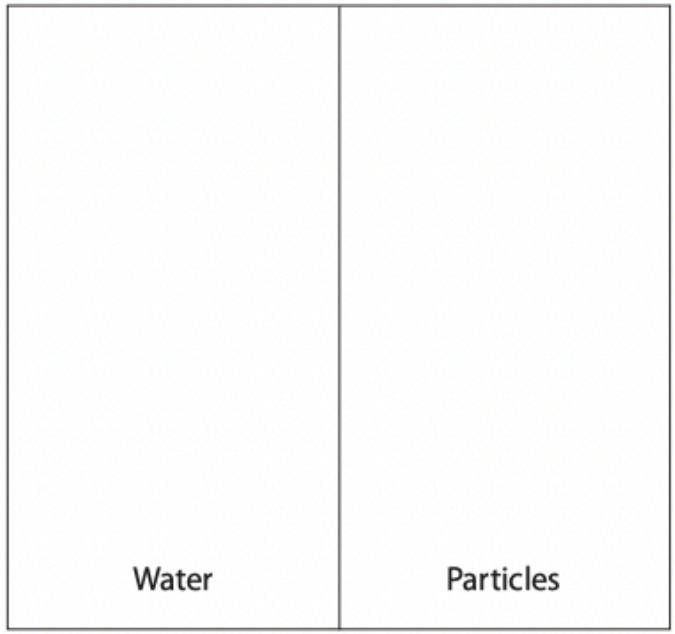


Particles Outdoors

Are there little pieces of solid material outdoors?

We found _____ outdoors.

We poured _____ and water on the ground.
This is what we saw.



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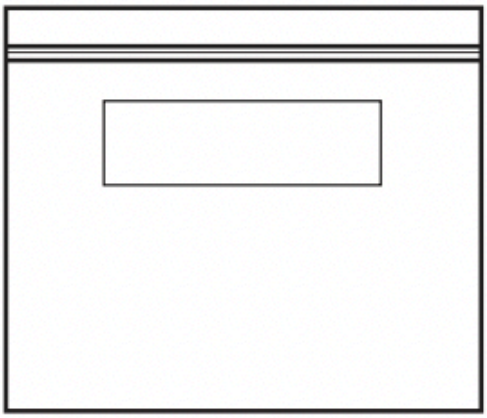
Solids and Liquids Module
Investigation 3: Bits and Pieces
No. 14—Notebook Master

Focus Question Are there little pieces of solid material outdoors?	Focus Question Are there little pieces of solid material outdoors?

Solid Materials in Water A

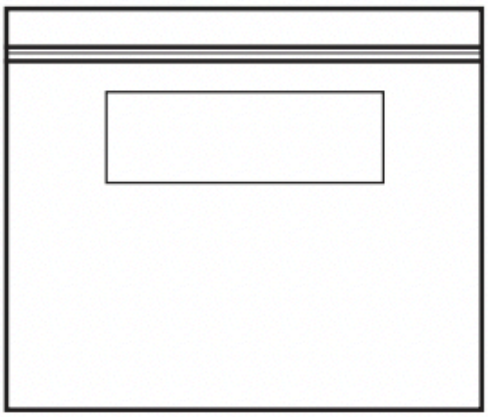
What happens when solids are mixed with water?



1. First, the solid was dry. The solid looked

_____

_____.



2. After a night in water, the solid looked

_____

_____.

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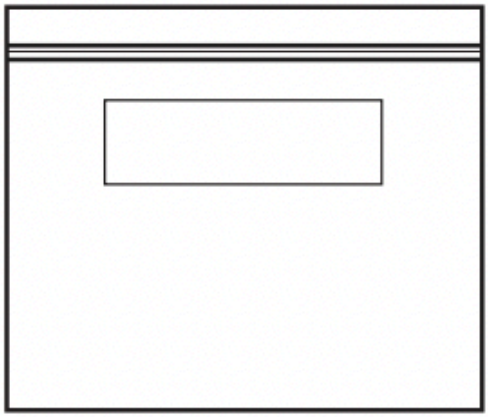
Solids and Liquids Module
Investigation 4: Solids, Liquids, and Water
No. 15—Notebook Master

Solid Materials in Water A

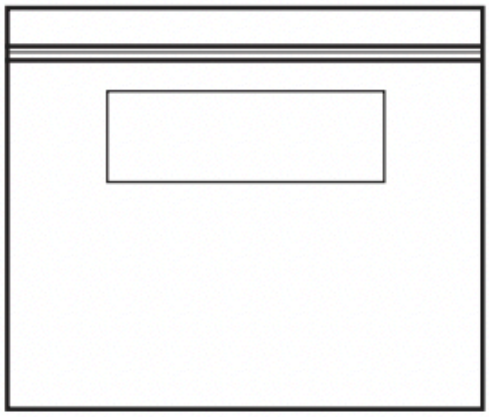
What happens when solids are mixed with water?



1. First, the solid was dry. The solid looked

_____

_____.



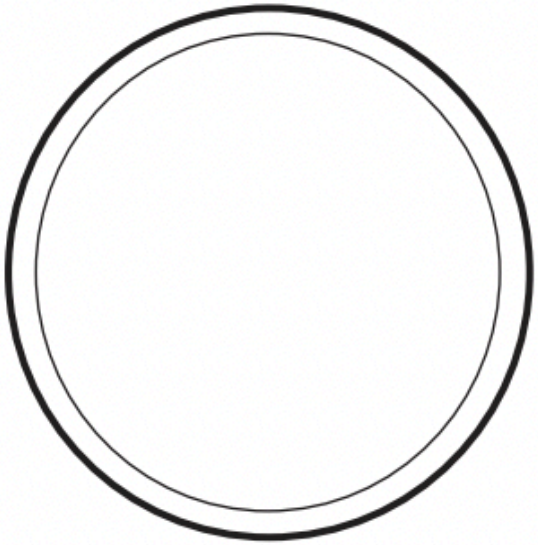
2. After a night in water, the solid looked

_____

_____.

Solid Materials in Water B

Record what your dry solid looks like.



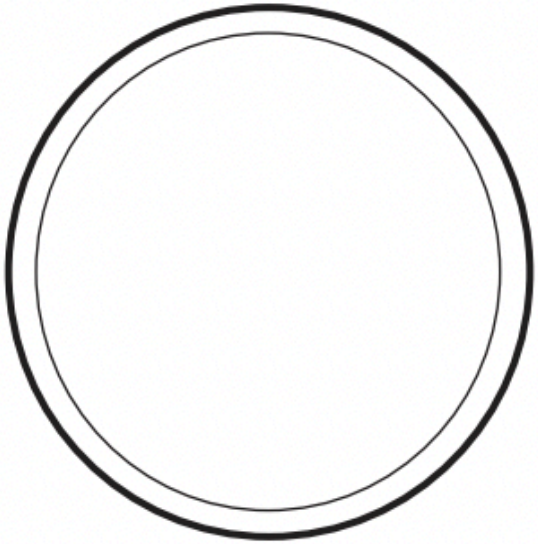
3. Then the water evaporated. The solid looked

_____

_____.

Solid Materials in Water B

Record what your dry solid looks like.



3. Then the water evaporated. The solid looked

_____

_____.

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Solids and Liquids Module
Investigation 4: Solids, Liquids, and Water
No. 16—Notebook Master

Focus Question What happens when solids are mixed with water?	Focus Question What happens when solids are mixed with water?

Liquid with Water

What happens when _____ is mixed with water?

1. Add water. How does it look?

_____

2. Shake it. How does it look?

_____

3. How does it look the next day?

_____

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Solids and Liquids Module
Investigation 4: Solids, Liquids, and Water
No. 17—Notebook Master

Liquid with Water

What happens when _____ is mixed with water?

1. Add water. How does it look?

_____

2. Shake it. How does it look?

_____

3. How does it look the next day?

_____

Focus Question What happens when liquids are mixed with water?	Focus Question What happens when liquids are mixed with water?

Investigating Toothpaste

Is toothpaste solid or liquid?

1. Add water. How does the toothpaste look?

_____

2. Shake it. How does the toothpaste look?

_____

3. After a day, how does the toothpaste look?

_____

Solids and Liquids Module
Investigation 4: Solids, Liquids, and Water
No. 18—Notebook Master

Investigating Toothpaste

Is toothpaste solid or liquid?

1. Add water. How does the toothpaste look?

_____

2. Shake it. How does the toothpaste look?

_____

3. After a day, how does the toothpaste look?

_____

Solids and Liquids Module
Investigation 4: Solids, Liquids, and Water
No. 18—Notebook Master

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Focus Question Is toothpaste solid or liquid?	Focus Question Is toothpaste solid or liquid?

Changing Properties

How do properties of materials
change when they are heated or cooled?

When it gets _____ , a solid changes to a liquid.

We say the solid _____ .

When it gets _____ , a liquid changes to a solid.

We say the liquid _____ .

Changing Properties

How do properties of materials
change when they are heated or cooled?

When it gets _____ , a solid changes to a liquid.

We say the solid _____ .

When it gets _____ , a liquid changes to a solid.

We say the liquid _____ .

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Solids and Liquids Module
Investigation 4: Solids, Liquids, and Water
No. 19—Notebook Master

Updated 9/2017

Focus Question How do properties of materials change when they are heated or cooled?	Focus Question How do properties of materials change when they are heated or cooled?

Focus Question What happens when you mix water with solid plant material collected outdoors?	Focus Question What happens when you mix water with solid plant material collected outdoors?